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Forestry policy: hindsight, forethought and foresight

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FORESTRY POLICY: HINDSIGHT, FORETHOUGHT AND FORESIGHT

A thesis submitted in candidature for the degree of Philosophiae Doctor

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SUMMARY

Before the First World War, various policy entrepreneurs unsuccessfully advocated productivist scientific afforestation in Britain. During the war, timber imports were constrained by submarine blockade. The Government set up the Forestry Commission to deliver coniferous afforestation for strategic self-sufficiency. This policy was resistant to changes in geopolitical, economic and social conditions. It produced forests ill-equipped to provide for the needs of later society. The research considers whether, in hindsight, the actors could have applied greater forethought, developed better foresight, and ended the programme earlier. Eclectic mixed methods were used to explore this policy inertia. Quantitative content analysis of newly digitised archival and parliamentary material provided statistical trends. Political responsibility was explored by interview and email including from former forestry ministers. Personal autoethnographic witness from a complete member researcher was brought to bear. A range of change conditions set within policy approaches, including the Advocacy Coalition Framework, were used to assess the conditions for policy change or inertia. The evidence suggests that previous actors were largely prisoners of the mindsets and frames of their times, and subject to powerful institutional inertia. There were few alternative voices or discourses which could challenge the power of the Forestry Commission as an institution. Former forestry policy-makers can therefore be largely absolved of blame for failure to better predict the future needs of society. If it is manifestly difficult to develop foresight, then other strategies are required. The creation of adaptable forests is therefore a priority.

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Chapter 1.

Introduction

1.1. Time, forestry and the judgment of history

Trees usually live longer than humans. While mature forests can be destroyed quickly, they can only be created by the slow growth of trees. Forestry policy must take account of the long time-frames involved in natural systems. This is a problem for any forestry policy-maker:

The forests we see today across the UK are a product of this past. ...established under circumstances that no longer exist and for purposes that are no longer relevant. (Nijnik and Mather, 2007)

For much of the twentieth century the British state invested money, and much human and bureaucratic effort, in the creation of about 1.4 million hectares of mainly coniferous forests.

There were major changes in the *stated* rationale for this policy but only minor changes in the *emphasis* of the afforestation programme. For nearly sixty years, large-scale coniferous afforestation was pursued by a committed and professional institution, the Forestry Commission.

In the 1980s, the timber production-focussed afforestation project came to a relatively sudden halt. It is not evident that there was a sudden change in social, economic or geopolitical circumstances. Policy-makers, over a relatively short period, changed the fiscal conditions, which had the effect of ending private-sector afforestation. No policy was put in place to restore afforestation levels, despite supportive rhetoric from the Government.

In hindsight, such a longstanding policy of creating new forests for a now relatively redundant purpose is startling. Perhaps better forethought could have been exercised and better foresight developed, earlier. What can we learn, and are we developing the best forests for the future now?

1.2. Historical context

1.2.1. The last ice age to 1900

It is generally accepted that Britain became relatively heavily forested following the last ice age, about 10,000 years ago (Rackham, 2010, p.61). This woodland was probably significantly modified and reduced in extent by human activity from as early as the stone ages. Rackham suggests that England passed the half-wooded stage in the second millennium BC. There was relatively constant decline, accelerating from the 1860s in what Rackham calls “a time of destruction not seen for 650 years.” He ascribes this to a fall in the value of woodland produce, and thus of woodland as a land-use. At the beginning of the twentieth century, Britain was about 5% forested.

1.2.2. Forestry policy before 1900

There may have been some designation of forest areas by the Saxons and Danes, but there is little evidence of anything other than relatively free and unregulated exploitation of woodland in England before 1066. Forest laws (in England), are well recorded from the time of the Norman conquest, and represented royal policy and interests (James, 1990). In Wales the tenth-century laws of Hywel Dda included forestry measures (Linnard, 2000). Tudor forestry policy protected timber for naval shipbuilding. During succeeding centuries there were various afforestation and woodland management initiatives to the same end, for instance as advocated by Evelyn (1729).

1.2.3. “The Great Spruce Project”

Twentieth-century forestry policy in Britain is dominated by a radical change in 1918. This initiated a major coniferous afforestation programme, which may be called the “Great Spruce Project.”

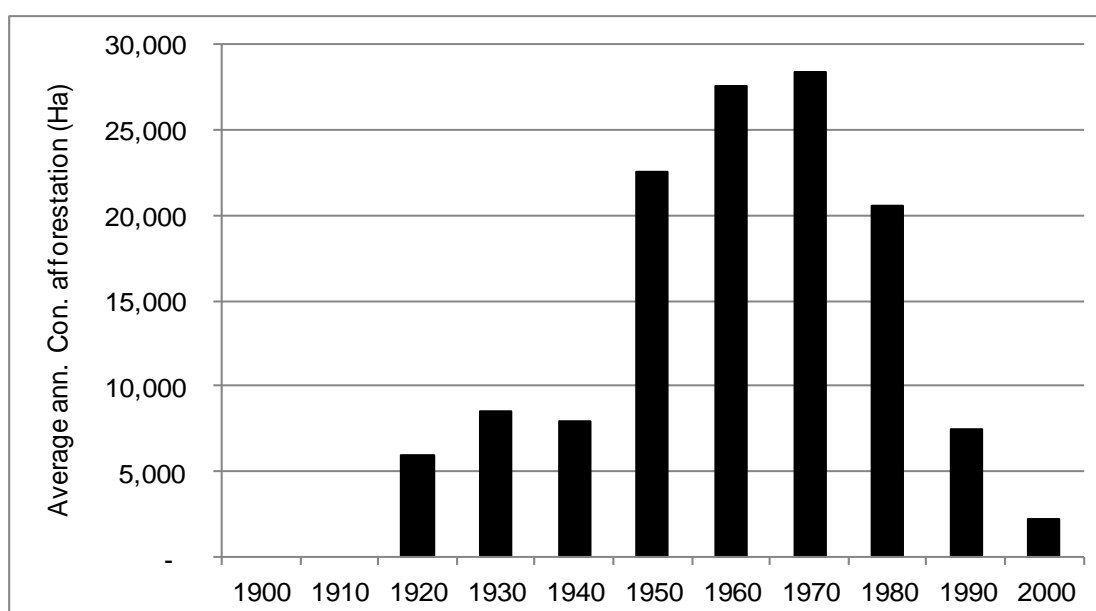


Figure 1-1 Average annual coniferous afforestation by decade 1900 to 2009¹

Large-scale coniferous afforestation continued for sixty-years until roughly 1990. The geopolitical and social environment of Britain changed significantly during the century, but there were only subtle changes in forestry policy emphases. A sixty-year policy inertia is striking. How can it be explained? What evidence can be found for the hypothesis that change could have been effected earlier, and that policy-makers failed in not seeing the need for change, and overcoming the forces of inertia? What were these forces?

¹ Produced from Forestry Commission data in Excel file NPRS1920, obtained from Forestry Commission, Edinburgh.

1.3. Hindsight, forethought and foresight

Consideration of the past is beset with difficulty. To quote the opening line of L.P Hartley's (1954) novel *The Go-Between*: "The past is a foreign country: they do things differently there."

Forestry policy-makers need to use the very best understanding available, in order to hone *forethought* and develop the best possible *foresight*.

Hindsight

Seeing what has happened, and what ought to have been done, after the event; perception gained by looking backward: opp. to foresight. (OED Online)

Forethought

Careful consideration of what will be necessary or may happen in the future. (OED Online)

Foresight

Perception gained by looking forward; prospect; a sight or view into the future. (OED Online)

The question of judging with or without *hindsight* has both legalistic and cognitive dimensions. The law frequently requires that judge or jury "ignore what they have learned in hindsight" (Rachlinski, 1998). In psychology, Colman (2008) describes *hindsight bias*: "The tendency for people who know that a particular event has occurred to overestimate in hindsight the probability with which they would have predicted it in foresight."

Irland (1994, p.17) describes the need to recognise past mistakes in the forestry profession: "Be ready to admit a mistake - to yourself, to others, to the injured party. This can take uncommon courage."

1.4. Meaning of policy

Theories of policy-making are detailed in Chapter Chapter 10. Klein and Marmor (2008, p.lxiii), rather liberatingly, counsel against attempts to over-develop a taxonomy of policy, to the extent that it "risks analyzing the subject out of existence"; they define policy as "what governments do and neglect to do."

Hill (2004, p.7) sets out a number of definitions of policy, starting by citing the Oxford English Dictionary: "A course of action adopted and pursued by a government, party, ruler, statesman." The United Kingdom National Audit Office (2001, p.15) provide a fuller statement:

...policy is the translation of government's political priorities and principles into programmes and courses of action to deliver desired changes.

In addition to values, policy is an exercise of *power*. As Lindblom (1968, p.116), put it:

Some person or persons must simply make policy choices for the society, the rest of the population simply accepting the decisions.

Dahl (1957, p.80) provides an oft quoted equation:

A has power over B to the extent that he can get B to do something that B would not otherwise do.

This may seem blunt, but it is no less applicable to the sometimes gentle sphere of forestry than other policy arenas.

Easton (1953) cited in Hill (2004, p.7), introduces networks and values:

...a policy ... consists of a web of decisions and actions that allocate ... values ... An output of a political system ... is a political decision or policy.

Hill (2004, p.5) notes two kinds of policy analysis, *of* policy and *for* policy. Analysis *of* policy seeks to understand both content and process. This research seeks to explain the absence of processes of change until that of the late 1980s, but pays less attention to the content of the policy, taking the eventual change as logically implying a failure to meet current societal needs.

Analysis *for* policy seeks to improve policy-making and includes evaluations, policy-making information, process advocacy and direct policy advocacy and the “pressing of options”.

In this research, what will be called “policy decision processes” are identified and then explored using:

Historical material; archival, parliamentary, and media.

Statistical textual analysis of documents and debates.

Insights from witnesses including autoethnography.

The taxonomy of policy theories is based upon the work of Arts (2012), who explored trends in forestry policy analysis. Theories of potential change follow Giessen (2011).

1.4.1. Non decision-making and concealed power

British forestry policy exhibits a revolutionary beginning followed by considerable stability or inertia. A logical breakdown of these historical phases is set out in Chapter 11.

These policy decision processes include the role of power in changes *not made* as well as those enacted. Power exercised in support of the status quo may be concealed power, described by Bachrach and Baratz (1972, p.44):

...non decision-making is a means by which demands for change in the existing allocation of benefits and privileges in the community can be suffocated before they are even voiced

This study seeks to be both descriptive, and ultimately normative, recommending better ways of making forestry policy in Britain.

This is a *social science* process, and an attempt to understand human beings and their thoughts and actions. It is not possible to take a completely formulaic approach:

...understanding depends not just on seeing policy making as a strange form of theater – with the analyst in the first row of the stalls – but on trying to capture the intentions of the authors of the drama, the techniques of the actors, and the workings of the stage machinery. Empathy in the sense of capturing what drives policy actors and entering into their assumptive worlds, is crucial. (Klein and Marmor, 2008, p.lxiv)

In examining the role of the actors in the forestry policy process, and in particular the actions of *institutions*, most particularly the Forestry Commission, we are considering the nature of humans in society. Berger and Luckmann (1967, p.54) suggest that: “Institutionalization occurs whenever there is a reciprocal typification of habitualized actions by types of actors.”

It is essential to gain an understanding of the participants; their own words are therefore frequently presented. The occasional photograph is included as evidence of the spirit of the times, together with allusions to the historical period involved, and events which may have affected actors’ lives. This research is as much about how past foresters saw the world, and spent their lives, as it is about the forests which outlived them. It is also about how foresters ensure that their lives are well spent in bequeathing forests which aid their successors in meeting the needs of future generations.

1.5. Research purpose

This research does not purport to evaluate the *validity* of the policy arguments; or the success of delivery in terms of stated objectives: it seeks to explore the explanations for the policy choices.

It can be argued that the period involved was dominated by materialistic and industrial value systems which prevented a reconceptualisation of forestry without a paradigm change in society itself. The values we now have were in some sense ‘unthinkable’ by the actors involved, or at least very few of them. Some of these few became agents of change. Mather et al. (2006) pose the question:

If significant change has affected rural land use at the end of the twentieth century, what are its causes? Relatively little attention has been focused on causality.

This research does not directly address that question, but does identify the mechanisms by which that change took place and the mindsets and discourses associated with change and stability.

The premise is that the clear cessation of the timber production imperative in British forestry policy in the 1980s was a correct response to the needs of modern society. It follows that if large-scale coniferous afforestation was, and is now, considered unnecessary or undesirable, then the establishment of such forests was a mistake, at least in hindsight. A simple counterfactual “thought experiment” can explore this point and meet the “minimal-rewrite-of-history rule” (Mey and Weber, 2003). If the Forestry Commission had been abolished in 1922, as recommended by the Geddes Committee (1922) then it is likely that:

Large coniferous forests would not have been created, and;

Native ancient semi-natural woodlands would not have been replaced with conifers.

Both of these policies were discontinued in the 1980s. It can be argued that if the policy had been terminated earlier, modern society would have benefitted, since these now-valued sites and habitats would have been undamaged by conifer planting. Britain's forests might now be in a condition better suited to modern society than the forests actually created by our predecessors. It is arguable that the human, natural and financial resources deployed were wasted, or had a negative effect on modern wellbeing *as viewed by current policymakers and current society*, with hindsight, and in ignorance of the future. Grayson (1993) lends credibility to this thought experiment:

...if there had been a series of leading indicators of changing attitudes to species choice in afforestation in Britain, there might have been more timely preparation for the surge of interest in broadleaves, especially native species which appeared in the early 1980s. Or the differences over a particular group of peatlands ... might have been averted."

Identifying why it may be hard to change forestry policy is the prize pursued by this research. Some new evidence is assembled and analysed and various approaches to policy analysis provide the lenses for its examination.

1.5.1. Hypothesis

This research proposes that the previous policy-makers could have been expected to identify the issues, examine the evidence and decide to change policy earlier, thus endowing us with forests better suited to modern needs, as we have *now* decided them.

In this sense the research places the actors "at the bar of history"; where did the power lie, who was responsible, could they have known better?

1.5.2. Research questions

The research questions are:

What are the conditions of policy change and inertia which explain the start of the Great Spruce Project, its persistence in the face of pressures for potential change, and its final termination?

Could the actors involved have chosen to change earlier?

Are they culpable, in that they could have applied greater forethought, developed better foresight, and ended the programme significantly earlier? Alternatively, were they prisoners of their times, unable to exercise the forethought which might be expected of them from hindsight based on one historical outcome?

What can be learned about potential approaches for developing better foresight in forestry policy-making?

1.6. Methodological framework

This research starts from a post-positivist paradigm; that there is a real ontological truth to be found but that epistemologically, our search can only approximate towards it, limited by our perceptions and understanding. It may also be that the investigator shapes the results by interaction with the subject. In this case, I am part of the subject, twentieth-century British forestry. An autoethnographic element

of the research seeks to both control for, and take advantage of this. Interviews with other actors also seek to uncover truth. The research assumes Habermasian communicative rationality, where human beings are capable of reasoned communication towards truth, and that language and linguistic structure facilitate understanding.

Forestry is an interdisciplinary subject. Our interactions with forests are biological, economic, aesthetic, cultural and emotional. It does not automatically follow that mixed research methods are required, but combined with this researcher's interaction with the subject and the general understanding of a century of history which is the objective means that diverse methods are justified. A pluralistic combination of quantitative and qualitative evidence, new to the subject is brought to bear. This is representative of grounded theory, though not to the degree conceptualised by Glaser and Strauss (1967) who were integrating coding for quantitative analysis and qualitative approaches. This research is more structured in that material is not manually coded, but more systematic computer aided analysis yields word frequency statistics. Statistical textual analysis of parliamentary and other documents provides quantitative data not before examined. Other evidence is are archival and a scholarly.

This thesis makes a further contribution by applying the lenses of different policy theories. It is therefore more focused upon the exercise of power and the decision-making processes of those in apparent political power than previous accounts. There is no attempt to focus narrowly on one aspect, using one theory and one form of evidence. There is a place for more focused approaches and further work is suggested as a result of this research.

These are mixed methods, this results from a determination to broadly shed new light on the subject beyond that achieved by other works. This approach combines the experience and story of the researcher with the experience of those involved more politically, as well as new quantitative and qualitative analysis of the large amounts of digital data which have become recently available. The intention is to set out a story: the researcher is conceived as both storyteller and objective analyst. The choice of mixed or even eclectic methods is a conscious decision of this researcher, as complete member researcher, seeking to widely illuminate and survey that story.

1.7. Sources

Six strands of source material have been used:

- Narrative histories.

- More focussed geographical or sociological accounts.

- Archival material, some recently available digitally.

- Historical news media material, now available electronically.

- Hansard records of parliamentary debates, now electronically searchable.

- Personal communication with contemporary witnesses by interview or email.

Autoethnographic analysis of my own experience.

All of these sources involve texts, whether archival or more contemporary 'witness'. These have been included as evidence for the historical argument. They have contributed to a lengthy thesis. I now turn to the nature of history and historical evidence.

Chapter 2.

Historical methods

2.1. Introduction

This research is historical: it applies hindsight. It seeks to understand actions and decisions in the past. There are different conceptions of history and its relationship to the future. Santayana (1936) suggested that “Those who cannot remember the past are condemned to repeat it.” This is often also attributed to Winston Churchill, and it is in the spirit of comments he made in the House of Commons:

It falls into that immense dismal category of the fruitlessness of experience and the confirmed unteachability of mankind. Want of foresight, unwillingness to act when action would be simple and effective, ... these are the features which constitute the endless repetition of history. (HC Deb 02 May 1935 vol 301 cc602)

At the time Churchill was arguing for preparation of national defence. That might have included the Great Spruce Project, in its fifteenth year at the time. Churchill's view seems to be on a spectrum between Santayana and George Bernard Shaw:

If history repeats itself, and the unexpected always happens, how incapable must Man be of learning from experience! (Library of Congress, 2010, p.112)

This research tests Santayana's thinking. Can we learn from history?

All of the methods used are historical: scholarship by others; archival material; historical media coverage; analysis of texts; personal recollections from contemporaries; and the researcher's own direct witness of a third of a century.

2.2. Historical knowledge

Stanford (1994, p.10) described history as “the experience of human life extended over time.” According to Stanford (1994), history can be seen as history-as-event, at the time; and then, as events pass, and are described, and held in memory, they become history-as-account. Since history-as-account can influence events, it becomes part of (future) history as a whole. For example, this thesis itself explicitly seeks to be “an original contribution to knowledge” (Bangor University, 2013): it could influence actors in future policy making.

Stanford (1994, p.130) acknowledges Meiland (1965), who argued that actual knowledge of the past is impossible constructionism, since history is essentially composed of “present entities.” In this sense forestry documents from 1945, read now, form part of the present. Stanford objects with a common-sense view, that historical knowledge is possible: humanity can reach significant agreement on what happened in the past.

History-as-account can develop over time: a new historical account of previously described events is possible. A number of histories of British forestry already exist. The forests established are actual

artefacts, available for study, but the thinking and attitudes of those who took the decisions are more easily explored through documentary evidence, and where available, the testimony of witnesses including ourselves. Stanford sets out three types of past knowledge.

2.2.1. Primary past knowledge

If one has direct personal knowledge then one has a primary historical starting point. I have direct personal memories of Forestry Commission offices in the 1980s, and of recreation sites and forests, from family holidays in the 1960s. Through conversations with older colleagues we may have ideas of what the Forestry Commission was like in the 1950s. We can project backwards to create a mental picture of a period slightly earlier, for instance of our “grandparents’ day,” by making further adjustments to the image. Stanford (1994, p.115) notes that we are able to “read with ease the fiction of those days.” My direct knowledge of bureaucratic life in a science policy division of a Whitehall department, makes C P Snow’s (2000, p.13) description of a meeting in a ministerial office in the 1940s more intelligible.

2.2.2. Secondary past knowledge

Stanford (1994, p.118) identifies a number of potential sources of “secondary knowledge” of past events: images; visual material like maps; oral evidence and reasoning. The latter includes the increasing use of mathematical reasoning. Statistical analysis of historical material is used in this research.

2.2.3. Tertiary understanding of the past

Stanford describes this as generalised knowledge, either *a priori* or *empirical*, using deduction and induction. In dealing with the possible reconstruction or *construction*, of models of historical situations, two related difficulties are described. Firstly, the real-world situation has disappeared, and the selection of components for the model has been partly determined by accidents of survival, not the rational consideration. In the case of post-war forestry policy, various documents and communications exist as evidence of the influences upon the thoughts of the policy-makers. There is much less information on the strength of personality of the actors, and their mindsets. It may be difficult to properly weigh the experience of two world wars and resultant productivist and national-survival-based motivations. There is a danger that the model taking shape in the historian’s mind is based on a distorted system of facts, and:

...the greater is the likelihood that that model follows the bent of his own convictions rather than the original “real world” situation. (Stanford, 1994, p.121)

Stanford suggests that, as in science, testing of models by others and peer review serve as protection against this.

2.3. Nature of evidence

Statistical information derived from content analysis of forestry documents might be seen as development of what Stanford calls “hard evidence.” Increasing use of computing power may analyse historical information to provide new statistically supported insights. However, he is also referring to more factual historical statistics and in fact contrasts this with “soft” linguistic evidence open to more variable interpretation. Content analysis thus stands between these two, but represents a relatively new way to reveal new insights. It is for instance possible to say that a forestry report of 1909 appears to contain more productivist terminology than one of another period. A statistical time series which may reveal a trend in thinking which would otherwise be difficult to uncover by more traditional historical approaches. One danger is that of “*intentional evidence*.” Stanford (1994, p.146-147) draws the distinction between a historical battle report intended for posterity, and an item of prehistoric garbage with no intended message for the present. Manuscript notes in a file are clearly written less with posterity in mind than Forestry Commission annual reports. Interviewing venerable former officials of the Forestry Commission may engender unintentional interpretation, as they reflect on their own legacy. The same may apply to this researcher’s own reflections and autoethnography.

2.4. Imagination and counterfactual history

Stanford (1968, p.131) sets out various ways in which imagination can be useful to a historian:

- Visualising the past.
- Inference from available information.
- For developing counterfactual ideas.
- Interpretation of a “whole course of action.”
- Developing insights.

A counterfactual thought experiment was proposed in the introduction. There is a debate in historical theory about the usefulness of counterfactual methods:

First, it is not self-evident what roles thought experiments can play in theory construction and/or choice. Second, it is not self-evident that historical thought experiments have plausibility... (Mey and Weber, 2003)

Johannes Bulhof (1999), reviewed various historical writing and discovered that in fact:

Claims about what might have been are not only everywhere, but are very important to our understanding of history. ... By far the most common use of counterfactuals and modal claims is about ordinary historical subjects and is found in ordinary historical texts.

Serious counterfactual exercises of the Cliometrics School (MacRaild and Black, 2007, p.80) included a study of the impact of railways on industrialisation in the USA (Fogel, 1964). This sought to model the economic effect of a hypothetical absence of railways. A follower of Fogel, Hawke (1970), calculated the positive effect of the existence of railways on the British economy at between 7% and

11%. Significant insights might be gained from such modelling of the afforestation effort in twentieth-century Britain.

All historical examination involves modelling in some sense. Stanford sets this out neatly:

As he goes back and forth between his primary evidence, his secondary sources, perhaps also the opinions of colleagues and friends, and lastly the constructions growing in his mind and in his writing, he may alter his conception of the finished work... (Stanford, 1994, p.151)

2.5. Narratives

Usually in life, as well as history, we expect narratives with a “general linear reality” (Abbott, 2001, p.37) with cause followed by effect, we expect that:

...policy causes and effects could be ascertained empirically and that a general set of social forces drove policy-making, with individual deviations from deterministic outcomes existing as “noise or random error”... (Howlett and Rayner, 2006)

Howlett and Rayner identify two basic approaches to narratives.

1. Narrative positivism seeks to look for causation in the “real” world separate from the narrative history.
2. Narrative postmodernism – drawing on Foucault, Howlett and Rayner (2006) describe this as:

...built on the observation that there is a world outside of the narrative itself but the moment we try to describe it we are again telling stories.

Histories of British forestry have been written, as positivist narratives “ex-post facto” (Foot, 2010; Pringle, 1994; Richards, 2003; Ryle, 1969).

Our stories are interwoven, and exhibit intertextuality. Examining the way in which a Forestry Commission annual report is put together may result in a limiting of imagination. It takes place within a “frame” and there is a limited “stock of discursive elements” in such a shared frame. This research adds a statistical element to this, providing a new potentially more objective measure.

Howlett and Rayner note that intertextuality results in the difficulty that:

...postmodern emphases on reframing and free play tend to undermine any sense that history moves in any kind of specific direction...

This work does not take a postmodernist approach, but this concept is taken as a note which may play a role in explaining the difficulty in conceiving of a different forestry history both now looking back, and by the participants looking back at their own history during the period concerned.

Howlett and Rayner (2006) set out an approach to what they term the “Historical Turn in the Policy Sciences.” This takes issue with the historians’ usual approach, which looks at a history as a single entity or story, which arises from a sequence of events. They survey a range of approaches and conclude that:

...the most interesting new work has a hybrid character that incorporates narrative and stochastic methods in the course of developing models such as path dependency and process sequencing.

This research looks at discrete policy decision processes, allowing modest consideration of path dependency and process sequencing.

2.5.1. Path dependency

At its simplest this implies that each stage in a path results from the preceding one. Mahoney (2000) sets out both this form, of *reactive* sequences which form a chain, and a concept of “self-reinforcing sequences.” To be path-dependent rather than to show simple causation, there must be a historical event which is contingent and which sets the chain off, and there must be an automatic element in the sequence which follows. The challenge is to identify the difference between the two.

Applying this to British forestry policy might involve considering the contingency of the First World War which created conditions which could (but did not *have to*) result in the establishment of an afforestation programme. Whether this then continued through a reactive or self-reinforcing chain might have explanatory power in considering the stability of the project.

As Paul Pierson notes, in a path-dependent pattern earlier parts of a sequence matter much more than later parts, an event that happens ‘too late’ may have no effect, although it might have been of great consequence if the timing had been different. (Mahoney, 2000)

For instance, the invention of nuclear weapons in 1945 appeared to have very little effect upon the British afforestation programme. If on the other hand the technology could have been predicted in 1922 (or 1917), then a change in policy might have been more likely. Pierson (2000) usefully sets it out thus:

(1) the initial ‘critical’ juncture, when events trigger movement toward a particular ‘path’ or trajectory out of two or more possible ones;

(2) the period of reproduction, in which positive feedback reinforces the trajectory initiated in phase one; and

(3) the end of the path, in which new events dislodge a long-lasting equilibrium.

Howlett and Rayner suggest that that initial conditions are chance-like, and have a significant influence over the irreversible course of events later in the sequence. This chimes with the history of the post-First World War afforestation project.

While a random sequence implies that any event has an equal probability of following from any other, in a contingent sequence each turning point renders the occurrence of the next point more likely until, finally, “lock in” occurs and a general explanatory principle, such as increasing returns, takes over the work of explanation. (Howlett and Rayner, 2006)

2.5.2. Stochastic

Howlett and Rayner (2006) note that contingency requires meaningless distinction between causes of different importance; suggesting that the source of change lies in the large events. The First World

War was certainly a “large event” which affected forestry policy. Howlett and Rayner look at smaller events such as the paths by which QWERTY or VHS became dominant, in the context of “large-scale social processes such as bureaucratization”. The same point might be made about productivism as a large-scale social process, making the First World War a more subsidiary event. However it is difficult to disentangle the relationships: the First World War was a productivist war, and itself provided a spur to greater productivism, in forestry, for instance.

2.5.3. Process sequencing

The punctuated equilibrium model (described more fully in Chapter 10) seeks to resolve the question of “process sequencing”, where “periods can be demarcated on the basis of contrasting solutions for recurring problems” (Haydu, 1998).

		Direction of Sequence	
Origins of Sequence		Reversible	Irreversible
	Contingent/Random	Stochastic and Narrative Postmodernist	Path Dependency
	Embedded/Cumulative	Process Sequencing	Narrative Positivism

Table 2-1 Process sequencing, from Howlett and Rayner (2006)

Howlett and Rayner concluded that “process sequencing” was the dominant model found in policy-making, importantly noting the danger of hindsight bringing the appearance of inevitability:

...the policy narratives generated through application of either positivist or post-modern methods always tend to be idiosyncratic, retroactive explications of events which have already occurred, where inevitability is observable only in hindsight.

The danger is that by explaining what happened, we ignore the other possible actions which could have resulted from the same conditions.

2.6. Turning points

Abbott (2001, p.245) advances a theory of turning points, noting that identifying them is a matter of hindsight and that they are essentially part of a narrative (Abbott, 2001, p.25). Trajectories describe relatively stable sets “of rules governing outcomes”. Abbott also notes that there can be “extended periods of nontrajectory experience”, when events may be random or genuinely inexplicable as part of a direction. Statistical analysis of historical texts may provide a new kind of evidence of trends and direction. Abbott points out that:

A major turning point has potential to open a system the way a key has the potential to open a lock. In both cases, too, action is necessary to complete the turning. (Abbott, 2001, p.259)

This research examines the way in which the afforestation policy replaced a stable system, became stable itself, and resisted change despite significant pressures which might have been expected to unlock change.

2.7. Kinds of historical questions

Mey and Weber (2003) suggest four kinds of “explanatory questions.” They provide examples in each case, here replaced by equivalent forestry policy questions.

Non-contrastive questions: “Why does object *a* have property *P* (at time *t*)?”

Why was the Forestry Commission established in 1919?

Why was a new broadleaved policy introduced in 1985?

Why were the recommendations of the Geddes Committee for the abolition of the Forestry Commission rejected by the government in 1922?

Contrastive questions - There are three forms of these:

“Why does object *a* have property *P* (at time *t*) rather than property *P'*?”

Why did afforestation by private owners end in 1988 rather than continue?

“Why does object *a* have property *P*, while object *b* has property *P*¹ (both at time *t*)?”

Why was there a government announcement ending upland afforestation in England, but not in Scotland in the late 1980s?

Why is the Forestry Commission a non-ministerial government department, unlike the Ministry of agriculture?

“Why does object *a* have property *P* at *t* but property *P*¹ at *t*¹?”

Why did the afforestation project end in 1988 and not in 1922, 1945, 1959 or 1972?

Why did broadleaved planting become important after 1985 but not before?

Existing works on British forestry policy have not fully addressed questions of these sorts.

2.8. Histories of twentieth-century British forestry policy

2.8.1. Historical accounts

A brief relatively early account by Griffith (1951) called for sustained policy and uncritically supported the strategic argument, despite the advent of nuclear weapons. Ryle (1969) provides a somewhat personal account including the internal thinking of Forestry Commission staff. This was the first of a sequence of histories written by Forestry Commission staff. He provides insights into the “Geddes

Axe”, and particularly the development of the Post-War Forest Policy discussed below. A polemical work by Tompkins (1989), argued for a cessation of upland afforestation. A further, briefer, insider-narrative is provided by Pringle (1994), published by the Forestry Commission, this provides little insight into the complexities of policy and direction. A more incisive account is provided by Mather (1993) as a chapter in a general international work on afforestation. This suggested that a wide-ranging review was overdue. Aldhous, yet another insider (1997), set out a useful tabulation of afforestation progress and of grant schemes and mechanisms. He recommended that the profession: “maintain: among other qualities humility to review dispassionately the possibility of mistake.” Richards (2003), produced a work full of original sources, but little analysis. More recently, the role of people provided a theme for the account by Foot (2010). Rackham (2010) dealt with a wide span of history, together with Smout (1997) (Scotland), and Linnard (2000) (Wales). Finally, Oosthoek (2013), concentrating on Scotland, described the Indian colonial and German origins of scientific forestry and took the view that foresters possessed environmental convictions which allowed a “coming together” at the end of the century, following what he termed “rogue forestry” in the controversial afforestation programme in northern Scotland.

2.8.2. Critical geography

Judith Tsouvalis (2001) surveyed forestry history by reference to spaces both physical and conceptual. Incisive critiques of some of the narrative histories include the way in which Pringle reinterpreted concepts like Forest Parks into the multiple use discourse of the 1990s. The critical geography approach gives powerful insights into some intellectual and semi-political struggles within forestry. It described for instance the way in which individuals developed, and campaigned for, the concept of, and geographical space for, “ancient woodland.” However, the political interface is less fully treated.

2.8.3. Social history

A social narrative is provided by Nail (2008), contrasting modern (English) forestry with the exclusive spaces and marginalisation of people in earlier English history, and describing the “productivist dream” inherited by the Forestry Commission in the “traumatic context of World War I”. Nail goes on to describe the dream as failed, and sees the post-war period as one of “waking up” to multiple purpose and sustainability narratives. However, the process by which these social changes worked through policy and power structures is less clearly addressed, although interagency competition is analysed.

2.9. Building upon previous histories

This chapter does not seek to review all of these works comprehensively. All will be referred to later where they shed light on the historical periods and policy decision processes considered in turn.

While these writers have made use of basic sources such as Forestry Commission annual reports and the major official reports, there has been less thorough consideration of the archival material

available. This is not to say that a number of them do not contribute useful archival sources (Foot, 2010; Nail, 2008; Oosthoek, 2013). There is more work to be done in examining the considerable material held in the National Archives. Reports used in the following chapters have only recently become available electronically, allowing text analysis (but this research required some time-consuming optical character recognition (OCR) processing) not used by any previous researcher. The same applies to Hansard records which have been referred to by previous workers but not systematically analysed, presumably because they were effectively impenetrable until digitised and searchable. The nature of historical material is constantly changing, Hutton (1993, p.xxii) noted that; "our present-day electronic culture has intensified and deepened this trend toward easier access to representations of the past." This also includes the quick and easy email consultation of a former Forestry Commission Director General living in Australia.

This research seeks to bring these new sources and means to bear, in order to add to others' work. The first and more conventional additional research has been archival, discussed in the next chapter.

Chapter 3.

“Archives, records and power”²

3.1. The nature of archives

An archive can be defined as:

Materials created or received by a person, family, or organization, public or private, in the conduct of their affairs and preserved because of the enduring value contained in the information they contain or as evidence of the functions and responsibilities of their creator... (Pearce-Moses, 2005)

This impartial-seeming definition runs the risk of underestimating the power relationships involved and the danger of overreliance on archive material. The traditional approach assumes that the records provide impartial evidence of the “actions, processes, and procedures of ... creators” (Trace, 2002). In recent decades there has been more scrutiny of the real reason for the creation of documents was it to: communicate an idea; make a case; or place a record of an idea on the file for posterity? We have to consider the motives of people who originally decided what they needed to record, and who weeded the active file, and then decided what merited transmission to the Public Records Office.

The files of the Forestry Commission and other government departments were created originally as “means of carrying out activities” (Jenkinson (1944) cited by Trace (2002)). Stanford (1994, p.156) suggests that there are two further readings of a document beyond this face value. Firstly, what it meant to the people at the time, informed by ‘horizontal’ non archival evidence. Secondly:

...the meaning that the text has for us in full recognition of what it meant for them. ... In one sense every such relic of the past has this third meaning for the historian in the present simply because it acts as evidence for her.

The creation, selection and maintenance of documents may be seen as consolidating power at a number of levels. At the lowest, deciding what material should be preserved puts the official involved in control over their own posterity. This can be dangerous:

Archives validate our experiences, our perceptions, our narratives, our stories. Archives are our memories. Yet what goes on in the archives remains remarkably unknown. ... This lack of questioning is dangerous because it implicitly supports the archival myth of neutrality and objectivity, ... It further privileges the official narratives of the state over the private stories of individuals. (Schwartz and Cook, 2002)

This power, exercised by the state and its agents, is carried out according to various guidelines. The (National Archives of the United Kingdom, 2012) seeks to preserve material which illustrates: government policy development and change; the way in which civil servants and ministers work; and constitutional and organisational structures.

² Title from (Schwartz and Cook, 2002)

The guidance sets out the language of state power. Foucault, cited in DeLanda (2003, p.9), notes that the threshold for a person's life to be recorded (and be selected for an archive), has widened from memorialising the great and the good of past centuries, to now include ordinary individuals recorded by bureaucrats.

Stanford (1994, p.149) notes the large scale of documentary evidence available for the twentieth century. He also points to modern disadvantages – in particular, the increased use of the telephone. It is also possible that the “clubby” nature of mid- twentieth-century Whitehall means that we have only very scanty evidence of some communication. The Ministry of Agriculture (MAF) files, for instance (TNA: MAF 141/105 C, July 4 1947), contain a careful list of examples of Forestry Commission failure to co-operate with the Ministry, written in forthright terms. The only evidence of this being used is in a manuscript note from (presumably) the Permanent Secretary's private secretary, reporting back to the more junior authors, that the issues had been raised with the Chairman of the Forestry Commission over lunch. The same may well apply to events like the entertainment of various Ministry of Agriculture officials at Northerwood House³ over a weekend in 1947. The meeting was minuted, but the arrangements evident in the file for high officials to drive down together draws attention to unrecorded discussion.

3.2. The National Archives and Public Records Office

The Public Records Office (PRO) forms part of the National Archives of the United Kingdom. Files are deposited according to statute, after selection by Departmental Records Officers. Some documents, for instance some First World War cabinet papers, have been scanned and are available digitally. Most files are held in roughly the form in which they were originally used. They are accessible to researchers by means of sometimes-vague file descriptions.

For this research, more than 500 images were made over a number of days at the National Archives at Kew. Some documents were clear and easily recordable by camera, and capable of optical character recognition. Those of poorer quality or manuscript required transcription.

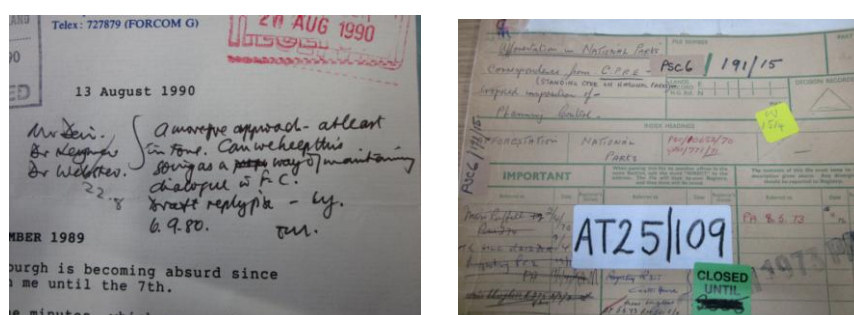


Figure 3-1 Example of a national archive document with manuscript notes and a file cover

³ A stately house in the New Forest gifted to the Forestry Commission in 1945 and used for training and conferences.

3.3. Freedom of Information Act 2000

Cabinet papers, for instance relating to forestry tax changes announced in the budget statement of 1988, remain closed under the “Thirty Year Rule.” However, it has been possible to secure copies of papers (most marked “Secret”), by direct application to HM Treasury under the Freedom of Information Act 2000. The (nearly a hundred pages of) material obtained by this method had some details ‘redacted’ in accordance with the Act, since officials would not have expected their work to become public. The redactions also included the name of what appears to be a forestry company.

3.4. Electronically available material

A relatively new wealth of digital material has been subjected to computer aided text analysis to yield fresh insights. Forestry Commission annual reports and other government reports and papers are available, many as digital images, but these are not susceptible to full-scale text searches. A separate optical character recognition process was carried out for this research. All parliamentary proceedings are now available as a directly searchable electronic archive. Material had to be transferred by cut and paste for text analysis.

Variations in image quality and resultant OCR can reduce the number of correctly identified words in a text search. This was controlled for by a quick visual review of each text file. Spelling error searches were used to improve some well-recognised files. Some documents where the original quality was too low for reasonable character recognition were rejected for text analysis. Some passages of particular evidential value were transcribed as quotes in this thesis. Much of the digital material required time consuming searching.

The main groups of material included:

Forestry Commission and Office of Woods annual reports and other substantial government reports (94 documents).

Newspaper articles available as images but requiring OCR (62 documents).

A large number of other reports.⁴

Digital forestry texts from the early twentieth century.

Nearly 500 photographs of documents in files at the National Archives.

Individual *Hansard* texts (232 items).

In total, 724 digital texts were collected as a database.

⁴ Including: Zuckerman, Treasury cost-benefit analysis, Wood production outlook, 1972 Policy document, 1991 Policy, Nature Conservancy Council conference proceedings, National Audit Office report 1986..

Many of these archival and scholarly investigations shed light on the personalities and distinctive voices of actors. Most of them are no longer with us, but some are available to be consulted. I now discuss this personal communication.

Chapter 4.

Evidence from contemporary witnesses interviews and email

4.1. Value of contemporary evidence to the research

In order to investigate the hypothesis that policy change could have occurred earlier during the period of policy inertia, it is necessary to seek to understand the dynamics between policymakers of different types, with different mindsets and standpoints.

For events in the past few decades, recollections of actors can be collected. For earlier periods, the relatively stable nature of the British governmental system (and the Forestry Commission as an institution) means that contemporary evidence can still inform understanding of earlier power relations.

4.1.1. Storytelling and theoretical approach

Seidman (2006, p.9) argues that interviewing cannot be used to “get answers to questions, nor test hypotheses,” but that it seeks understanding of “lived experience of other people and the meaning they make of that experience.” Interviews are storytelling and conversations which can result in a joint exploration of truth. This is central to Habermas’s thinking, but it can be objected that Habermas makes this over-theoretical, “rather than allowing actual communication to present itself” (Smith, 1996). The intention is thus to create a textual form of the interviewee’s lived experience and use it to express something essential about the making of forestry policy, so that the reader is animated by that essence. All of us are participants in a “lifeworld” and the interview method explores our shared subjective consciousness and experiences. Interviews of this sort may be seen as neither subjective nor objective (Kvale, 1996).

The interviews in this research asked actors to recollect past actions and motivations, sometimes long after the event. The autoethnography described in Chapter 6 explores the difficulty in interpreting one’s own past actions, and recollecting motivations. My autoethnographic story sometimes overlaps with that of the interview respondents, with a similar risk of bias and hindsight within the accounts.

A dialogue involves the interviewee as a collaborator in the research process. This dimension is relevant to this study, since the researcher has long been involved in the subject matter and may be known to the interviewees. This provides the potential for quicker rapport than might otherwise be the case, but also brings predispositions in terms of power and attitudes. Seidman notes that interviewers can develop rapport if they “share their own experience when they think it is relevant to the participants”, but that this brings a significant danger of distorting the interviewees’ volunteering of information. While qualitative interviews cannot be treated as objective, the data will contain “meaningful relations to be interpreted” (Kvale, 1996, p.11). In most cases, I have worked with the interviewee when I was in a subordinate position. While the interviews were set up in a context of

equality and of a dialectical search for the truth of the situation, these historical power relations are recorded where relevant.

4.2. Interview methodology

4.2.1. Choice of unstructured interview

The objective was to draw out new insights and the “interviewees’ own perspectives” even encouraging “rambling or going off the point” (Bryman and Bell, 2007). Unstructured interviews allowed changes to questions in response to interviewees’ comments.

Unstructured interviewing is recommended when the researcher has developed enough of an understanding of a setting and his or her topic of interest to have a clear agenda for the discussion with the informant, but still remains open to having his or her understanding of the area of inquiry open to revision by respondents. (Cohen and Crabtree, 2006)

This approach is true to the idea of the process as in “*inter view*”, and “interchange of views between two persons conversing about a theme of mutual interest” (Kvale, 1996, p.14).

4.2.2. Interview guide and themes

Themes arise in qualitative research, before, after and during data collection (Ryan and Bernard, 2003). An attempt to maintain a uniform approach at the outset of interviews was made in order to reduce variation arising from the interviewer’s familiarity with some of the interviewees (Seidman, 2006, p.97). While the method adopted falls into the definition of an unstructured interview, it is between the two extremes set out by Bryman and Bell (2007), a spectrum between a single question or aide-mémoire, with a free response; and “a list of questions or fairly specific topics to be covered”. In deciding on the degree of structure, Bryman and Bell set out a number of criteria:

The desire to gain access to world views of interviewees.

The degree of focus in the study.

Any need to achieve comparability between a number of interviewers.

A likelihood of doing multiple case studies capable of comparison.

A single pilot interview was conducted using a list of broad questions. This fitted the description of a “semi-structured interview”, but the responses were discursive and revealing, and led to the decision to take an unstructured approach using a list of themes rather than questions. This also served to confirm that email invitations for reflections were valuable, both as follow up methods and as a primary means of collecting direct “personal communications.”

An aide-mémoire was prepared to assist in covering a range of themes: three main versions were prepared to deal with the main categories of respondents:

Politicians

Former Forestry Commission staff

External voices

These also guided the framing of email questions sent to respondents.

4.2.3. Interview ethics

The research was subject to Bangor University ethics processes, and the approach was submitted to the Ethics Committee of the College of Natural Sciences. Participants were provided with an information sheet detailing the research. Those who consented to recorded interviews were asked to sign an informed consent form, which made clear that material would be attributed, and also reminded participants that they could withdraw from the research at any stage. Email respondents were initially asked whether they were in a position to help with the research. Some of the immediate replies to this request were of value in themselves and respondents were asked for email confirmation that these could be used as attributed “personal communications”. At this stage they were also provided with the research information sheet.

4.2.4. Anonymity

Anonymous interviewing provides respondents with the opportunity to provide information which they would not be happy to disclose attributably. The nature of the respondents, including for instance forestry ministers, of whom there have been relatively few, has meant that denoting participants under group headings like “forestry politicians” would be unlikely to guarantee anonymity. The value and transparency of the findings can also be enhanced by making clear whose views and experiences are being used. Participants have therefore been asked whether their reflections can be fully attributed with specific agreement and approval.

Contextual information was collected, both in order to identify any relevant material not obvious at first sight for later interpretation and the potential benefit of later workers.

4.2.5. Recording and transcription

Interviews were recorded with prior permission using an Android telephone or hand-held recording device. Use of an in-line connection facilitated recording of telephone interviews directly to the recorder. Transcription made indirect use of voice- recognition software by repeating the interview in the researcher's voice, which the software could recognise readily, and checking the resultant automatic transcript against the original recording.

4.3. Personal communications - email

While this research has not made use of other innovative methods like chat rooms or online focus groups, it has tested the potential of email as a way of developing "reflexivity by providing both the time and space for [academics] to construct, reflect upon and learn from their stories of experience" (James, 2007). The process should be consciously reflexive since openness of questions results in an interaction and development of a shared understanding with the researcher. Face-to-face interviews are synchronous communication in time and space Opdenakker (2006), allowing observation and interaction, with spontaneous responses, where participants have little opportunity for reflection. Email 'interviewing' is asynchronous, allowing "considered" responses from participants. Clearly, allowing a former Secretary of State or Director General of the Forestry Commission to ponder their electronic response to an open-ended email request for reflections does result in a more considered and perhaps less immediate response. The benefits probably outweigh the potential for biased "calculation." As James puts it, (referring to other workers):

...remarks, narratives can open up a deeper view of life that is derived from real events, feelings and conversations, as well as exposing those experiences, which might otherwise not be heard or read. It is through narrative that individuals' identities and self-concepts are drawn together and made sense of in the course of biography, and that past, present and future events are linked together by individuals as an ongoing process organized as an unfolding story. (James, 2007)

Email is convenient, allowing for instance, interaction with a former Director General of the Forestry Commission resident in Australia, exchanging emails over a week. This may be equivalent to a sequence of questions in a half-hour face-to-face interview. Again as James points out, this method allows an opportunity for respondents to:

... compose their narratives, to recall and better understand how they came to see themselves in their past and present careers as they picked up on issues that slipped temporarily out of view through the course of the interviews, and as they returned to earlier aspects of the narrative at their convenience.

Of course email does allow some opportunity for "disembodiment and anonymity" which can allow "users to take on many new identities", or even to "reconstruct" identities (Hardey, 2002), but this is reduced when the interviewees are known to the interviewer, and in most cases in this research, vice-versa. In some cases this might simply have been when the researcher was a relatively anonymous junior officer of the Forestry Commission. One respondent wrote: "I will cast my mind back 25 years! I will aim to get back to you no later than..." A full and thoughtful, but perhaps less spontaneous

response was then forthcoming. James remarks; “I decided to accommodate the priorities in their professional lives, to give them time to consider the issues, so I waited for them to respond.” This works both ways however: the researcher is able to ponder a potentially searching follow-up question.

In terms of objectivity, some of the issues of unstructured interviewing are relevant in email exchanges. Their social nature tends to involve some self-disclosure, even by way of introduction of the nature of; “you might remember that I organised a conference in 199...?”

Usefully, and methodologically reassuringly, James shared this issue:

The nature of my role as researcher had involved self-disclosure. I realised that my professional and personal experiences as a ‘participant’ in online narratives about identity construction were not data that should be omitted, but were in fact the very reasons why I was undertaking the study.

As in a physical interview, this meant that rapport could be developed, with some risk of complicity or bias. For instance, if a (not previously acquainted) land-owning member of the House of Lords responds to an email question about a speech made in 1978 (which is now available in cyberspace) and mentions that they own forests in Scotland affected by insect damage, this researcher had to decide whether to make a ‘human’ response along the lines of: “Thank you for your email, could I ask whether you think that the government of 198.. intended xxx? I have bought a 10 ha spruce forest with my Forestry Commission pension lump sum and share your concerns about...”

Some of this is of course unremarkable – in some respects it differs little from the chat with an MP over a cup of tea in a House of Commons tearoom when the recording device is switched off. As Markham (2004) points out:

Talking with anyone formally or informally marks a significant shift from observer to participant-- or more crucially, accomplice. Online, as interviewers, we co-construct the spaces we study. This is not a minor point. Our interactions with participants are not simple events in these online spaces, but are constitutive and organizing elements of these spaces. (Markham, 2004)

These spaces could of course be quite human, as James says; having noted that she knew the subjects, “this did not preclude them writing narratives that were sometimes ‘superficial and playful’, where it was evident that they did not always want “to participate in substantive discussion”. In this she was citing Gaiser (1997) who had worked on internet chat rooms.

Meho (2006) describes email interviewing as “online, asynchronous, in-depth interviewing”. Some of the email contacts in this work have been single relatively unspecific requests for reflections. Others have been multiple exchanges over a period; this variation is typical of the studies which Meho examined. A number of email conversations in this research followed or preceded more formal telephone and face-to-face interviews. Clearly email exchanges take less time and cost less in terms of travelling; and they access the views of people at a distance. They also gain information from those who are unwilling to agree to a formal interview with recording, transcripts and the need to make appointments and set time aside. This was important in gaining access to some categories of people with constrained dairies such as serving politicians. For instance a face-to-face interview with a former

minister and active MP took three months to fit in his diary. Other politicians rapidly replied to email questions. From the researcher's point of view, transcription time and cost are obviated, and computer-searchable material is immediately generated.

Those without email might be excluded, but this proved to be less than expected: while email addresses were not readily found for elderly members of the House of Lords, letters sent by post elicited email responses. The same applied to former Forestry Commission senior staff in their 80s or 90s.

Informed consent was achieved through, in simple cases, a clear exchange of email asking permission to attribute a specific single line of comment accompanied by an information sheet. Where much fuller material was provided or combined with a face-to-face interview, a formal consent form was used. The more diverse nature of the interactions required careful record-keeping and filing in order to be clear that consent was given. There were cases where respondents chose to change the wording at this request-for-permission stage. This might have reduced the spontaneity of response from a face-to-face interview but it seems more likely that, better quality material, more easily presentable, was elicited, and the wishes of respondents respected. In some cases respondents emailed later along the lines of "I've been thinking a bit more about xxx and now remember such and such."

Meho points out that some respondents might be less or more effective at written or spoken communication. In one case a respondent had suffered some medical difficulties which affected their typing, but this was compensated for by careful agreement of what was approved for use.

This research supports Meho's conclusion that email interviewing offers "unprecedented opportunities for qualitative research" and that the challenges presented can be overcome.

4.4. Evidence collected

Direct personal contact has yielded considerable evidence, some of it with a significant human and personal dimension, which has provided some new insights. This researcher has borne witness to a third of the forestry policy story since the genesis of the afforestation project. The next chapter explains the use of the relatively novel method of autoethnography, drawing upon my own personal evidence.

Chapter 5.

Autoethnography

5.1. Introduction

The purpose of this thesis is to explore the underlying dynamics of British forestry. Both quantitative and qualitative methods are used. Voices, mindsets, standpoints of individuals and institutions are analysed, and a “story” of a policy community and its conflicts is told.

The business of the theorist is to unmask the partial and motivated character of actual narratives, sometimes by telling an alternative story but more often in policy studies by appealing to other methodologies to demonstrate the gap between the stories and an underlying reality. (Howlett and Rayner, 2006)

I cannot avoid the fact I have researched the forestry community of which I have been a member for over thirty years. This is both an opportunity for reflexive insight, and a risk of bias resulting from personal perceptions and emotional involvement. All research involves sources of bias. Certain predilections cause people to choose forestry (or academia) as an occupation. More specifically, choices of field or subject are made by an institution, funder, and the researcher. All researchers will have a standpoint.

5.2. Approaches to autoethnography

Autoethnography can explore standpoints and render them more transparent. It provides “an approach to research and writing that seeks to describe and systematically analyze personal experience in order to understand cultural experience” (Ellis et al., 2010). Firstly, an autoethnographic account provides an almost ethical declaration of my own emotional involvement with, and unavoidable standpoint vis-à-vis, the Forestry Commission. This can then be taken into account by the reader (Frank, 2000). Secondly, my own *reflexive* narrative may provide evidence of the processes involved, the nature of the institution of the Forestry Commission and its members, and the evolution of its mindset over time. It must also be noted that this brings with it the possibility of an informed “confirmation bias” (Klayman and Ha, 1987). At its simplest this is illustrated by Kahneman (2012): “When asked, ‘Is Sam friendly?’ different instances of Sam’s behaviour come to mind than would if you had been asked ‘Is Sam unfriendly.’” Since it is cognitive, confirmation bias is hard to control against. My own memories may be unconsciously selective. The autoethnography in the next chapter contains an analytical section after each vignette of my recollections. This attempts to observe the recollections as objectively as possible. In this sense I explore the “notion of myself as “*reflective* researcher” – showing myself to myself” (Doloriert and Sambrook, 2011). My motivation for carrying out this late career research includes self-discovery through a review of the role of my former self and my thinking during the latter third of twentieth-century forestry policy. This can engage the reader in a way which is not possible in a purely analytical approach (Anderson, 2006). The use of autoethnography in a PhD of this type is somewhat experimental, and Doloriert and Sambrook (2011)

pose the question; “Do the current requirements of a PhD thesis stifle or limit autoethnographic writing, or vice versa, and if so how can this be managed?”

There is danger in the mixing of methods:

...such mixing should be done under the aegis of a single paradigm such that the ontological, epistemological, and axiological concerns are coherent and resonant. (Denzin and Lincoln, 2011, p.716)

This research is determinedly mixed, the opportunity to exploit my own experience through autoethnography could not be ignored. The challenge is to ensure that the “quantitative and qualitative components are mutually illuminating” (Bryman, 2007). According to Bryman, part of an autoethnographic account is clearly “objectivist.” But in parallel, there is a more subjective account “constructed” by the researcher. It could be argued that this is socially constructivist and in a sense not real. In this research is also supported by statistical and archival evidence.

Atkinson et al (2003) point out that personal narratives in research work are “more usually written as parallel but separate accounts”. Alternatively, the autoethnographic material could be inserted into the objectivist account where it appears to inform the overall story. I have decided to present the autoethnography in a separate chapter, so that it forms a discrete source.

Atkinson et al. question how “far such practices and texts should be part of, or divert us from, “telling the story of the field.” In this case that story is the development of forestry policy in Great Britain. I hope that this diversion will inform the reader and provides an appropriately *reflexive* context about the researcher, even if Atkinson et al. (2003, p.60-61) suggest that this produces “some indication of the [auto]ethnographer’s ‘split personality’, perhaps tending to “isolate, rather than integrate, the self, into the field.”

This research examines the nature of, and motivations behind, the twentieth-century British coniferous afforestation project, the key institution involved has been the Forestry Commission. I was involved in the organisation and its values and structures for about 34 years (1977-2011). This represents one third of its 93-year history. I have felt *emotionally* engaged with the institution and its community. At times I have felt very much a member. At other times I have felt isolated, alienated and sceptical about its purpose and activities. I am not independent of the subject in the same way that a younger immediately postgraduate researcher might be (though they will bring other subjectivities to the issues). This research deals with a personal journey and my “emotional states and cognitions were transient, prioritised differently over time, and were often conflicting”, (Analoui et al., 2012).

This autoethnography has also informed the rest of the research. My experience has assisted with the quantitative text analysis by informing the selection of text and language terms which arise out of the discourse of the organisation. The qualitative research, especially archival, has been informed by some understanding of the individuals involved and their mindsets. My own story, and examination of what I found thinkable at times in my personal history, has provided a perspective and understanding of the human beings involved.

5.3. Standpoint – individual subjectivity

One of the purposes of an autoethnography is to explore the relationship between the researcher and the subject matter, to disentangle, or at least raise to a conscious level, the subjectivity within the ostensibly objective academic narrative. Denzin and Lincoln (2011) suggest that “qualitative investigators think they can get closer to the actor’s perspective” than quantitative approaches which are “more remote” and “inferential”. On the other hand, quantitative researchers see interpretative methods as “unreliable, impressionistic and not objective” (Denzin and Lincoln, 2011, p.9). I cannot avoid a standpoint with regard to the Forestry Commission and British Forestry:

...standpoints are not optional; the only difference is whether or not they are acknowledged. No one can opt out of having a standpoint.’ (Frank, 2000)

In navigating a career with the Forestry Commission I have brought my values to the management of forests and what they provide to society. I have made choices about the work I have done. I have made compromises with power. Sometimes I have exercised it. Sometimes I have followed orders or implemented policies which made no sense to me. I have a standpoint, which Frank (2000) defines as:

To take a standpoint means to privilege certain aspects of what your biography shares with others. These biographical selections constitute whom you want to be, including what work your biography best suits you to do. Taking a standpoint requires self-consciousness about how the fate and choices in your life have positioned you in the world and with whom you have been positioned ... [it] involves taking responsibility for the ethical effects of your behavior and seeking to affect the world through that behavior.

Frank (2000) makes a final point:

...standpoints are never static: One aspect of my responsibility for my standpoint is that it continues to change as experiences and communities change.

The standpoint of a researcher will change during a research project. You, the reader, also have a standpoint, which can change.

5.4. “Complete member” researchers

A complete member researcher (CMR) is “a complete member in the social world under study” (Anderson, 2006). Adler and Adler (1987) point out that CMRs, “come closest of all researchers to approximating the emotional stance of the people they study.” Anderson (2006) notes that “being a complete member does not imply a panoptical or nonproblematic positionality”, but also that one of the advantages of “being personally identified and involved in the social world under study is that it gives the researcher an added vantage point for accessing certain kinds of data”.

Anderson cautions that given the “variable nature of member values and beliefs, autoethnographers must assiduously pursue other insiders’ interpretations, attitudes, and feelings as well as their own.” In this thesis, the other research methods used take account of the perspectives of others and textual

analysis yields quantitative material on the nature and mindset of actors and organisations. Anderson (2006) draws attention to the natural diversity of group members who:

...seldom exhibit a uniform set of beliefs, values, and levels of commitment. As a result, even complete membership confers only a partial vantage point for observation of the social world under study. Frequently, members' orientations and interpretations are significantly influenced by role expectations related to specific member roles.

My long interaction with the forestry community opens the possibility of bias in my perspective as a researcher and in the reactions of interviewees. I have been involved in many debates, and adopted positions. These have varied from advocating particular types of management as a Forest District Manager, acting as a Minister's Special Adviser with a high profile, while interacting with senior former colleagues in the Forestry Commission. This story can be set out autoethnographically in a number of ways. Doloriert and Sambrook (2012) note emerging streams of autoethnography: this work is primarily "autoethnography within [a] 'previous/other life' organisation", but that life also continues for me as "complete member" and even to an extent, by doing this research as a PhD, "within" an HE organisation.

5.5. Form and function of the autoethnographic method

Ellis, (2004, p.xix), sets out her ideas on literary autoethnography in "*The Ethnographic I, A Methodological Novel About Autoethnography*":

What is autoethnography? My brief answer: research, writing, story, and method that connect the autobiographical and personal to the cultural, social, and political. Autoethnographic forms feature concrete action, emotion, embodiment, self-consciousness, and introspection portrayed in dialogue scenes, characterisation and plot.

This chapter will not aspire to this level of literary writing, but a number of fictionalised vignettes are included. I have drawn on Doloriert and Sambrook's account of experimenting with style by attempting to avoid over-editing or 'polishing', in order to retain some of the 'rawness'. I have also experimented with the textual style to the extent that some vignettes are semi-fictionalised, some are streams of recollections and some are more standard autobiographical recollections. I have sought to follow Medford's dictum:

I write under the assumption that ... The others I have named or implied in this article are in my audience, and I ask critical questions of myself and the slippage that is surely going to be present in this work that I cannot see. And I continue to contemplate the consequences, both immediate and long term, that may come from making my questions and my position known. (Medford, 2006)

This research includes significant statistical exploration: this chapter is an attempt to add a complementary method:

"Seventy five percent of our pilot sample..."

"The stories," Penny interrupts. "We want the stories."

Looking chagrined, Jack says, "Oh, yeah, right. I forgot which class I was in. But aren't statistical analyses, just stories with numbers?"

I nod. "That's true, but the plot and dramatic tension are sometimes a little thin." (Ellis, 2004, p.89)

Marechal (2009) distinguishes two senses relevant to this research: "consideration of a group to which one belongs" or; "reflexive accounting of the narrator's subjective experience and subjectivity (autobiographical writing that has ethnographic interest)."

Autoethnography requires the use of analytical tools which take it beyond simple autobiography. At the same time the autobiographical process can use "aesthetic and evocative" text in order to bring "readers into the scene" (Ellis, 2004, p.142). First, second and third person narrative can be used. (Ellis et al., 2010).

There is an element of vulnerability in self-disclosure (Doloriert and Sambrook, 2009). British forestry is a community, and stepping outside its norms may be uncomfortable. The professional community is represented by the Institute of Chartered Foresters. This body maintains professional standards, including not criticising the work of others. What 'heresies' might I reveal even in a PhD thesis which would have repercussions? Even at the immediate level of the thesis, a researcher using autoethnography, in a College of Natural Sciences, probably takes on some of the challenges Doloriert and Sambrook (2009) identified with the use of autoethnography, "fluffy", "not proper research", in a Business School.

5.6. Analytical approaches

Ellis (2004, p.197) makes three points about analysis. A narrative has to have a structure which makes it analytical "in itself." In addition, turning points and themes can be examined. Finally, the structure and "types of words and tone" can be considered.

In searching for a "procedure" for analysis, Richards (2011) takes three approaches adapted from Horowitz (2007):

(a) the central theme of a story (i.e., what is this story about? What is this person trying to convey?);

(b) subject positioning (i.e., (How does this person see herself? What dimensions of her identity does she reveal?; and,

(c) evidence of secondary themes (i.e., not central to a participant's perspective but still important enough for the participant to mention).

The emphasis on the personal gives rise to some of the challenges to the autoethnographic method.

5.7. Criticisms of autoethnography

Marechal (2009) sets out objections to the autoethnographic approach:

The 'elevation of autobiography' in personal accounts to the status of ethnographic enhancements, on the grounds of their evocative power or experiential value, has been criticized by analytic proponents for being biased, navel-gazing, self-absorbed or emotionally incontinent.

The personal nature of autoethnographic writing is unusual. The key is to seek to combine the personal, which is present in the nature of most researchers, with appropriate analysis and scholarship: "...personal writing in this way seeks to erase the false dichotomy between the scholarly and the personal" (Burnier, 2006).

Burnier (2006) also draws attention to the dangers of inadequate analysis:

It tilts toward the solipsistic when it is not done well, and it loses its claim as interpretive scholarship if it fails to be analytical and theoretical.

This work seeks to tread a middle line. Anderson (2006) made a case for "analytic autoethnography" as an alternative to the "evocative or emotional autoethnography" proposed particularly by Ellis and Bochner. Anderson sets out five elements of analytic autoethnography:

Complete member researcher (CMR) status.

Analytic reflexivity.

Narrative visibility of the researcher's self.

Dialogue with informants beyond the self.

Commitment to theoretical analysis.

Anderson contends that the "defining feature of analytic autoethnography" is the "value-added quality of not only truthfully rendering the social world under investigation, but also transcending that world through broader generalization."

Richards (2011) notes that Bochner (1992) eschews judgment of narrative research since narrative should be treated as reported experience. Richards goes on to advocate the interpretation of stories for the reasons give by Frank (2000), who distinguished between narrative and story: "the risk of reducing the story to a narrative is that of losing the purpose for which people engage in storytelling, which again is relationship building."

This research is a narrative; it is history. It sets out events and seeks information about them. To pretend that the researcher was not also a participant for thirty years, and does not have personal observational evidence to contribute, but also attitudes associated with them, would be a misleading fiction. This evidence is therefore explicitly included, and declared as an autoethnography.

Chapter 6.

Personal interactions with the Forestry Commission

This chapter asserts the idea of academic study as storytelling. It is hoped that the reader will be able to engage with the story and that it will usefully inform, balance and complement the more quantitative and analytical aspects of this thesis.

6.1. Autoethnographic vignettes

The following vignettes explain my 40-year history of interactions with the Forestry Commission. Each episode is introduced, followed by personal recollections written relatively spontaneously and unedited. An analysis section seeks to summarise my standpoint, with some reflections on the events, drawing on the approaches of Ellis and Horwitz described in the last Chapter. The historical context is provided by footnotes. My personal story roughly covers the period from the Government's forestry review, announced in 1970, to the present.

6.1.1. First contacts

My background was suburban 'semi-detached' middle class. As a child I remember holidays in the Lake District, Scotland and North Wales, sometimes these would involve visits to Forestry Commission recreational facilities and leaflet-guided nature trails. I developed an interest in botany.

On a family holiday in 1972 I can remember going into a small busy Forestry Commission office. It was a wet day and rather steamy inside, there was an electric fire in the rather simple wooden office. I think it was Knapdale Forest on the Mull of Kintyre. There was a wooden counter and a kindly seeming man in a tweed jacket came to it and sold me a couple of large Forestry Commission publications. I'm pretty sure one was "Timber! Your Growing Investment" (Edlin, 1969), I've still got it, it's part of this research story. I do remember feeling rather attracted to the image, the forest, the little office, the cosy, busy environment. I think even then I wanted to be part of it.

I remember my mother talking negatively of conifer forests. This may have been in a Lake District context; as a young woman she fell in love with the Lakes, she might have first visited just before the Second World War, around the time of the "Afforestation in the Lake District" controversy (Symonds, 1936). Somehow in the end I think she finished up more attached to the "idea" of the Forestry Commission than I was.

Two themes seem to run through this story: an interest in nature derived from my mother, and an attraction to an organisation. My father worked in a bank, perhaps I absorbed the idea that working for a solid organisation was desirable. Some of the words I find I have used about the Forestry Commission are almost affectionate: The warm image of the office; and the sense of being attracted to the lifestyle and possibility of belonging. There seems to be memory of early awareness of conflict about conifer afforestation.

Forestry policy in 1974 emphasised timber production but with attention paid to landscape, recreation and nature conservation.⁵

My interest in a forestry career developed around the age of 13 or 14.

I was 14, we had spent a few weekends cutting undergrowth at a woodland near Chester. I think the Forestry Commission's Assistant Conservator had endorsed the work and attended the presentation ceremony. I think I struck an odd sight, I was wearing a Sea Scout uniform, Forester's badge was an odd objective, I think I'd gone out of my way to achieve it.

At this time, my parents bought a country cottage near to the Forestry Commission's Clocaenog Forest in North Wales.

I remember mooching off on a damp autumn afternoon on my own clambering on the local mind bogglingly steep plantation, identifying the conifer species and breathing in their smells and feel. I remember wearing a sprig of Douglas fir in my lapel to my suburban grammar school the following week.

At the age of 16 (1975) my interest was serious enough to justify a visit to the Forestry Department at Bangor University, to discuss A-Level choices. I wanted to include economics, at the time the recommended subjects were straight sciences. My focus on forestry as a career was fixed; my A-Level geography project was on species and soil types in Clocaenog Forest.

I remember the hot summer of 1976, tramping the hills of Clocaenog Forest. I visited the Forestry Commission office and met a friendly helpful Head Forester⁶ (renowned by young forest workers for his help and encouragement). On one sunny afternoon as I sat in the Forest Office, the "DO" (District Officer⁷; he used to write poetry in Welsh about forest workers and forestry) passed through, and offered to send me some forestry booklets. It all seemed something I wanted to be part of. I sat happily in that late-afternoon-sunny-prefabricated office tracing soil and species maps. What did I think, did the project make complete sense to me?

I read a Forestry Commission leaflet on the work of a District Officer. It described a typical day. This involved visiting foresters and forests and stopping beside a Scottish burn to eat his sandwich lunch.

There seem to be turning points, in fact rather concrete career decisions for a person of 13-16. Some of the words and tone are decisive. A sort of certainty about a future identity as a forester seems apparent. Thematically the latter part of the story seems to repeat the earlier one, a sense of something rather attractive about the ambience of a Forestry Commission office. There is little about the forest and quite a lot about the atmosphere of the organisation.

⁵ "The main general objective of the Forestry Enterprise remains that of producing wood as economically as possible. However, in pursuit of this aim, as in the case of the Forestry Authority, attention is paid to amenity, and the Commission is required to preserve and enhance the landscape and to develop the potential of its properties for nature conservation and recreation." (Forestry Commission, 1974a)

⁶ John Maisiey MBE.

⁷ Euros Jones.

6.1.2. “Physical” contact - Forestry Commission “forest worker”

I gained a place at Bangor University but deferred my place in order to work as a forest worker. I think I wanted some experience and a chance to do some growing up. I wrote more than thirty letters to various estates, with no success. As a sort of last effort I wrote to the Chief Forester of Clocaenog Forest⁸. “Come and see us”, he said.

A quick chat in the, again summery, office I had visited the year before, and he said, “can you start on Wednesday?” My first day at work weeding young conifers on a hot summer day.

I can see the system working. I had shown interest at the age of 17. It is as if they were somehow on the look-out for young men who would join them. They were not consciously recruiting, but there I was again at 18. A job was in the Chief Forester’s gift, he took me on (or was it in?). I started work as a Forestry Commission employee in July 1977.

I struggled up into the forest to work by, successively; a push bike, a moped, and a Morris Minor. My mates in the village favoured souped up Ford Escorts with spotlights, I did not completely “fit in.” This period probably represents the single most formative year of my life. I was a manual labourer in a predominantly Welsh speaking rural community. I developed calloused hands, and still bear a scar from an accident with a weeding hook. I think that until I was 18 I had been led to look down on those who worked with their hands. For the past thirty five years I do not think it’s crossed my mind to do so.

I cannot remember ever questioning the value of the great spruce forest we tended, or the spruce restocking I planted. If anything, I saw work on recreational facilities as some sort of irrelevant park keeping, not “real forestry.”



Figure 6-1 The author in Clocaenog Forest North Wales 1978

I remember being enthused by the whole ethos of the Forestry Commission, the green vans and the uniforms. I worked restocking with spruce, marking trees for felling, digging drains by hand, and weeding young trees. I felt completely committed to the work and its value. Loads of timber going down the road excited me.

I remember the magical sound of chainsaws echoing in the woods on a misty morning with a sweet smell of two-stroke exhaust. There was a mystique to the elite “real men” who worked on harvesting.

Much of the theme of this story is about the rite of passage of leaving home and becoming a young adult. The attitude to the forests is secondary. However, my memories of the organisation and its

⁸ Edmund Waddelove.

purpose are strong. I am surprised to observe my memory of an unquestioning approach to the type of forestry practised.

6.1.3. Forestry degree - entrance to the Forestry Commission's "officer class"

On arrival in Bangor University I gained (or sought to claim) kudos from having been a forest worker. My discussion with fellow students was very much in tune with the timber production ethos of the Forestry Commission. I was to a degree dismissive of "environmental forestry." I chose productivist dissertation options (The effect of deep draining and ploughing on efficiency of harvesting).

In 1979 I visited Canada and the United States during my vacation. As I remember it, I viewed large scale clearfelling on Vancouver Island and the interior of British Columbia without querying or even grasping that these might be environmentally contested practices. The same applied to intensive pine plantations in Mississippi.

In 1980 the Forestry Commission announced a landscape design policy.⁹

On a forestry tour of France I remember asking a French forester whether an oak stand (in a great forest managed to a plan covering more than a hundred years), should on strict economic grounds be felled and on grounds of financial return converted to producing cabbages (visible in a neighbouring field).

During one of my vacations I worked for the Forestry Commission's Field Survey Branch, measuring trees and preparing maps. At this stage I had grasped that in future recruitment, they would be looking for signs of commitment to working for the Forestry Commission, and that loyalty might be rewarded.

I sought to study some philosophy in my first year and was frustrated by a rather traditionalist tutor. I remember wanting to broaden my education beyond a materialistic emphasis.

I was enthused by the Publication of the "CAS Report" (Centre for Agricultural Strategy, 1980) recommending further large scale conifer planting. As chair of the student forestry society, it was a coup to get its lead author to come and speak to us.

The Forestry Commission announced that afforestation could take place allowing for environmental values.¹⁰

My primary objective was to secure a job as a Forestry Commission Assistant District Officer. This was generally seen as the plum job, the objective of the course. I succeeded.

The theme of this phase seems to be continued commitment to the production forestry of the Forestry Commission, and to belonging to the organisation itself. The need to demonstrate commitment to the organisation was important and fits my experience of the Forestry Commission, and Kaufman's (1967) observations on the US Forest Service: "Selecting men who fit". The Forestry Commission appeared to have a preference for people who had demonstrated a commitment to it as an entity. Its graduate entry at Forest Officer was the target of many who did forestry degrees, and there was a

⁹ "While pursuing its main objective of wood production the Forestry Commission seeks to achieve an acceptable balance between efficient and timely forest operations and good landscape design." (Forestry Commission, 1980b)

¹⁰ "There should be scope for new planting to continue in the immediate future at broadly the rate of the past 25 years while preserving an acceptable balance with agriculture, the environment and other interests." (Forestry Commission, 1980a)

feeling that the main purpose of the degree course at Bangor was to maximise those who might gain entry at that level. The entry to the University itself was focused upon choosing men (this was 1978, it was possible to hear the remark that forestry “was not a job for a woman”)¹¹ who would make “good foresters.” Kaufman’s comment on the US Forest Service appears to describe my and many of my colleagues’ attitudes:

Willingness to conform is in this sense employed as an initial criterion of selection, a standard applied to themselves by the young men crossing the threshold to professional training. ... They started with yearnings to work in the field ... with profound respect and admiration for the Forest Service and its officers.

This description would fit me as a young graduate, and before. I had seen that loyalty would be taken into account; experience as a forest worker and choosing vacation work with the Forestry Commission might be rewarded by an “Officer” job for life. Kaufman notes:

Forest officers are selected in a fashion that winnows out many of the men who probably lack the inherent predisposition to conform to the preformed decisions of the Forest Service. (Kaufman, 1967, p.198)

Looking back, there is a strong thread in my vignettes, continuing evidence of my unquestioning approach to the organisation, its ethos and its forests.

6.1.4. Trainee forest officer Forestry Commission England

Following an interview in the Forestry Commission headquarters in Edinburgh I was offered a job as an Assistant District Officer. I was also successful in being offered a five-year post with the Overseas Development Administration, but chose the Forestry Commission. The man from the ODA described this as choosing the iron rice bowl.¹²

I found myself posted to Shropshire. I remember being slightly regretful that I was not sent to some of the great spruce forests in Scotland. In my mind I think productivist approaches seemed to be preeminent. The forests of South Shropshire are famous for good soils and growing Douglas fir. I remember getting interested in whether Sitka spruce might produce timber even faster. I did regression analyses on a “state of the art” calculator to prove the point. At the time we were comparing methods for replanting felled areas. Sites with good soils, which had been broadleaved woodlands before the Second World War produced a rapid growth of brambles and birch and other broadleaved regeneration. We compared what now seem incredibly interventionist approaches. One involved forest workers walking the area with petrol engine devices on their backs, blasting a mist of herbicide, which killed all vegetation. The second method involved ploughing sometimes steep slopes, to provide conifer planting sites. I remember one site full of broadleaved regeneration where 8,000 conifer trees (instead of the usual 2,000) had been planted in ever more desperate attempts to replace losses and ensure a future timber crop.

¹¹ There was only one woman in my class of 21 at Bangor; it was rumoured that the admissions tutor was unconvinced that women should be doing forestry. I subsequently knew a District Officer who in 1982 resisted the appointment of a female Assistant.

¹²铁饭碗 A Chinese idiom for the expectation of lifetime employment in a state enterprise.

http://news.bbc.co.uk/hi/english/static/special_report/1999/09/99/china_50/iron.htm

During this period I attended the *Broadleaves in Britain* conference, (Malcolm et al., 1982). This conference was later identified as a crucial turning point in British forestry (Nail, 2008; Tsouvalis, 2001). I had no feeling that I was present at a fundamental point of change.

In hindsight I am puzzled that my former self viewed most of these forest management practices so uncritically. Both of the restocking approaches now appal me for what now seems their “violence to nature.” The idea that Sitka spruce planting should have been extended into one of the few forests which can productively grow other species seems perverse. Continued, or perhaps increasing, surprise at my lack of questioning remains the main analysis.

6.1.5. Managing operations in the Scottish borders

On transferring to Scotland in 1984, I had hoped for the perhaps macho kudos of a harvesting job. I found myself working on establishment and management. I lived in a former Forestry Commission house with forest workers as my neighbours: there was a strong sense of community.

I remember a hot sunny day, being taken to the high tops of the last heather clad hills in the Tweed valley where a the ploughing operator was cutting furrows for the planting of Sitka spruce. The work was being supervised by the South Scotland “Ploughing Forester”, a man who seemed to carry some almost mystical cachet. My predecessor had calculated that an appropriate discounted rate of return could be made from yield class 12 spruce. Beyond this site was a tract of heather, which was to be sprayed with glyphosate from a helicopter to suppress competition. I remember a sense of excitement to be involved in such an enterprise.

The Wildlife and Countryside Act 1985 placed a legal duty on the Forestry Commission to protect environmental values.¹³

I had a leading role in planning the planting of a large area of bog in Central Scotland. The land was drained and hundreds of thousands of spruce and pine trees planted. Visiting the gang of men planting the trees on huge torn strips of peat surrounded by straight deep drains on a spring afternoon sticks in my mind as a happy day.

I remember ordering a tiny number of broadleaved trees for planting (hundreds, in relation to more than a quarter of a million conifers) and being told by the Conservancy Office that we (in common with others) should be using far more broadleaves. We prepared a press release to explain that we were planting more broadleaves in the Tweed Valley. I remember discussing it with colleagues who laughed dismissively at the very idea this was important.

In 1985 the government announced a new policy favouring broadleaves.¹⁴

¹³ “endeavour to achieve a reasonable balance between—

(a)the development of afforestation, the management of forests and the production and supply of timber, and

(b)the conservation and enhancement of natural beauty and the conservation of flora, fauna and geological or physiographical features of special interest.” (Wildlife and Countryside Act 1985.)

¹⁴ “It is the Government’s wish to ensure that the broadleaved character of the well-wooded parts of the country is maintained and improved.... The maintenance and greater use of broadleaves in the uplands will also be encouraged, particularly where they will add to the beauty of the landscape and the wildlife interest; this will apply equally to the extensive conifer plantations which have been established in the uplands in response to our continuing policy of expanding home timber supplies.” (HC Deb 24 July 1985 vol 83 c560)

I attended a landscaping design training course in order to take part in the design of some of the forests in the Tweed valley, I remember finding the “artistic” dimension of this stimulating and something of an eye-opener.

Thematically there is some sign in my reflections of a turning point in relation to landscape design and the role of broadleaves, but the thrust continues to be mainly of unquestioned productivism. At the end of 1986 I was posted to Wales. There was little choice in this move. The Forestry Commission sought to provide its young officers with variety. Kaufman (1967, p.178) observed this in the US Forest Service, and that it also served to inculcate “identification with the Forest Service as a whole. For during each man’s early years, he never has time to sink roots in the communities in which he sojourns.”

6.1.6. Leading working methods research and development team

I led a small team of three, based in corrugated iron buildings in an old forestry labour camp in Wales.

My first memory of seriously questioning the kind of forestry “we” were doing, was a drive north in 1986 along the A74 in southern Scotland on my appointment as a Work Study Team Leader in Wales. As we drove past the blankets of young conifers, poorly landscaped in the context of my recent training, I remember querying what we were doing, to my colleague¹⁵. Were these forests worthwhile or simply ugly? I think he said something like, “you should not be so self-critical of the organisation.”

In 1986 the National Audit Office drew attention to conflicts between Forestry Commission objectives (National Audit Office, 1986).

The work involved machinery development, and handling of conifer replanting stock. I remember not enjoying the work and realising that I did not like deciding how to do things, but preferred to be deciding what should be done.

At one stage we worked on a spraying device mounted on a forwarder. It was intended to allow the large scale application of glyphosate to upland restocking sites. We (rather honestly) named it the “Forwarder Mounted Upland Sprayer.” One of the Commissioners reputedly described it as environmentally unfriendly. I am now inclined to agree. At the time we thought we were doing what the organisation wanted.

The vocabulary is reflecting the critical thinking. A conflicted view with a colleague is reported. The tone is unhappy. The afforestation of the Flow Country in the North of Scotland became an issue of media and political interest, discussed in more detail in a later chapter.

Alec was visiting India and had called in at the British High Commission in New Delhi to confirm a visit to a forestry school. It was hot and humid; staff walked past in rustling saris.

British Diplomat: “You are from the Forestry Commission are you? Why on earth are you planting up the Flow Country in the north of Scotland?”

Alec: “I cannot justify it, it’s ridiculous....”

(But did I really say that? I cannot honestly remember, perhaps I dissembled?)

¹⁵ Dr R A Farmer.

Shortly afterwards the government acted to end the tax breaks which had facilitated the afforestation.

I found myself with a choice between two job offers: one with the ILO¹⁶ in Pakistan fighting erosion, the other managing Forestry Commission forests in Mid Wales. I believe it was the realisation that holistic “forest design” (Farmer, 1993; Farmer and Nisbet, 2004). might represent a sea-change in the management of the great spruce forests which persuaded me to stay in Wales. I remember the realisation that something might be changing came at a field meeting in Hafren forest:

The relatively low ranking environment forester for Wales (a second-generation Forestry Commission forester) told us, while standing in a dark plantation at the edge of a stream with no ground flora and an eroding bare watercourse, that “we have killed this stream.” There was a murmur of shock and disagreement that such a thing could be said.

His use of the phrase had I think been cleared with his superior, the Environment Officer¹⁷, but not with the Director Wales. It became known that the latter shared some of this shock. This became an iconic moment: with the power relations laid bare but unresolved. Those of us in the field could take sides. There was an impression of significant change and organisational reflection about the forests developed in previous decades. This took place in late 1991, a new forestry policy for Great Britain was published emphasising sustainable management.¹⁸

It was a bright golden autumn late afternoon, bracken already brown and sun setting in the west. Phil, a forest manager for Shotton Forest Management, was giving his fairly newly met fellow forester from the Forestry Commission a lift home over the mountains from a Continuous Cover Forestry Group Meeting in England.

Alec was mulling a job offer in Pakistan vs. a Forestry Commission job in Wales. Why not settle down in Wales, wife and family and be satisfied like Phil?

“Have you never thought of working abroad Phil?”

“Yes, I spent seven years in Borneo, the tropical rainforest was my first love.”

I chose the iron rice bowl again.

6.1.7. Entrusted with “stewardship of the estate” - Forest District Manager

The management of land is territorial. In the Forestry Commission it is the “Forest District” headed by a Forest District Manager (FDM). As a territorial leader of a team with distant superiors, FDMs have considerable sway in their own area. The role has much in common with that of the United States Forest Service Ranger studied by Kaufman (1967), who notes that “with 792 men making judgements critical to the execution of policy pronouncements ... control is not easily exerted”. Kaufman points out

¹⁶ International Labour Office.

¹⁷ Bob Farmer.

¹⁸ Forestry Policy for Great Britain:

“The sustainable management of our existing woods and forests.

A steady expansion of tree cover to increase the many, diverse benefits that forests provide.” (Forestry Commission, 1991)

that Rangers will have subtly different approaches to thinning or the handling of the “timber resources of a given district”.

Barely a week into my role as a Forest District Manager, a “coupe file”¹⁹ crossed my desk for approval. A small stand of Douglas fir was composed of two parts, one had a windblown hole in it, the upper part was on a slope and intact. The proposal was to ‘tidy it up’ by felling the remains of the windblown area leaving the rest untouched. It was late in the evening and I went to look at it, in the failing light, on the way home. I came away frustrated and angry.

“Not approved, thin the whole lot, hard!” [manuscript note on coupe file.]

“It’ll blow over,”²⁰ we need the logs to sell!” [harvesting manager the next morning.]

“We’ll take the risk, it’s called ‘Continuous Cover Forestry.’ We’ll get the same volume thinning the lot as felling half.”

Forest Design was at a crucial stage, in many cases effectively applied to the blank canvas of forests until then simply managed by clearfelling stands of trees when a computer programme identified them as “financially mature.” There was an opportunity to set a Forest District-wide attitude, which favoured small coupes, use of continuous cover, and restoration of broadleaved woodland sites.

6.1.8. Changing direction - native woodland

The Environment Panel were visiting an ancient woodland site planted with dense western hemlock. It was February, and pouring with rain. The panel members were veteran conservationists, retired Nature Conservancy staff, a botanist, a famous wildlife author and “Guardian Country Diarist.” One of them wrote a column in the local paper. Some of them had been fighting the Forestry Commission for much of their careers from the 1950s onwards. The Forest District Manager and his nature conservation Forester were both new. The group stopped in the rain under an ancient oak surrounded by fast growing conifers, which were gradually swamping it.

FDM: “What do you think we should do on this site?”

Panel Member: “It would be nice if you could leave these old broadleaved trees alone.”

FDM: “Supposing we felled all the conifers on this hill and just let the area regenerate with birch and whatever seeded in, so that it could go back to a broadleaved woodland?”

There was a silence. I think there was a feeling that something mad had either been going on in the past, or had just happened. Something seemed to have gone wrong with the man from the Forestry Commission; he seemed to have forgotten his script.

The plans were drawn up and felling started. The Director asked what was to be replanted on the site, “Douglas fir presumably?”

FDM: “No, there are some mature birch trees. We think there will be enough seed for a nice birch wood to spring up at nil cost.”

Director: “I would rather see conifers replanted. Please do an economic appraisal.”

¹⁹ Felling ‘coupe’ from French.

²⁰ Thinning can “open” the canopy to the wind.

The “Forest Investment Appraisal Programme” was put to use. Discounted revenues meant the high cost of replanting conifers compared badly with the free birch seedlings, even under the most optimistic cost and timber growth assumptions. (I used the most optimistic assumptions. Some years later I learned that two days of Executive Officer time had been spent trying to fault these figures.)

‘Minute’ (a typed note on A5): Director to Forest District Manager - “Lodge Park”

“I do not understand your figures, I look forward to inspecting this site.” (The woodland is still waiting for the visit. The birch is dense, and metres high.)

I think that in my case the internal controls were starting to lose their power. It was clear that the senior officer was not happy with my attitude, but I had lost the internal desire to conform. Kaufman terms this “Preforming Decisions and Voluntary Conformity” and notes that bureaucracies make great use of manuals and other “procedural devices.” He notes the way in which these are used to control and discourage remote field staff from too much independent action. Going further, he describes the way in which members of an organisation can be conditioned to “want to conform”:

...confronted by a situation in the field, there is a course of action they would ‘instinctively’ like to follow, that seems ‘clearly’ to be the ‘best’ and ‘proper’ one; a good deal of the time, this ‘happens’ to be the action prescribed by the Service. (Kaufman, 1967, p.198)

Kaufman (1967, p.94) notes the power of a wish to observe organisational requirements: “feelings of guilt-the pangs of conscience, or, in a manner of speaking, the intrapsychic sanctions”.

A Forestry Commission mission statement was published in 1994: “Our mission is to protect and expand Britain's forests and woodlands and increase their value to society and the environment.”

6.1.9. Vignette on “power”

The senior officer was looking at a site with the (subordinate) Forest District Manager. Underfoot was a fertile brown earth developed long ago, under a native broadleaved woodland no doubt. The Forestry Commission had planted the site with conifers and then recently clearfelled them. The remains of the felled trees had been bulldozed into “windrows” together with quite a lot of young birch trees which had been regenerating. Larch trees had been planted at considerable expense on the site.

FDM: “I can’t help thinking we could have just spent no money and let this site regenerate with birch trees for free.”

Senior Officer: “With ideas like that you may get hurt.” (something like, I’m sure the word ‘hurt’ was there).

The Forestry Commission had an internal culture which expected a certain conformity. Much of this was internally policed by a sense of esprit de corps and group identity. Challenging this could be subtly disturbing and difficult. Loyalty was valued and rewarded. Kaufman describes the process as “Detecting and discouraging deviation”. Those whose “administrative behaviour fits the desired pattern are the ones who win the rewards, while those who do not conform feel the weight of official disapproval” (Kaufman, 1967, p.158). Having a differing mindset or disposition can become stressful.

6.1.10. Attitudes to nature revealed

Alec was flying back with a senior manager from a meeting in Forestry Commission HQ in Edinburgh, on a dark night. Flying up that morning in daylight, forests of northern England had been visible as great dark geometric shapes on the yellow hills of frosty grass. In the darkness, as the plane came in over Manchester, lights and motorways stretched in all directions.

Alec: "Isn't that depressing, all that light and built up area?"

Forestry Boss: "Oh, I quite like to see the hand of man on the landscape."

This now makes sense in the context of Arcadians and imperialists.

6.1.11. Semi independent - director Tir Coed

In 1998 I was offered the chance to become semi-independent by secondment to a new offshoot organisation. The ability to enunciate an alternative view was part of the role. I used the relative freedom to set out my ideas on the future of forestry in Wales at the time of the first consultation on the woodland strategy for Wales in 2000. For some reason I was widely credited with the setting of an objective of achieving 50% of the forest area under continuous cover forestry systems. This was not true but somehow appropriate, in that I would have advocated a significant change in this direction.

6.1.12. "Treacherous" ground - political adviser to minister

In November 2002, I found myself in a more explicitly political role as the Special Advisor to the Rural Affairs Minister in Wales. I had to take the risk of resigning from the Forestry Commission. Special Advisers are classified as non-permanent civil servants. Their relationships with the permanent civil service are covered by a Code of Conduct for Special Advisers (Gains and Stoker, 2011). These can be complex. In my case I moved from being what the Forestry Commission probably thought to be a useful position to ("safely") develop relatively new (or heretical) ideas without threatening the core of the spruce project, to one where I had, on a daily basis, the ear of the minister.

One dark evening in the cabinet secretariat suite, overlooking Cardiff Bay, the Minister²¹ said something like, "remember I want to do some things in forestry." I drafted an email listing (paraphrased from memory):

More native species in restocking.

Faster transition to continuous cover forestry.

A serious rural development pilot project.

Allowing local communities a real say in forest design and management.

Ending the use of pesticides in Welsh forestry.

The email came back in hard copy. There were ticks against all of these and a note in black ink from a fat black fountain pen (the Minister was that kind of guy), something like "try all of them."

²¹ Now Baron German.

None of these had been explicitly included in the manifesto upon which the Minister had been elected. They were in line with the Party's attitudes: "green" and community-related. We did not discuss it, but assumed them to be implicitly what people had voted to achieve.

We shared this thinking with senior civil servants in the Welsh Assembly (it was another dark night on a train from a meeting with the Secretary of State in London). I think that some senior Welsh Assembly Civil Servants thought the Forestry Commission was somehow a power unto itself which they had been minded to grasp. However, they lacked the expert capacity and constitutional control of policy advice, which came from the Forestry Commission itself. The conjunction of a dynamic Minister, with a Special Advisor with a forestry degree, seemed to resolve this.

The civil servant and I were waved off into the corner of the carriage to sort it out while the minister had a snooze. I remember that a fellow passenger heard us discussing the planting of broadleaves in place of conifers and wished us luck.

The process involved the drafting skills of the senior civil service with input from a professional forester. The senior staff of the Forestry Commission in Wales found themselves dealing with questions about the value and purpose of coniferous replanting which they had been able to fend off in the past.

Spin and NGOs

The public affairs officer of the nature-related NGO put out a press statement welcoming the minister's review of restocking policy. It fitted the friendly consensus of the forestry policy community since the battles of the Flow Country and ancient woodlands in the late 1980s and early 1990s. It said something like "while there is a place for conifers in the uplands...". I encouraged the NGO to push a bit more.

Liaison with Opposition Politicians

An opposition Assembly Member had asked a question of the Minister before my arrival, but perhaps NGO xyz had been in touch with him. He was a member of the Rural Affairs Committee, and thus capable of either criticising or supporting a review of restocking policy. The conversation about how (even) as an opposition AM he could support the Minister in greater use of native trees in Welsh forests took place in the lift, and was concluded in the underground car park.

Outcome

The Minister and a senior Civil Servant presented a paper to the Forestry Commission in early 2003, which indicated a greater emphasis on use of broadleaves in restocking²².

On the day of the National Assembly for Wales elections of 2003, I became automatically unemployed.

²² "There will no longer be a presumption in favour of replanting with conifers in Forest Design Plans. Replanting and regeneration will usually seek to foster more intimately mixed woodland, responding to small-scale variations in site. Intensive conifer restocking should only be considered on those areas where there are opportunities to grow high quality mixed woodland that has the potential to support the move to diverse outputs including timber." (Forestry Commission Wales, 2003)

6.1.13. Outside the Forestry Commission

This is a personal story; in a sense, at this stage I felt cast out, and saw that as reasonable. The senior staff in the Forestry Commission in Aberystwyth were probably unhappy with the Minister's and other civil servants' (their seniors in the "real civil service") sudden informed interest in exploring the point of spruce replanting on a large scale in Wales. I picked up that there was a sense of:

"Why is he causing us this trouble?" to which others said:

"Why are you surprised? He has always been clear that he was sceptical about clearfelling and conifer restocking."

Following such a political role, working in Wales again was inappropriate. The Woodland Trust employed me briefly to do some contract work on forest design planning and community engagement in Wales that was critical of current Forestry Commission Wales treatment of ancient woodland sites. Someone reported a conversation to me, something like:

Two foresters on a bus for a study trip:

"Oh you know him do you? He's been doing some damage to the industry in Cardiff you know!"

There was a sense of purgatory and prodigal son about the ensuing period of unemployment. Eventually I made overtures to the National Office of the Forestry Commission in England. Perhaps there were some old colleagues there who thought they could accommodate a free thinker, or some such idea. Project work was found. Somewhat to my surprise, I was trusted with policy work.

6.1.14. "Exile" from Wales - England policy officer new loyalties - "Whitehall"

A new minister might ask for a briefing about the Forestry Commission, or preparation for a meeting with forestry lobbyists. Questions might include: "Does it make money?" "No Minister, it is subsidised." Or perhaps: "Would we set it up now if it did not exist?" "No minister, probably not." The team played the key role in drafting the revised forestry strategy for England.

The phone rang late one evening in the darkened open plan office of the Whitehall department. Who could be ringing my extension at 8:30 in the evening?

"Is that Alec Dauncey?"

(The New Minister, probably on the way home in the back of a car, think "Yes Minister".)

He wanted to talk about some voluminous reports we had sent him: he wanted "synthesis and summary!"

"I'm sorry minister, we thought that your office had asked for these..." (this was true, and cleared up in the morning).

"Anyway what is the status of the Forestry Commission, does it make money?"

"That's an interesting question minister..." (Thinks: This is getting interesting, I have the ear of the minister, who is clearly engaged.)

My time in Whitehall provided a number of insights into the way in which Ministers reach decisions and policy documents are developed.

My departure was somewhat tortuous, through a range of project work. The day I left I sent selected colleagues a valedictory email. I suggested that I had done some things which I now counted as “enviro-crimes”:

“I think we should or could have ‘known better.’ We could have done more to remedy things quicker. We stuck to the Great Spruce Project for a very long time? I think dramatically more “natural” forestry is still needed. Seems to me we have always been about ten or even twenty years “behind the curve” on changes we could have made.”

6.2. Other autoethnographic writing on forestry policy

Some of the historical accounts of British forestry history include autoethnographic vignettes.

George Ryle was a Forestry Commission senior officer in Wales in the 1950s, and provides a historical account which contains personal anecdotes. In describing the highly contentious acquisition of land in the Tywi area of Cardiganshire he describes an encounter with a Welsh farmer.

I was invited up to his farm across the fields for tea. And arrived to find him sitting in the sun on his front doorstep quietly picking livestock out of an ancient bed rug. ... I heard the whole story, from the local farmers’ angle, of the Battle of the Towy, as well as the life stories of all the neighbouring farmers, and the age-old legends of Twm Shon Catti whose cave was in a hillside across the river. I learned that ‘the forestry’ was not in itself so evil but that its men and its ways had been bad. I managed to get away a little before midnight. (Ryle, 1969, p.125)

Ellis et al (2010) make the point that such works often involve descriptions of “epiphanies.” Tompkins (1989, p.xiv), provides an example:

It was a rare and perfect summer’s evening. A burn flowed through the darkening glen, and the hills lay folded around it, slumbering in the calm, warm air.

I had driven past the young Forestry Commission plantations, which arched over the tops of the hill at 1,600 ft, and now the private forestry company for which I worked was bent on extending the forest into the silent heart of the hills. The glen also contained a ruined pele-tower whose battlements had protected a farmer from raiders hundreds of years ago. It seemed an incongruous feature in this secluded setting, but now a new onslaught was looming. In a few months the quiet evolution of a centuries old system of sheep farming would be shattered by subsidised conifer afforestation, and the hills would be completely transformed.

That evening was a turning point and my work was never the same again, for I realised that the balance of land-use in the hills has tilted too far. Forestry is an ancient and reputable profession, but the aberrations of ill-conceived policies have drawn a blanket of conifers across vast areas of hill and moor, often onto the poorest ground for tree growth. But while conifer afforestation in the uplands has flourished for over 40 years, many of the lowland, broadleaved woodlands that are so important for landscape and wildlife, have been neglected, replaced with conifers, or cleared for agriculture. We need to be clear why this has happened and, having established why, to then build a new approach to forestry in Britain.

Colin Price, supervisor of this researcher, has his own autoethnographic account to contribute:

I came into forestry (even to do my UG degree) with a clear view that conifer forests were an affront to the landscape, and that the balance needed to shift away from sheer productivism.

Ennerdale, as it happened for me too, was a key experience. I'm pasting in here some passages from a log I wrote about my first major Lake District expedition in 1963, which include some comments on the impact of forests on recreation as well as landscape.

This pleasant and innocuous progress was abruptly terminated at 1,000 feet by the Forestry Commission in the guise of Ennerdale Forest. The path never dried up completely, but the infrequent passage of a pair of boots which seemed to keep it in a fair condition on the open fell, was insufficient in the Forest to control the undergrowth, and on the prevailing steep pine[sic]-needled gradient, progress was often troublesome.

On the whole I suppose, the Forestry people haven't done too badly in the Lake District, and where the trees occur in small areas, they often do good work in splitting up the landscape and hiding the scars of industry.

And thus I entered the forestry UG course at Oxford as a green mole, seeking compromises from the end that says "landscape is a legitimate objective, and compromise can mean seeing what sacrifice of landscape can be justified in the name of increased profit". Economic appraisal seemed a good starting point, and that was what turned me into an economist. No-one anywhere on the degree course suggested (or even seemed to have thought about) the possibility that there might be some places where forestry might not be profitable. I just had to find out for myself. My UG dissertation ... contained words like "it is infuriating to have tolerated an ugly forest for years on economic grounds, only to discover that this same uneconomic forest was being justified on aesthetic grounds".

6.3. Autoethnographic conclusions

My standpoint is hopefully illuminated by this account; which started with great loyalty, and increasingly grew into a form of rebellion. My history includes professional decisions which I now – with the benefit of hindsight – see very critically. This history is bound to affect my analytical perspective in this thesis and be likely to make me a vigilant and perhaps critical commentator on the Forestry Commission's history. The research approach seeks to mitigate these dangers of bias by the transparency of this chapter and by the use of quantitative analysis in later chapters. The methods set out in the last chapter have related to a narrative in the broadest sense. I turn now to the means by which archives and texts can be analysed and dissected to examine the discourses and mindsets involved.

Chapter 7.

Text analysis

7.1. Discourse

There is a developing body of theory on computer-aided text analysis. The long time series brings additional, novel complexities, since language itself has changed, and these changes form part of the research itself.

There is a wealth of material written and spoken (parliamentary debates) by those who made forestry policy over the course of a century. They wrote it in order to: argue, set out evidence for the public, and report progress. They will have had various motivations: “doing a job well”, making a good speech in the house, winning votes, or professional advancement. Many of their motivations will have been obscure even to themselves. With hindsight it is possible to see use of words in the prevailing ethos of the day – “productivism”, for instance. This will probably not have been identifiable to the participants buried in their ‘paradigm’, unable to comprehend a society where the survival of a species of bird is a priority, and where mining timber for national survival is long forgotten.

Some corpora are more deliberate. Forestry Commission annual reports are the product of drafting and redrafting by many individuals. Tsouvalis (2001, p.62) describes annual reports as reflecting an “organization’s knowledge-culture” telling stories as narratives rather than “critical reflection.” She sees them as “the result of an act of recollection and look back on the year elapsed – written, however, with the knowledge of the present and a view to the future.” In addition, she suggests that report writers have an opportunity to weigh their words with “reflective selectivity” rather than objectivity.

Other official reports involve negotiation and agreement sometimes evident in correspondence between officials preserved in yellowing files in the National Archives, or even a letter between a politician and his wife. Some notes of people’s thinking are sadly indecipherable. All of this material comprises discourse.

A survey of environmental discourse is provided by Dryzek (2005, p.195), defining discourse as a “shared way of apprehending the world” with the creation of “coherent stories and accounts.” Language defines human meanings and relationships, and endorses kinds of knowledge a “common sense” shared by a community. Dryzek sees discourse as political power: a dominant discourse will thus affect the decisions taken and the policy in place.

Böcher et al. (2008) apply the Habermasian model of deliberative democracy and rational discourse:

The basic assumption is that history and humans are not so much ‘driven’ by objective interests, rational calculations, social norms or overt power struggles, but by knowledge production and (collective) interpretations of the world. (Arts and Buizer, 2009)

The analysis of knowledge production and of “thinking” as expressed by language is now aided by computer text analysis.

7.2. Computer aided text analysis

NVivo²³ software was chosen, it includes a powerful text search and word frequency function (Bazeley and Jackson, 2013). Word lists from other workers provide a starting point for quantitative analysis, in combination with word lists based on knowledge of the material. Some of these involved the processing of long word and term lists over more than a hundred large documents. The word lists used are detailed in the Appendix, for review (and the potential benefit of other workers).

The quantitative work carried out can generate a large body of data: 724 sources were loaded into NVivo, (on a powerful laptop). These contain 127,000 references to words stemmed “forest”; and the word “afforest” appears 62,186 times in the material assembled. A considerable number of text queries have been processed using NVivo, and analysed using Microsoft Excel. Regression, and Chi-square tests have been conducted and results are included as footnotes.

Some material such as Forestry Commission annual reports, were available as digital “images” but needed to be rendered machine readable by Abbyy OCR software. Some were of variable quality; all were checked visually and by spell checker. Some variation in readability was, however, unavoidable. This is not likely to have distorted the results significantly, since the NVivo word and phrase frequencies are expressed as both frequency counts and percentage incidence. Some distortion could occur if a high proportion of a document was composed of unreadable words. A judgement was made to exclude some documents for poor readability, none of the larger key time series had to be rejected.

The General Inquirer computer text analysis software was developed in the 1960s by Stone et al. (1962), and the Gallup Organization (Neuendorf, 2002). The software has not been used but some of the word lists²⁴ have been applied (sometimes modified). Some of these word lists originated in the work of Lasswell (1965) who pioneered analysis of political texts, including German Second World War propaganda.

7.2.1. Word lists

There is a methodological benefit in using large word lists produced by others and used more widely in social science. Firstly they tend to be relatively large, which means that results represent a greater proportion of the text in a given corpus. Secondly they avoid the potential bias which might come from an individual researcher choosing words likely to produce a particular result. There are dangers; word

²³ NVivo is a registered trademarks of QSR International Pty Ltd.

²⁴ The Harvard words lists are available here:

<http://www.wjh.harvard.edu/~inquirer/homecat.htm>

lists aimed at financial issues may not be appropriate to a public sector annual report. Forestry has its own usages. Language can vary, for instance between the USA and Britain.

“Sentiment” words provide a particular challenge. Recent work has looked at the ways in which dictionaries should and can be adapted for particular contexts. Loughran and McDonald (2011) looked at adaptations for financial purposes and have proposed their own lists in particular for “uncertainty”. Young and Soroka (2012) sought to refine word lists from the Lexicoder Sentiment Dictionary (LSD) in analysing political media material.

Tiainen (2010) analysed half-yearly reports of companies and provides useful detail of the word lists used. Some of these have been used in this research. Tiainen’s discussion of future-oriented verbs is useful:

Defining future-oriented verbs is more complex ... In its basic form, the future tense is comprised of a modal auxiliary verb and a main verb. English modal verbs include “can”, “will”, “shall”, “may”, “must” and their preterits “could”, “would”, “should” and “might”. In this study, all modal verbs are interpreted as being future-oriented. In addition, some verbs are recognized as being future-oriented even when they occur in present tense, since their meaning or the context in which they are used refers to the future. After thorough consideration, ... 45 verbs were classified as future-oriented...

The word lists of other workers required checking and calibration. An attempt to validate Tiainen’s list was made by reviewing all 234 resultant codings in the 1934 Forestry Commission Annual Report. The vast majority were genuine evidence of “future” thinking. The word lists used are detailed in the Appendix.

7.2.2. Word lists used in forestry policy analysis

Hoogstra and Schanz (2008d) used a list of “uncertainty” words in order to explore foresters’ attitudes to uncertainty, comparing foresters and agriculturalists, given the long time frames involved.

Bengston and co-workers carried out a number of statistical studies on forestry material (Bengston and Fan, 1999; Bengston et al., 2009; Bengston et al., 2004; Bengston and Xu, 2006). Their word lists can be used in a British context with modest changes. For instance, in an American context nature conservation might be indicated by “old growth”; the nearest British equivalent might be “ancient woodland.”

Bengston and Xu’s “moral/spiritual” value words include “cathedral” (“cathedral grove” for massive “old growth” conifers). In a British context, this is more likely to pick up (rare) references to actual cathedrals. The word “majesty” in North America may imply natural beauty. It was not a useful indicator in a corpus of a century’s worth of reports published by His/Her Majesty’s Forestry Commissioners, and printed by His/Her Majesty’s Stationery Office (with copyright on every page).

A further special difficulty is that usage varies over the long timescale of this research. The word “amenity” was used in the early to mid-part of the twentieth century, with “landscape” or “recreation” used later. Nature values were likely to be described in terms of: “nature reserves” in early decades;

then with “bio diversity” as two words; with “biodiversity” only gaining usage as late as the 1980s. Even “conserve” or “reserve” were not a good index of biodiversity values, since early Forestry Commission annual reports used them to refer to timber reserves. “Wild life” was frequent in the 1960s rather than the current usage, “wildlife.” Some other words required care. While “scientific” genuinely indicated a type of productivist discourse in the early twentieth century, the high counts for the word after 1945 resulted from the term “Site of Special Scientific Interest.” The origin of the term deserves analysis, but in fact in the latter half of the century it denoted concern for biodiversity values. Other words had to be excluded for more mundane reasons. While “walk” might be expected to denote recreational use, it produced skewed results due to the “fishing walks” listed routinely in Office of Woods annual reports for 1900 to 1920.

Some of these problems were identified because they were sufficiently odd to attract investigation; and by investigating more fully any outlier results, for instance “walk” in the Office of Woods annual reports. There is clearly scope for error and even unconscious bias in this process. Hopefully the fact that the researcher has been a native speaker of “forestry English” was more of a benefit than a bias. Anomalies were identified by reviewing samples of actual codings for each analysis carried out.

Some relatively systematic checks were established. The software allows flexible searches: for instance, a given word list could be applied to the three Forestry Commission annual reports for 1923, 1949 and 1979 providing small enough detailed coding outputs for quick examination. The NVivo “word tree” tool also provided quick visual clues as to additional words or false results.

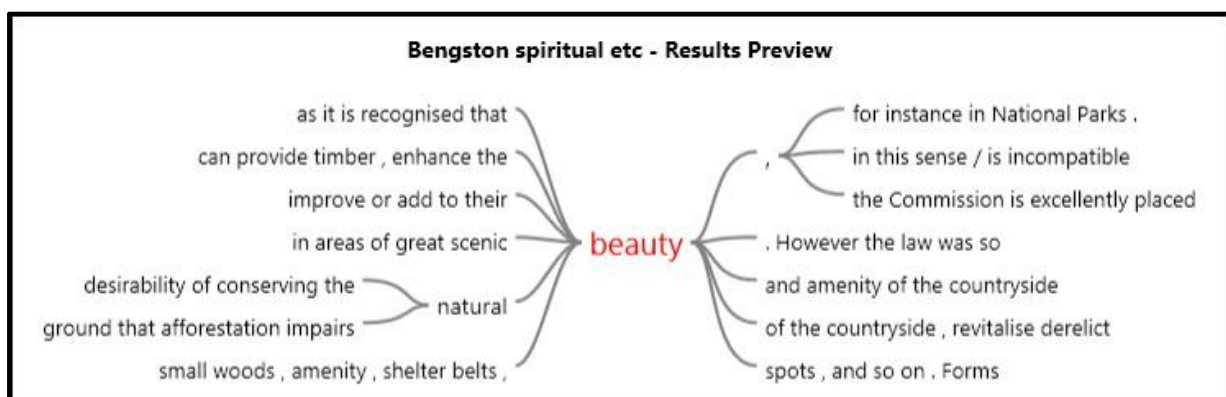
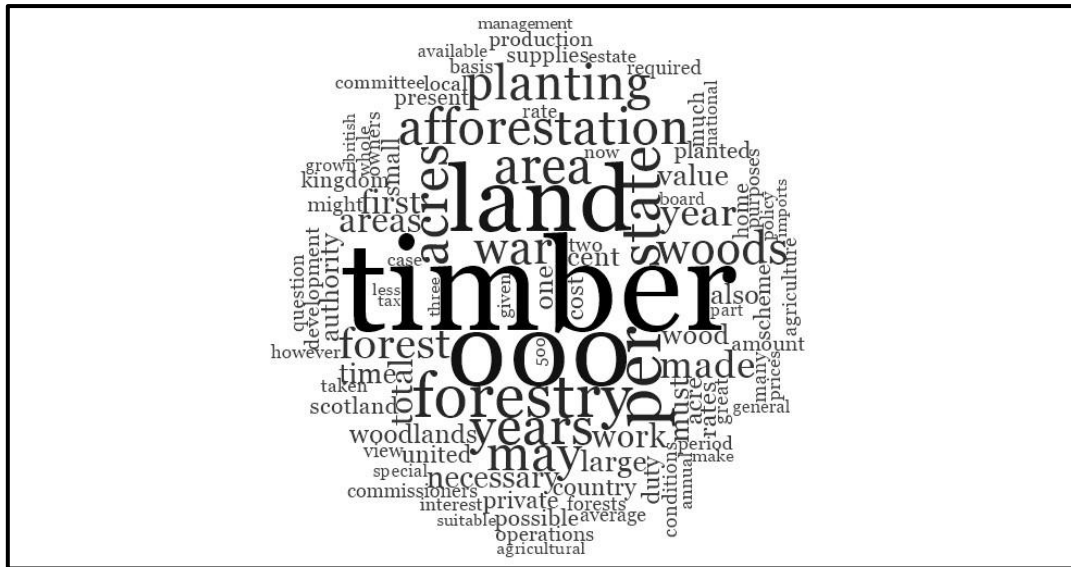


Figure 7-1 Example of NVivo word tree

A “word cloud” provides an opportunity to improve the searches and to identify words with unexpected frequencies in a given document or group of documents. These checks all involved the researcher’s judgment.



7.3. Parliamentary debates

The debates of the UK parliament are recorded and published in *Hansard*. “Millbank Systems” (UK Parliament, 2012) provides debates and records of written questions between 1803 and 2005. It was developed by a relatively informal group of parliamentary workers. The occurrence of two or more words can be searched for (e.g. “forestry” and “policy”), as can exact phrases (e.g. “Forestry Commission”). The project has effectively finished, so it has not been possible to establish the exact criteria for proximity of different words. However, debates including the search terms can be identified and enumerated, providing direct statistical evidence.

The Milbank database was searched to establish trends in the frequency of the single word “forestry” in all parliamentary proceedings (debates in both houses and written answers) between 1900 and 1999. The data for a base decade of the 1900s were indexed for the rest of the century. The overall volume of debate has grown significantly. This trend was estimated using the large number of results for entries containing the words “the” “and” and “to.” This provided a control for the increased volume of debates throughout the century. For comparison the same method was applied to “agriculture” and “Ireland”, Figure 7-3) shows the results. Use of the word “forestry” steadily increased in relative frequency for most of the century, peaking in the 1980s, when references to forestry were more than 5 times more frequent than would have been accounted for by a general increase in the volume of debate. Forestry has become significantly more discussed relative to “agriculture” as well as within the general volume of debates.

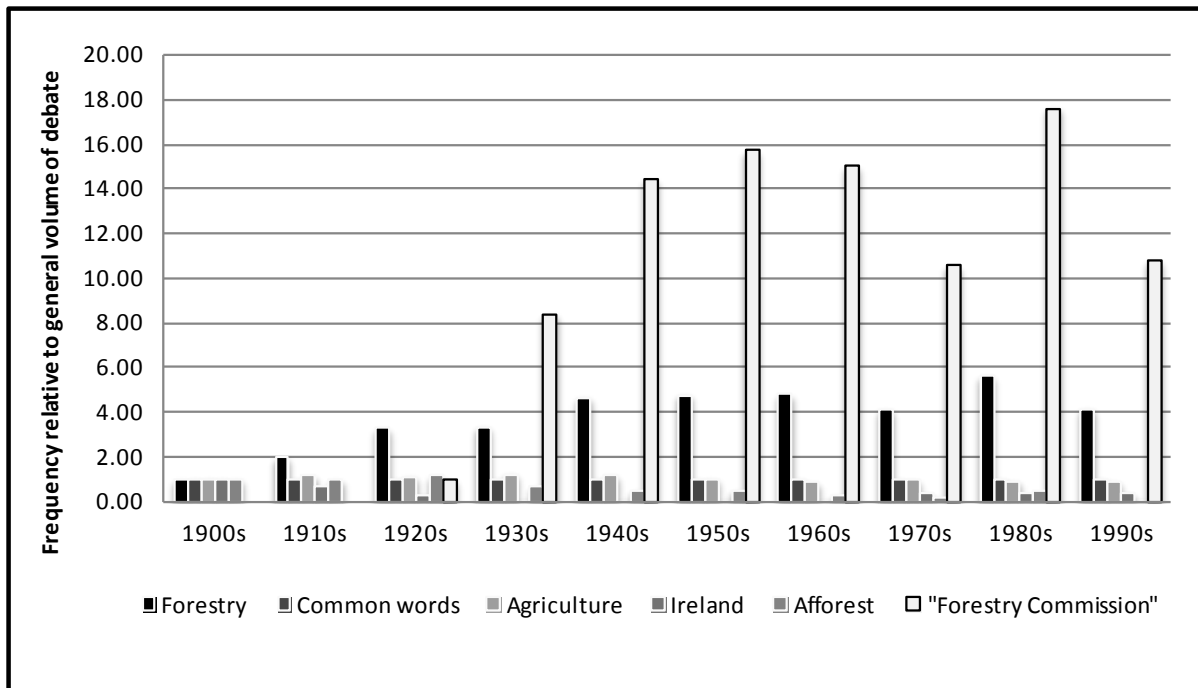


Figure 7-3 Frequency of “forestry” and other words in Hansard 1900 to 1999²⁵

Potential rogue results were identified: Indian (to 1947) and colonial forestry issues account for a proportion of the earlier incidences of the word “forestry”; since the 1990s there has been increased reference to tropical deforestation. The searchable database of parliamentary material was also subjected to NVivo analysis as described above.

7.4. Sentiment and attitudes

Computer-aided text analysis provides a powerful statistical tool to explore sentiment and cultural attitudes. Text analysis is therefore a way to examine the differences in the way in which people and institutions think of the world and about time and the future. The next chapter examines the nature of these predispositions and ways of looking at the world as preparation for understanding the quantitative results of text analysis applied to British forestry presented in later chapters.

²⁵ This graph is intended to be indicative of principles it has not been subjected to statistical analysis. Common words are “the” “and” and “to”.

Chapter 8.

Mindsets and predispositions

8.1. Introduction

The way we think about the world moulds our responses as individuals and within institutions. The state can have a mode of thinking and acting. This chapter sets out ways in which modes of thinking could be important: attitudes to nature; and the way the state sees the world.

This relates to the research questions since mindsets could mean that actors, in their time, could not have *thought differently*. At the bar of history, can they be absolved of conscious responsibility for their choices?

8.2. Imperialists and Arcadians

Worster (1994, p.2) distinguishes two ideas from the nineteenth century age of reason. The “Arcadian stance” is seen in the writings of Gilbert White: “a humble life for man with the aim of restoring him to a peaceful coexistence with other organisms.” Worster contrasts this with “imperialists” whose “ambition was to establish, through the exercise of reason and by hard work, man’s dominion over nature.” Dryzek (2005, p.10) refers to Lewis’s (1992) similar distinction between “Promethean” and “Arcadian” approaches.

Peterken (1996, p.31) describes the scientific foresters’ approach, and that of, nature conservationists who tend more to non-interference in the nature they wish to protect:

Foresters have been trained to grow trees and to manage woodland actively, so it is small wonder that unmanaged woodland and ‘bare’ moorland could be a standing affront.

Worster identified a “Christian pastoralism” related to concepts of a good shepherd. Worster also sees Christian origins in the imperialist idea of man’s domination of nature, with Francis Bacon seeking “the enlargement of the bounds of Human Empire”. Worster sets out the romantic challenge most clearly espoused by Thoreau, who criticised the “man-worship” of humanism (Worster, 1994, p.85), while at the same time being conflicted by his use of science to understand nature.

Cox (1985) contrasted Jeffersonian yeoman farmers, conquering the wilderness, with more romantic European conceptions. For Cox, Thoreau had a European pastoral view and was challenged by the genuine wilderness of Maine, rather than the more English landscape of Walden Pond. Cox identifies the resolution of this tension in the early twentieth century faith in science and government.

8.3. Approaches to conservation

McConnell (1971) contrasts Muir and Pinchot's approaches to conservation. Pinchot popularised the term in *The Fight for Conservation* (1910) criticising "egregious exploitation" of American forests. The first Chief of the US Forest Service, he saw "conservation" in materialistic terms:

...the perpetuation of the resources which can be renewed, such as the food-producing soils and the forests; and most of all it stands for an equal opportunity for every American citizen to get his fair share of benefit from these resources, both now and hereafter. (Pinchot, 1910, p.79)

Muir and Pinchot were initially allies in valuing managed forests:

Prussia has ... refused to deliver its forests to more or less speedy destruction by permitting them to pass into private ownership. But the state woodlands are not allowed to lie idle. On the contrary, they are made to produce as much timber as is possible without spoiling them. (Muir, 1901, p.363)

Muir later developed a more wilderness-based approach. McConnell commented that in the 1950s; "the term 'conservation' was captured by the spiritual heirs of John Muir" and that the environmental movement in the 1970s was a rejection of the "primacy of economic materialism".

8.4. "Back to nature" forestry

Gamborg and Larsen (2003) describe a progression in European forestry from the industrial to multiple use, and more recently to biodiversity conservation. Very relevantly they question the "ability of these plantations and the associated management and silvicultural regimes to fulfil this function". They dub this "back to nature forestry":

In Europe, the challenge is more one of converting large parts of even-aged conifer plantations to more structurally and functionally diverse forests...

Gamborg and Larsen set out these more romantic conceptions, especially the idea of "*Dauerwald*" or permanent forest.

8.5. Ecocentric and technocentric

O'Riordan (1981, p.10-11) contrasts an ecocentric mode, which he draws from McConnell, with a technocentric mode drawn from Hays (1999). Technocentric thinking is associated with rationality, "pursuit of progress" and:

...a sense of optimism and faith in the ability of man to understand and control physical, biological, and social processes for the benefit of present and future generations... (O'Riordan, 1981)

Any attempt to gain new insights into the policy-making process at the interface between politics and institutions must take account of the conceptions of nature involved.

8.6. High modernism, the state and forestry

State forestry in Britain and its dominant productivist effort was a classic centrally planned and modernist effort. Scott analyses the difficulties of such governmental projects in *Seeing Like a State*, (1999) and concludes that large-scale state-directed schemes are likely to fail in that the:

...necessarily thin, schematic model of social organization and production animating the planning was inadequate as a set of instructions for creating a successful social order. By themselves, the simplified rules can never generate a functioning community, city, or economy. (Scott, 1999, p.310)

Interestingly, Scott uses a relevant forestry example as his starting point: the development of “scientific forestry” in late 18th century Germany.

While noting that “some level of abstraction is necessary for virtually all forms of analysis”, Scott (1999, p.11) argues that the way in which “simplification, legibility and manipulation” are used as a “lens” in forest management can be used as a metaphor revealing the character of the modern state’s relations with nature and its management. Scott ascribes the early modern European state’s focus on the revenue and timber values of forests to the related fiscal receipts. Describing this simplification as “heroic”, Scott argues that this ignores a range of other values evident to a naturalist or anthropologist. Kitchen summarises Tsouvalis’s argument:

...that the FC’s industrial, conifer plantation forests were symbolic of modernity and totalitarianism, and discerns in the recent turn towards multipurpose use, elements of postmodernism... (Kitchen, 2012)

Kitchen goes on to explore the extent to which Forestry Commission and the mindsets of its staff really *have* changed.

Li (2005) questions Scott’s idea of the state and:

...power as a ‘thing’- one that is spatially concentrated in the bureaucratic apparatus and the top echelons of the ruling regime, from which it spreads outward across the nation, and downward into the lives of the populace.

Li suggests that the actual effects need to be explored in more detail and that the schemes can become more embedded in the societies in which they take place.

Scott describes this approach by states as utilitarian, though this seems to ignore the more holistic intention of utilitarianism as a philanthropic, albeit anthropocentric philosophy. The perspective of those in power in the state may not of course equate with the interests of the majority, or “the greatest happiness of the greatest number”²⁶. The argument appears to be about the discourse and focus of the ruling class and its officials, an argument based on interests, or on the materialism which results naturally – even, in Scott’s view, automatically – from the simplification involved.

²⁶ “Utilitarianism” Oxford Dictionaries, April 2010. Oxford Dictionaries, April 2010. Oxford University Press. http://oxforddictionaries.com/view/entry/m_en_gb0917990 (accessed September 19, 2010).

Scott traces the development of German forestry discourse, the idea of “a standardized tree” (*Normalbaum*), and a distinction between timber trees and underbrush. He emphasises the way in which this simplification produced a system which allowed systematic, regimented centralised management in order to “maximise the return of a single commodity”. Introducing the scientific method was justified since “it was a far simpler matter to examine the effects of such variables as fertilizer applications, rainfall, and weeding, on same-age, single-species stands.” Scott describes a range of behaviours, for instance “inspections” by forest officers seeking uniformity. Tracing the project forward, Scott describes the increased use of Norway spruce, initially for restoration of productivity, but then more generally due to increased financial returns. He describes this monocultural forest as “a disaster for peasants who were now deprived of all the grazing, food, raw materials, and medicines that the earlier forest ecology had afforded.”

The way in which individuals perceive and make sense of the world may be inherent in our personalities. Our personalities will also result in our playing different roles in organisations, and gaining satisfaction from different activities. These will influence our choices in profession, and the kind of organisation we choose to work for. Scott coins the term “the administrators’ forest”, which seems to describe at least a part of the history of British forestry policy, which so directly followed the German example he describes. He is clear that:

In the short run this experiment in the radical simplification of the forest to a single commodity was a resounding success. It was a rather long short run, in the sense that a single crop rotation of trees might take eighty years to mature. (Scott, 1999, p. 19)

This brings us to the special importance of time in forestry policy.

Chapter 9.

Time, forests and foresight

9.1. Time, trees, forests and ecosystems

The long production cycle of forestry brings special temporal problems if the needs of society change over decades. Attitudes to time affect forethought and foresight; the tools required for dealing with uncertainty.

Trees are the oldest organisms in Britain, and woodland was the dominant original natural vegetation. Rackham describes a “great oak” in Blackmoor Forest: “...about 1,100 years old: older than the Forest, older than the churches...”(Rackham, 2010, p.510)

Price (2013) suggests that rapidly imposed change can undermine “future-protective institutions”. However it is also important to note that forestry may often provide a more flexible resource than might be assumed. As Price points out, in view of the uncertainties:

...it is surprising that forestry has continued as steadily as it has, with outcomes perhaps not quite as decision-makers intended, but close enough for them or their successors to review the decisions without particular regrets. This underlines the robustness to which evolution has conditioned forests, the versatility of their products in use, and the realization, vague though it may be, of the need for a stable political background for forestry. Nonetheless, there are no grounds for complacency: better decision-making methods could often have been employed. (Price, 1989, p.114)

This thesis seeks to avoid complacency by assuming that it is not in the nature of forests to *automatically* provide flexible resources for future generations but that forethought and foresight are worth developing and honing, based upon the evidence of past policy-making.

Shannon (1992) advocates the integration of foresters in wider society in order to develop better thinking on the future:

Forestry is a social practice that joins multiple forms of knowledge and spheres of life into a common endeavor – sustaining healthy forests. Foresters who learn to think strategically can anticipate the future, and then contribute to shaping it.

Thaler and Shefrin (1981) and Price (2013) explore the contrast between the “planner” and “doer”, a conflict within individuals making choices. The act of creating a new forest is the act of an impatient “doer”, even while following a “plan” to produce timber in the distant future. The activities of the forester as a “doer” (Price, 2013) mean that the concentration of conventional rotational activity is around the felling of one rotation and the regeneration of another. This can result in an illogical association of the two, even though the decision to take action in regenerating a forest is actually independent. The land could be used for something else, or left unused.

This research deals with the creation of forests where none existed before. Those engaged in the afforestation had few links with forests of the past. This was less true of the parallel effort to replace

ancient or naturally regenerating native woodland with conifers. The difference in the types of thinking involved may have some explanatory power in the development of British forestry. A difference may have arisen between the foresters of the afforestation project and those of the ancient woodland sites. The action (exciting in an “imperialist” sense) of reshaping the landscape of an unforested glen, may be quite different from the more contemplative consideration of the thinning of slow growing trees in a relatively stable existing forest. The extent to which foresters and forestry policy-makers really take account of time is more uncertain.

9.2. Time perspectives

The concept of time perspective is described by Zimbardo and Boyd (1999) as:

...the often non-conscious process whereby the continual flows of personal and social experiences are assigned to temporal categories, or time frames, that help to give order, coherence, and meaning to those events.

These temporal frames influence the storing of information and the way in which people form “expectations, goals, contingencies, and imaginative scenarios.” Some individuals may be more influenced by the past; “recalling analogous prior situations, with memory of the costs and benefits that attended those decisions.” Others may be psychologically influenced by a view based on “an extension of the present into a future, when the calculated costs of this current action will be paid, or rewards will be reaped.” A third “temporal frame” may be actions “influenced by the sensory, biological, and social qualities associated with the salient elements of the present environment.” The contention is that there is an unconscious bias power, arising from an individual's time perspective.

A “Consideration of Future Consequences” scale has been proposed by Strathman et al. (1994) who carried out experiments with college students to determine the extent to which people view differently distant or immediate consequences of actions. They identified a significant variation between individuals who “believe certain behaviours are worthwhile because of future benefits, even if immediate outcomes are relatively undesirable”; and those who are focused on present satisfaction and “not interested in considering possible future consequences”.

9.2.1. Time perspectives and forestry

Hoogstra and Schanz (2008a) sought to explore the time perspectives of foresters with the Circles test devised by Cottle. They identify a potential explanation; foresters work within the cyclical nature of the seasons. This may result in greater conservatism in considering future situations, since natural cycles are reassuringly repetitive.

Lönnstedt (1997) interviewed Nordic forest owners concluding that they had a time horizon of 25-30 years and a “concern for preserving and developing the woodland”.

The time attitudes of various stakeholders were surveyed by Rantala and Primmer (2003), who distinguished two “value positions”, a “forestry position” and a “nature position”. Using interviews they

sought to establish “societal views” on forests fifty years in the future, and how future generations should be taken into account. Attitudes to the future appeared to be subsumed into views about whether a more or less nature oriented forestry policy should be enacted.

9.3. Time preference

Time perspective leads to the question of time preference in the economic sense of how to value the future in general, and the benefit or disbenefit of decisions to future generations. The difference between individuals and societies presents a problem to politicians and economists who must navigate the expectations of both. The time perspective and preference of a society as whole might be expected to be different from that of individuals within it:

Public capital continues to serve a society whose membership may be changing, but whose needs remain similar. Hence individuals' views of future values cannot be translated as a time horizon, a discount rate, or a discount function for society as a whole. (Price, 1993, p.184)

Price (1989, p.60) also notes that:

Homo sapiens is not a species beholden only to the moment's impulses, but a visionary, a forecaster, a planner, who designs present actions with a view of the future. Part of that process is to assess the importance of future events in relation to present ones and this introduces time preference and its economic expression in interest as a charge for impatience or a reward for capital foregone.

There is a fundamental bias in the fact that the decision must be made “from within one of those time periods” (Price, 1993, p.102-103). This may lead to irrationality and an imbalance in available information. There is also a difficulty in considering the time *between* two distant events, which then becomes much more pronounced as the events become closer, with the first more comparatively immediate. Other research cited by Price suggests different discount rates apply for different sized sums of money. Psychological explanations however:

...suggest that any discount rate deduced from short-term intertemporal choices of individuals does not represent the true importance ascribed to the distant future. (Price, 1993)

Attitudinal differences can be discerned in the use of discounting in forestry in nearby European countries. David Grundy, the Forestry Commission head of economics described this in oral evidence to the Public Accounts Committee (1987, Para. 909):

...they do not calculate them; it is not a subject that interests them. Their approach is to say that they have decided that they want forestry, so much forestry, and that they are going to use this to support wood processing industries.

This attempt to justify a long-term plan without discounting of future benefit would appear to be likely to attract the support of the list of economists and philosophers who Price (1993), citing Robinson (1991) lists as opposing or questioning the rightness of valuing the future less than the present. Price (2013, p.61) draws attention to Hume's warning:

There is no quality in human nature, which causes more fatal errors in our conduct, than that which leads us to prefer whatever is present to the distant and remote. (Hume, 1739, p.538)

Hume goes on to explain that “political society” can overcome this “inconvenience” and build bridges and harbours for future generations. Even societies with religious systems which oppose the earning of income from money seem to develop means of rewarding capital, thus manifesting time preference in their economic system. The use of discount rates was also evident in ostensibly Marxist inspired systems (Price, 1993).

9.4. Uncertainty

9.4.1. Unforeseen contingencies

United States Defense Secretary Donald Rumsfeld gained notoriety for seeking to set out approaches to uncertain futures:

But there are also unknown unknowns - the ones we don't know we don't know. And if one looks throughout the history of our country and other free countries, it is the latter category that tend to be the difficult ones. (Rumsfeld, 2002)

The statement bears comparison with the serious work of Modica and Rustichini (1994), on “Unforeseen Contingencies”:

A subject is certain of something when he knows that thing; he is uncertain when he does not know it, but he knows he does not: he is consciously uncertain. On the other hand, he is unaware of something when he does not know it, and he does not know he does not know, and so on ad infinitum: he does not perceive, does not have in mind, the object of knowledge.

9.4.2. Risk and uncertainty, and foresight

Hoogstra and Schanz (2008d) compared time perspectives in forestry and agriculture, and concluded that “decision making in forestry largely excludes uncertainty and surprise, even when it is known that a situation is uncertain.” They noted that Price (1989, p.113) condemns this:

The range of uncontrollable and unpredictable factors operating over a forest rotation presents so horrifying a prospect that many foresters ignore them altogether. This is inexcusable and irresponsible.

Price (1993) distinguishes between risk, which describes the condition of being able to assign a probability, and uncertainty, which indicates a more fundamental difficulty. Price notes that risk can be determined through “historical data, modelling exercises, or even informed guesswork”. Schneider et al. (1998) describe the outcome of a workshop on “Anticipating Global Change Surprise”, pointing out that an imaginable surprise is outside a particular community’s expectation. This idea relates to the distinction which can be drawn between “deterministic” and “indeterministic” approaches, distinguished by the level of certainty and degree to which one outcome is expected and risked. Deterministic modelling of, for instance, yields and timber prices produces results which imply that the relationships involved are fully understood. Schneider et al. cite Darmstadter and Toman (1993) in suggesting that:

Risk-hazard and related research demonstrates repeatedly that the event, process, or outcome registered as a surprise by the community in question was frequently known or forecast by others or the same event was knowable within the competing frameworks of understanding...

This raises the challenge of identifying the others who could alert a perhaps small and closed policy community like that of foresters, or an institution like the Forestry Commission, to events which might “surprise”. This provides a test of foresight: if the forestry community could not expect something, but another community was forecasting it, then in hindsight, and put rather simply, one can say: “you should have taken account of those ideas.” Schneider et al. suggest that: “Closed expectations rest within the rigid, unchanging belief system of the observing community”.

They set this out in diagrammatic form (Figure 9-1). The dead end for a policy community is represented by “closed expectations”, where participants are unwilling to recognise that some outcomes are not known. Even with open expectations, “epistemological impediments” can represent a barrier to enlarged expectations.

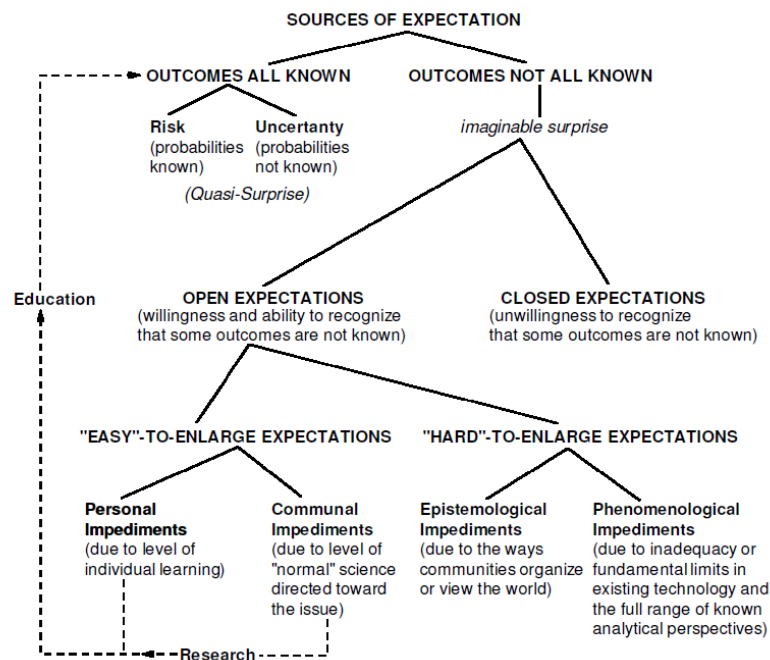


Figure 9-1 Sources of differences in imaginable surprise: typological map. (From Schneider et al., 1998)

The challenge for foresters is to seek to enlarge their expectations. Could they have done this to a greater extent in twentieth-century British forestry policy.

9.4.3. Policy time, and uncertainty

An ability to “think-in-history” (Dror, 2008) can make evident the “presumptuous nature” of some policy-making, giving an awareness of potentially perverse results. In *The Statesman* (1995, p.39) Plato describes the complexity of a “weaving” process in statecraft. “Weaving the future” is picked up by Dror (2008, p.84) who identifies grand policies; critical choices or long-term strategies. Afforestation programs appear to fall into the second category, according to Dror: using nuclear

weapons on Japan is in the former. The probability of good and bad futures must be navigated. Dror proposes the “necessity to engage in iconoclasm of policy orthodoxies”. One strategy is: “continuity between governments by building consensus and institutionalising grand policies”. This is a strategy much advocated by forestry lobbyists. Dror points out that if existing policy is profoundly mistaken then continuity of policy can be worse than doing nothing.

Sudden and significant changes in forestry policy could produce more diverse forests: if exotic conifers are planted during one decade and native species in another, then more options would be provided to the future. Diversity could be a compromise or precaution, because the most successful action is difficult to predict. This may bring sub-optimisation of all potential outcomes, where better prediction would have been more effective in selecting one “correct” policy option.

9.5. Intellectuals, sages, mavericks and contrary voices

A potential guard against poor foresight might be to survey alternative voices from outside the community, as suggested by Darmstadter and Toman above. Even within a sector or institution:

...values or interests create diversity of view (perhaps coming from different specialties, social classes, geographical areas) so that, even within a single agency, decision-making can be fragmented and parts of the agency can serve as watchdogs for other parts. (Lindblom, 1959)

Later chapters explore the British forestry policy voices, some in the wilderness, and others inside a learning institution.

Mytelka and Smith (2002) highlight Said’s vision for the intellectual – “someone whose place it is publicly to raise embarrassing questions, to confront orthodoxy and dogma” (Said, 1996, p. 11). They suggest that social scientists can influence policy in times of economic crisis, drawing attention to the role of Keynes in providing a theoretical basis for innovative approaches to macroeconomics in the 1920s. Said (1996) sets out the difficulties of the sometimes-lone contrary voice:

In underlining the intellectual’s role as outsider, I have had in mind how powerless one often feels in the face of an overwhelmingly powerful network of social authorities—the media, the government and corporations, etc. – who crowd out the possibilities for achieving any change. (Said, 1996, pp. xvi-xvii)

This was a BBC Reith Lecture; these are intended to be an opportunity for a certain type of recognised but sometimes alternative voice. Said describes the role:

...witnessing a sorry state of affairs when one is not in power is by no means a monotonous, monochromatic activity. It involves what Foucault once called ‘a relentless erudition’, scouring alternative sources, exhuming buried documents, reviving forgotten (or abandoned) histories. ... It is a lonely condition, yes, but it is always a better one than a gregarious tolerance for the way things are.

A more straightforward approach in forestry is proposed by Grayson (1993) who proposes that:

...the most sensible course appears to be to observe what is happening elsewhere, not only in forestry, and to attempt to report developments which may be repeated, or at least influence thinking, in Britain.

He points out that this may provide rather short notice of change.

9.6. Foresight studies

Loveridge (2008, p.230) notes that “change is easily recognised in *retrospect*.” Rackham (2010) refuses to “prognosticate about the future” of forestry in Britain, posing a provocative question in relation to this research:

Those who expect me to predict the next 40 years should ask whether in 1966 anyone could have predicted the state of woodland by 2006. Forty years ago there seemed to be no future in natural woodland. Who would have predicted that a goodly number of ancient woods would still be there in the twenty-first century, that plantation forestry would lose the economic base on which it was then justified, ... It is a fallacy to assume that the future will be no more than a continuation of the trends of the recent past.

The European Commission provides a five-step foresight guide (Miles and European Commission 2002).

- Structured anticipation and projections.
- Interactive and participatory methodology.
- New social networks and partnerships.
- Building up new strategic visions.
- Sharing the vision.

The UK Government Office for Science “Foresight Programme”, seeks to strengthen “strategic policy-making in Government by embedding a futures approach.” The UK Foresight Programme’s report (2010), on “Land Use Futures: Making the most of land in the 21st century” provides an example of an attempt to identify:

The most important challenges and opportunities for land use in the UK over the next 50 years – particularly those that merit decisive action.

The study makes use of existing trend data, growth of population, smaller households, economic growth and demand for food, as well as assumed continued increasing value of land as an investment, decoupled from its revenue earning potential. The report reveals a dirigiste mindset, reminiscent of Scott’s analysis of the state’s way of seeing the world. The analysis appears to assume a need for state intervention, with little belief that individual choices within market mechanisms will be able to deal with change. Dealing with forestry, the report suggests that a situation will arise where:

A possible increase in demand for conventional wood products over the next 50 years will not be met from standing timber resources. The contribution of forests and woodlands to meeting this deficit could be increased, but new incentives are likely to be required given the long lead times involved.

This sort of position may result from stake-holder input, perhaps uncertainty results in a request for funding now. It does not appear to take on board Schneider et al.’s advice discussed above, that other communities may be able to imagine change which the primary community cannot.

There is an interesting tension revealed in Loveridge's treatment of "institutional foresight". Having set out a range of methods, he deals with types of consultation, in particular more expert approaches. He concludes that "foresight creates controversy – that is its intention." This in fact may not be the intention of many governmental stakeholder consultation processes, which might purport to be foresight exercises. Klenk and Hickey (2011) identified a potentially policy challenging approach in forestry policy in Ontario. If researchers treated policies as scientific hypothesis then there was a likelihood that where the evidence base was limited: "exploratory research involves the risk that such research challenges the appropriateness of government policy".

Some consideration of at least the possibility of radical discontinuities such as major geopolitical or technological developments is rare in the literature. This allusion, albeit dismissive, to such an event from Slee (2009) is surprisingly unusual:

...as the pressure to reduce carbon intensity grows (and assuming the absence of techno-miracles), so we may need to further reassess our attitudes and manage forests to meet the most pressing need of our time.

Ryle attempted a "Look Ahead" at the end of his summary of the Forestry Commission's first forty-five years (Ryle, 1969, p.285-295.) This advocated a continued steady afforestation programme based upon a shift from emergency reserve to "balance of trade".

There is a body of research in both commerce and policy-making which looks at how organisations react to changes by learning and innovating. Mytelka and Smith (2002) set out two ideas: that innovation stems from experimentation; and that this must be seen in its institutional context including the "effects of learning within policy systems".

The European Forest Institute (Pelli, 2008) examined a number of forestry foresight studies and suggested that a "foresight culture" needs to be developed. Pelli cautions against excessive expectations, while new ideas may "emerge to the consciousness of the participants", they may not seem dramatically new, but will have been organised in debate. Different approaches to involvement are distinguished, more formal, top down use of experts, in contrast to wider workshops. The UNECE/FAO Forest sector outlook study (United Nations Economic Commission for Europe and Food and Agriculture Organisation, 2005), is a regular publication relying on trends, scenarios and modelling. In reviewing the effectiveness of outlook studies in the forest sector Hurmekoski and Hetemäki (2013) questioned whether any recent studies (since the 1990s) had been effective, and drew attention to unrealised dramatic predictions of increased paper consumption.

Later chapters will examine the ways in which mindsets are exhibited. There are some individuals who are prepared to be outspoken, and others who conformed.

Chapter 10.

Change and stability in policy making theory

10.1. Introduction

Different mechanisms are advanced as explanations for policy change: which also logically includes policy stability. This chapter does not purport to provide make theoretical judgments in a contested field. It does not seek to identify a single approach to “test” on forestry policy. It does identify potential explanations for change, in their theoretical contexts. The chapter briefly reviews policy theories then considers policy change factors before locating potential policy change factors within those theoretical approaches in more detail, concluding each section with a checklist of issues to assess in relation to the policy decision processes which make up the remainder of the thesis.

10.1.1. Approaches to policy analysis

Approaches can be used as an “alternative lens (likely to amplify some parts of the subject and obscure others),” (Hill, 2004, p.15). Expectations must be reasonable:

There is a particular style to analytical political theory which involves an extraordinary, at times painfully detailed, attention to the importance of constructing unbreakable chains of close theoretical reasoning... (Brown, 2007)

It is important to assess explanatory power rather than focus only on the latest ideas:

For periods of time we seem to single out one significant variable and pay an inordinate amount of attention to it, the most striking examples being interest groups in the 1950s and 1960s and institutions in the 1980s. As we seize upon the new variable, we discredit the previous generation of scholars who we claim (sometimes misleadingly) ignored it. (Hoberg, 1996)

The point is that “a forest policy indeed looks different when empirics are viewed through the lenses of different theories” (de Jong et al., 2012). The benefit of choosing a dominant theory as a lens provides a discipline, but on the other hand; “draws the attention away from those aspects ... outside the scope of the theory” (de Jong et al., 2012). The maze of theories is daunting. It is reassuring to find that other workers find it so:

To be sure, policy theories can be a guide to research, but given that there are so many of them, that is like saying the interstate highway system is a guide to vacation destinations. (Meier, 2009)

The objective of this research is normative; recommendations are sought. Some loss of theoretical focus is unavoidable in the search for a reasonably systematic checklist of policy change explanations.

10.1.2. Typologies of theoretical approaches

Parsons (1993) identifies six general approaches within the “political policy” frame.

Stagist
 Pluralist-elitist
 Neo-Marxist
 Sub-system
 Policy discourse
 Institutionalism

Parsons (1993) also criticises constant theorising and classifying. However, there seems little alternative to an attempt to list a range of potential explanatory models. Placing past policy-makers at the "bar of history"; was their exercise of power:

Rational and organised?

Arising more or less chaotically from a plurality of competing interests arbitrated by politicians and leaders?

Based on deep aspects of human identity and mindset?

Arts (2012) draws his categorization from three "handbooks": Fischer et al. (2007); Marsh and Stoker (2010); and Sabatier (2007). The latter deals specifically with the Advocacy Coalition Framework approach. This has been used widely in forestry policy analysis. Arts located five approaches on two axes (Figure 10-1).

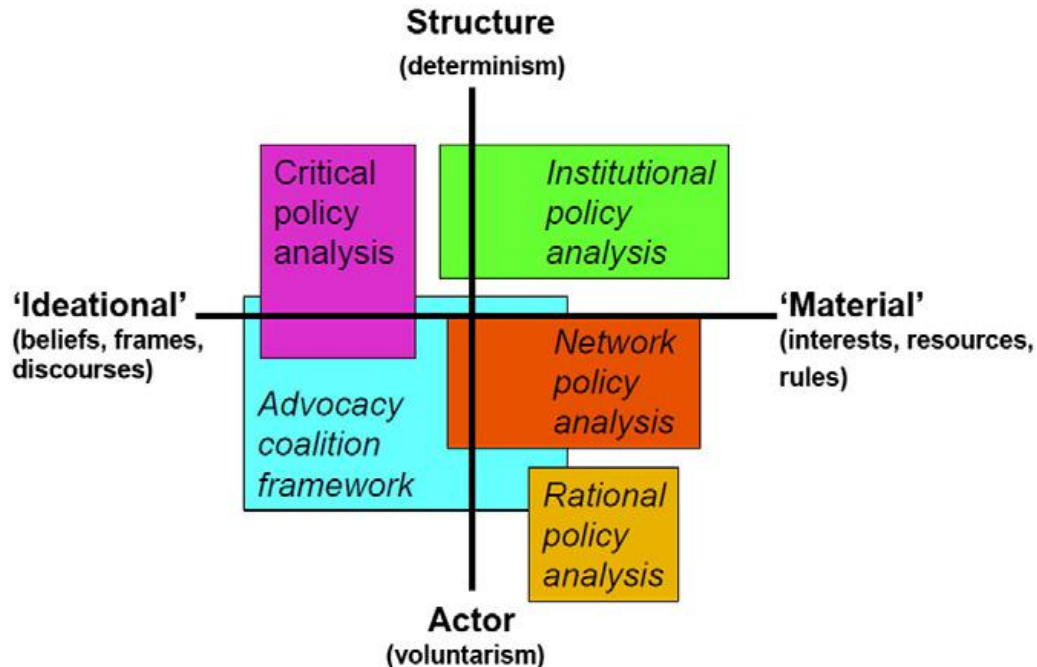


Figure 10-1 Topography of policy theories (From Arts, 2012)

Buttoud (2006) saw two trends in the same dimensions as Arts, the first:

...tends to consolidate a rationalist framework for a causative evaluation of forest policy measures, based on deductive or systematic assessments and impact analysis.

While the second:

...is dubious of the ability of the rationalist schemes to give a complete assessment of the outcomes generated by comprehensive programmes and policies.

The taxonomy used in this thesis is based upon that suggested by Arts:

1. Rational Policy Analysis

Individuals make rational choices, seeking best interests, policies are based upon evidence.

2. Institutional Policy Analysis

Institutions mould people's behaviour. Neo-institutionalists focus on "rules" rather than organizations.

3. Policy Network Analysis

Emphasis on the social behaviour of individuals, restricted and "mediated" by relations with others, for instance in bureaucracies.

4. Critical Policy Analysis

Diverse and further from the positivist or post-positivist paradigm of the other groups. A focus on the power of "texts, concepts, narratives and epistemes".

5. Advocacy Coalition Framework

Social behavior is linked to shared beliefs of coalitions which operate in competition with systems and policy "brokers" to result in policy outcomes.

Arts notes that "critical policy analyses" such as Marxian or discourse approaches have been less used in forestry studies. This research does not seek to fill this gap, but this type of analysis is reviewed below. The next section explores conditions for change, later sections situate these within the five theoretical approaches outlined here.

10.2. Policy change and stability

The afforestation project was stable for seventy years. There were numerous policy decision processes where change was considered but rejected. According to Capano and Howlett, (2009a, p.3) explaining stability is "relatively simple." They discouragingly see describing and explaining change as "a tremendous, almost Sisyphean task". Researchers have been criticised for dealing with change and stability separately, when in reality policy is an "ongoing phenomenon" and they are inextricable, or even "present at the same time" (Capano and Howlett, 2009b). Bardach (1976) sets this out:

...think of the politics of policy termination as a special case of the more generally applicable, and better understood, process of policy adoption. In this sense, we have a policy about a policy: there is a struggle to adopt a policy A, the substance of which is to eliminate or curtail policy B.

A number of sets of ideas about policy change are available to establish a reasonable checklist for further theoretical consideration. Capano (2009) counsels epistemological and theoretical rigour,

noting that once a list of potential variables has been considered the researcher may make unconscious choices. The researcher's epistemological choice is of "viewpoint", in relation to:

Linearity of change, causal events from stage to stage, or not.

Evolution or revolution.

'Motors' of change, (e.g. competition, conflict, learning).

External events and shocks are another source of change but so are "socioeconomic changes". John (2003) bemoans the fact that:

A lot of academic energy was spent on the socioeconomic causes of policy change before the 1980s, but then doubts about macro schemes of politics set in and systems theorists of all sorts fell out of fashion. It is possibly the case that the intellectual reaction against systems theory and functionalism has gone too far, and social science should start examining complex systems again, perhaps through the idea of coevolving social processes.

10.2.1. Conditions for policy termination

Parsons (1993, p.578) observes that policy "termination appears to be somewhat 'tricky', and rarely attempted". He draws on the work of Behn (1978) to set out ten factors which a policy terminator should have in mind, emphasising the political rather than the technical or rational:

It is unlikely in the extreme that a devastating piece of analysis will do for a policy, a programme or an organization.

Bardach (1976) describes five less rational reasons for resistance to termination:

Most policies are designed for longevity and include significant investment. "Thus, when we wish to terminate a policy which is not working, or has gone bad, we discover to our chagrin that we, or our political predecessors, have been entirely too clever."

Conflict around termination can be significant, involving "anti termination coalitions".

It involves an admission of past error, including long-past erroneous decisions, politicians can be asked "why did you permit it to go on for so long?"

There may be costs which affect other activities, including organisational demoralisation.

There are rarely political benefits: "politics rewards innovation".

Bardach (1976) identifies five conditions facilitating termination. All can be applied to the events in British forestry policy:

A new government.

Ideological change.

"Turbulence" (leading people to expect changes).

A policy which can be terminated in a way that "cushions the blow".

Policies with built-in timescales.

Some of these conform with Parsons's argument that the political is more important than the rational. Forestry is not usually an obvious "political" issue in Britain, but this dimension has been little explored by other workers. This research explores the political and engages directly with politicians.

Maser (1994) explores drivers of change in natural resources policy including "pendulum swing" and paradigm shift. These arise from insight, probably in advance of solid data. He suggests that supporters of the existing paradigm will demand considerable evidence for change, even if such evidence did not exist in support of the existing system; the paradigm becomes "like the shell of a crab" with individuals' identities and beliefs invested in it. Maser warns that psychologically: "there have been no failures on the part of those who adhere to the old paradigm, only changes that may leave them behind." The most profound change comes from "inner dictate":

The world has not "changed" in a physical sense, but our perception of the world has changed, so our relationship to the world has changed in a "real" sense.

This may describe the epiphany reported by Tompkins (Section 6.2).

Giessen (2011) provides a survey of policy change factors in forestry, some of which will be used as the checklist applied to policy events in later chapters.

Individuals: Policy entrepreneurs and issue experts.

External shocks and crises.

Internationalisation, policy diffusion and multi-level governance.

Political parties.

Veto-power.

Institutional change.

Policy networks, subsystems and their bureaucracies.

Ideas, narratives, frames and discourses.

Class.

Gender.

Advocacy coalitions, values, beliefs and policy learning.

Five theoretical approaches to policy will be described in more detail. Each section ends with the change factors identified for consideration in conjunction with quantitative and qualitative evidence. These are applied to the discrete policy decision processes which then identified in Chapter 11.

10.3. Theoretical approach - rational policy analysis

In terms of the actor-structure axis above (Figure 10-1), rational policy analysis assumes the voluntary control of actors in pursuit of their material interests.

10.3.1. Policy stages and cycles

The rational stages or policy cycles approach is effectively prescribed for use in the British civil service, (Cabinet Office, 1999). A number of workers have set out conceptions of the “stages”, six of whom (Hogwood and Gunn, 1984; Jenkins, 1978; Lasswell, 1956; Mack, 1971; Rose, 1973; Simon, 1957) are usefully summarised by Parsons (1993, p.78). The UK Cabinet Office(1999) model is shown in Figure 10-2.

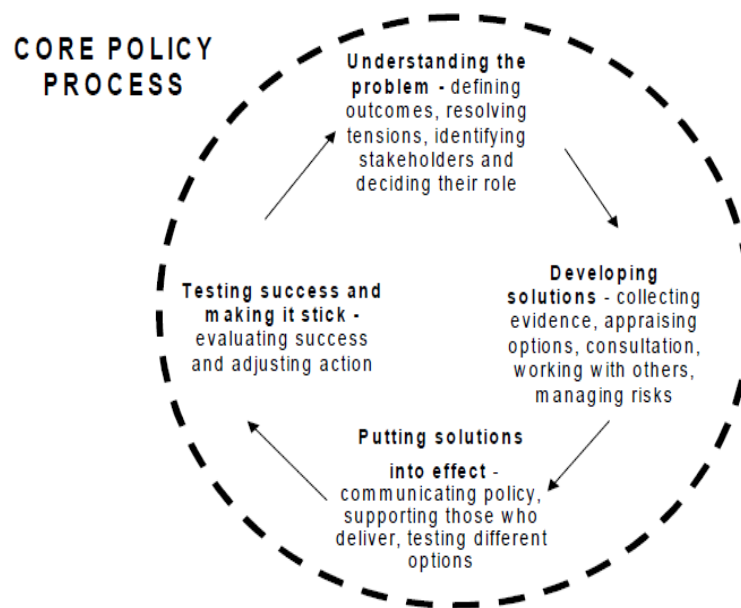


Figure 10-2 The Policy Cycle (From Cabinet Office, 1999)

This is close to the simple sequence of Howlett and Ramesh (1995):

- Agenda-Setting
- Policy Formulation
- Decision-making
- Policy Implementation
- Policy Evaluation

This appears to provide “some way in which this complexity can be reduced to a more manageable form” (Parsons, 1993).

10.3.2. Evidence based policy

The British civil service emphasises (or perhaps pays lip service to) “evidence based” policy-making (Bullock, 2001; Cabinet Office, 1999). The National Audit Office listed use of evidence as (only) one of nine desirable characteristics of modern policy-making (National Audit Office, 2001), these also included being: forward looking; outward looking; and innovative and creative. Klenk and Hickey

(2011) examined the extent to which researchers believed that their government funded forestry research was used in Ontario, concluding that the link was strong in relation to usually legally required guideline related research.

10.3.3. Criticism of the stages approach - are we rational?

Simon (1957) developed a concept of “bounded rationality”, since: “It is impossible for the behavior of a single, isolated individual to reach any high degree of rationality”. Difficulties include the limitations of the options considered, and the amount of information needed to evaluate them. In this situation human beings make use of “givens” in a limited “environment of choice”. In the context of *Punctuated Equilibrium Theory*, Jones and Baumgartner (2012) characterise bounded rationality as rejecting:

...the premise of comprehensive rationality that humans tally up costs and benefits and choose the best course of action. Rather, decisions are channelled by their cognitive and emotional architectures. In particular, decision makers are prisoners to their limited attention spans, and the key governor of the allocation of attention: emotion.

Their emphasis is thus on *attention* rather than “attitudinal and belief structures,” which are more emphasised in Advocacy Coalition Framework approaches (Jones and Baumgartner, 2012). Parsons (1993) sets out a disturbingly lengthy list of barriers to rationality:

Incomplete and fragmented knowledge.

Uncertainty.

Focus of attention.

Powers of observation.

Mental capacity.

Habit and routine.

Psychological environments.

Initiated behaviour that persists.

Organisational environment.

Habermas’s Theory of Communicative Action and “deliberative democracy” gives hope of a semblance of reason. Arts (2012) places Habermasian approaches in the category of “Critical Policy Analysis”, but Habermas’s emphasis on the rationality of individuals engaged in debate would seem more in tune with rational policy analysis. Ostrom (1998) noted that:

Consistent with all models of rational choice is a general theory of human behaviour that views all humans as complex, fallible learners who seek to do as well as they can given the constraints that they face and who are able to learn heuristics, norms, rules, and how to craft rules to improve achieved outcomes.

Taking this further, Ostrom (2005) queries the value of a “universal *model* of rational behavior”, but adheres to the “assumption of a universal *framework* ... of nested sets of components within components for explaining human behaviour”.

In their work on forestry policy, Cubbage et al. (1993) describe the rational-comprehensive approach as “laudable”, but based on unreasonable assumptions. Krott (2005) cites Habermas (2007) and suggests that a discourse based on public involvement and reasonable argument should be the test of a forestry program’s legitimacy. Purdon, discussing Canadian planning processes notes that:

Under ideal circumstances we communicate with each other via rational argument and discussion in order to establish ontological validity. (Purdon, 2003)

Howlett and Ramesh (1995) make a distinction between rational and incremental models of decision-making. Davies (2004), from a position inside No.10 Downing Street, asserted: “evidence-based government is possible and is well established in the U.K.” Others are sceptical:

Many cases exist where scientists are considered just as alibis for politicians, stakeholders or bureaucrats willing to use them in order to justify their arguments with some positive image drawn from science... (Biro et al., 2002)

The linear model of the stages approach in Britain includes an “Impact Assessment” stage, which is “expected to be carried out” (National Audit Office, 2001; National Audit Office, 2009). How often this process is carried out was explored by Hertin et al. (2009):

We have shown that RIA as it operates in practice shows little resemblance to the linear and instrumentally rational process of gathering neutral facts for better policies that is typically held up as the ideal-typical model in policy documents.

Hertin et al. (2009) considered whether this reluctance²⁷ stemmed from lack of positivism, or general lack of interest in a transparent process on the part of politicians, stakeholders or officials:

The case studies have illustrated a strong reluctance to apply structured ways of analysing qualitative information and to introduce methodological approaches that open up decision processes to public scrutiny.

Despite this, many policy-makers, past and present, see their activity as rational and organised. The collection of evidence and the preparation of reports, together with the discussion of drafts and final approvals, all appear to attest, at least to the participants, to a rational logical process.

Sabatier and Jenkins-Smith (1993) question the stages approach since it:

- Does not explain how policy develops between stages.
- Tends to ignore what initiates policy development.
- Is not capable of “empirical hypothesis testing”.
- Has a “built in legalistic top-down focus”.
- Does not take account of different levels and interactions.
- Does not allow for wider public “policy learning”.

²⁷ Personal observation: As a Policy Officer in a Forestry Policy Unit in Whitehall, I noted the fear of RIA, it was to be avoided, or done at the end of the process, reluctantly, rather than drafted, roughly, as a useful tool, the moment the policy idea came to mind. Fear of being systematised seemed to be the reason for the resistance.

Dorey (2005) notes criticisms from Sabatier and others, and contributes a rural policy example of a logical or moral failure, which could also apply to forestry:

...the poor have generally had rather less input in shaping welfare policy than farmers have had in shaping postwar agricultural policy in Britain.

Linder and Peters (1990), argued for a more sophisticated relationship between information and policy-making than implied by the “stages metaphor.” They argued for an institutional approach involving “complex learning and adaptation processes.” Unfortunately, self assumed learning can turn into “policy-based evidence-making” (Hunter, 2009). Parsons (1993) describes rational policy analysis as having “more methodological holes than a sack-load of Swiss cheese”, but recognises its merit in rendering policy analysis intelligible. Dorey (2005), writing specifically about Britain, argues for the stages approach as a “starting point”. Other more disorganised variants are now discussed.

Influenced by March and Olsen, Kingdon (2003, p.116) focused upon “agenda setting”, using the phrase “policy primeval soup” with a “problem stream”, a “policy stream”, and a “political stream”. This is useful in seeking to identify sources of change (or absence of it). Kingdon went on to describe the convergence of streams and a “policy window”, which he likened to a spaceflight launch window based upon alignment of planets.

In considering the likelihood of policy change in a chaotic system where streams must coincide at a particular moment, March and Olsen considered whether historical events are subject to simple chance, or whether each chance event changes the baseline for the next event. They describe this idea as one of “policy martingale”. (Originating in gambling practice in 18th century France.) Put simply, in a betting situation (say coin tossing), stakes are doubled on losing in the reasonable statistical expectation of a future win. An incremental modification of a policy will similarly bet on the existing situation. Bendor (1995) points out that while there may be path dependency in policy this does not mean that it is a true martingale, implying in effect no change – “on average one stays where one is”. There could instead be decisions based on historical conditions which no longer exist – for instance the QWERTY keyboard, designed to slow down typing and prevent (now non-existent) typewriter levers from jamming. Examination of the three streams of problems, policy and politics may be explanatory.

As an example of policy thinking which moves away from the rational, the “Garbage can” is a (chaotic) agenda setting theory described by (Cohen et al., 1972):

[the] ...garbage-can model assumes that problems, solutions, decision makers, and choice opportunities are independent, exogenous streams flowing through a system. (Cohen et al., 1972)

This has limited explanatory utility (Hill, 2004, p.90), but the idea of testing the presence of the four streams does have some systematic appeal, at least in considering whether these factors were all present or not during policy decision processes.

10.3.4. Incrementalism

Lindblom (1959), describes “successive limited comparisons”. Contrasting these with the “rational comprehensive method”, he suggests that policy-makers do not have the resources for a fundamental collection and analysis of all the options. In addition it would not be worth their while doing so, if only a small range are politically acceptable. This means that:

Important possible outcomes are neglected.

Important alternative potential policies are neglected.

Important affected values are neglected.

Incrementalism may better describe what actually happens, and be a better way of making policy, utilising “familiar, better-known experience” with reduced options for simplicity (Lindblom, 1968, p.27).

Parsons (2002) suggests that:

Policy making in liberal democracies has, for the most part, been more about 'muddling through' rather than a process in which the social or policy sciences have had an influential part to play.

Mahoney and Thelen (2009) suggest that:

Gradual changes can be of great significance in their own right; and gradually unfolding changes may be hugely consequential as causes of other outcomes.

Mahoney and Thelen go on to develop a model of “modes of incremental change” linked to “change strategies” and “change agents”. Cubbage et al. (1993, p.93), writing on forestry policy, drew attention to “mixed scanning”, checking for the fundamental within an incremental approach.

10.3.5. Change factor - individual experts and policy entrepreneurs

Böcher (2012) uses a definition of “policy entrepreneurs” from Roberts and King (1991), they:

...advocate new ideas and develop proposals, define and reframe problems; specify policy alternatives; broker the ideas among the many policy actors; mobilize public opinion; help set the decision making agenda...

Roberts and King emphasise innovations which the public entrepreneur can promote and design:

A “public entrepreneur” not only must have an innovative idea (which tends to be the domain of the policy intellectual), but also must design and translate that idea into a more formal, explicit statement. Working with those who have the formal power and resource control (typically referred to as policy champions), the public entrepreneur seeks acceptance of the innovative idea in law or executive fiat, and the eventual implementation of the innovative idea into practice. This distinguishes public entrepreneurs from others in the policy process because the former are involved in three phases of the policy process—creation, design, and implementation—as they promote their innovations. (Roberts and King, 1991)

Their research included interviews and psychometric testing. Giessen notes that; “suggestions initiated by these experts must fall on fertile grounds regarding the preferences of the government in

order to realise change.” Giessen suggests that issue experts may be ideas-based or interest-based, and shape discourses and conditions for change.

Issues for Assessment:

Can policy entrepreneurs be identified?

What can be concluded about their involvement and significance?

10.3.6. Change factor – external shocks and crises

If policy systems have a certain inertia, a shock to the system may cause change (Giessen, 2011). If policy change tends to be incremental, given the bounded rationality of the actors, and the nature of institutions, then change may exhibit “stickiness” (Baumgartner et al., 2011). Jones and Baumgartner (2012) set out Punctuated Equilibrium Theory, arising from their:

...unhappiness with policy process models that emphasized stability, rules, incremental adjustment, and “gridlock” whereas we saw policy change as oftentimes disjoint, episodic, and not always predictable.

The Advocacy Coalition Framework (discussed fully in Section 10.7), and policy subsystems approaches (Sabatier and Jenkins-Smith, 1999; Weible et al., 2009), incorporate “shocks”:

Significant perturbations external ... to the subsystem are necessary, but not sufficient, cause of change in the policy core attributes of a governmental programme. (Sabatier and Jenkins-Smith, 1999, p.147)

In this conception, changes in public opinion are seen as external events together with “changes in socioeconomic conditions”. More direct shocks, like wars and dislocations of trade are “salience disruptions ... initiated by large-scale events that focus public attention on specific subsystems”. They suggested that the terrorist attacks on the USA in 2001 met this criterion. This research encompasses two world wars and the invention of the hydrogen bomb. In the checklist approach “salience disruptions” or “discontinuities” will be sought.

Issues for Assessment:

Can external shocks be identified?

What evidence is there that this changed thinking in agents?

If so what were the mechanisms?

10.3.7. Change factor – internationalisation, policy diffusion and multi-level governance

Timber importation has involved Britain in international forestry for centuries. More recently governance and policy have become more subject to internationalisation. Bernstein and Cashore (2000) make a distinction between trade globalisation, and internationalisation, when:

...policies within domestic jurisdiction face increased scrutiny, participation, or influence from transnational actors and international institutions, and the rules and norms they embody.

Some internationalisation instruments can be seen as part of an international neoliberal agenda (Humphreys, 2009). Bernstein and Cashore describe pathways for international policy influences:

Market dependence,
International rules,
International normative discourse and
Infiltration of the domestic policy-making process.

Apart from reliance on imports, internationalisation and multi level government had little impact on the early stages of the Great Spruce Project.

Issues for Assessment:

What international pressures are evident at policy decision processes?

Is there evidence that diffusion of policy from elsewhere is relevant?

Have different level of government influenced the decision and how?

10.3.8. Change factor – political parties and politicians

It is often assumed that political parties form part of the rational policy process, but Giessen (2011) notes that:

According to the lay understanding of democracy parties should be expected to account for the overwhelming majority of policy changes. It is remarkable, however, that only a limited amount of literature is concerned with this factor and that these studies view parties a secondary factor at best.

Politics is used here in relation to the role of ministers, thus: “the interaction of organized, and self-proclaimed, political entities in the policy process” (Howlett and Ramesh, 1998). Some workers have warned of overestimating the importance of elections and politics:

We believe that elections are indeed fundamental elements of democracy but that policy changes frequently stem from the emergence of new information or changes in the social or economic environment that are not so simply related to the electoral process. (Baumgartner et al., 2011)

This research has sought to address this issue in the British context by engaging with politicians directly to identify whether or not party political or electoral issues have been involved in policy change.

The way in which political parties make their policies was sensationally described by Neil Kinnock at the 1985 Labour party conference:

I'll tell you what happens with impossible promises. You start with far-fetched resolutions. They are then pickled into a rigid dogma, a code, and you go through the years sticking to that, out-dated, misplaced, irrelevant to the real needs ... (Neil Kinnock, 1985)

Forestry policy is rarely significant in a British political party's policy-making and election manifesto. Hill (2004, p.152) suggests that issues of party-political decision or of ideology make debate of rational vs. incremental policy "beside the point". This is because "it is important not to be deceived by the rational action language politicians are likely to use". Parsons (1993, p.194) makes the point that for Kingdon (1984), the "political stream" is separate from the "problem" and "policy" streams. The political stream establishes an "agenda item" based on:

Public mood and attitudes.

Organised politics including lobbyists.

Formal governmental and jurisdictional changes.

"Consensus-building" including "bandwagons".

Forestry policy-making analysis sometimes avoids politics, producing complex definitions and taxonomies, rather than simply concentrating on what:

Governments do and neglect to do. It is about politics, resolving (or at least attenuating) conflicts about resources, rights, and morals. (Klein and Marmor, 2008)

Sometimes policy-makers define live issues, in effect influencing politics (Parsons, 1993). For instance, foresters can seek the ear of politicians. Gerald Kaufman²⁸ was a Labour minister in the 1970s, describing a forestry-related example (a paper mill) he said of officials:

The one thing they can never cope with is action by you on the political network, to which they do not have access and which, with all their undoubted skill and sometimes brilliance, they cannot understand. (Kaufman, 1980),

Kaufman and Flinders (2002) noted the difficulties in achieving "joined-up government" if civil servants are loyal to departments (like the Forestry Commission). Kauffman (1967) notes that career civil servants "believe that they also have a duty not to go supinely along with every momentary change in the political winds." He suggests that those with technical expertise, perhaps especially involved in "long-range" decisions, may feel this strongly. The power of the official in the British system can be considerable: "politicians in few countries place as much faith in bureaucrats as do the British" (Campbell and Wilson cited by Hill (2004, p.164). In reviewing modernisation of UK government" Burton (2006) notes that while the stages approach is the supposed norm, the diaries of Gerald Kaufman, Richard Crossman and Tony Benn do not seem to confirm the "textbook" idea of the stages model. There seems to be scope for applying a bureaucratic lens to British forestry policy.

Issues for Assessment:

Is there evidence of broader political direction?

How does this interact with individual politicians and their power?

²⁸ Minister of State (Department of Industry) 1975-79, Parliamentary Under-Secretary (Department of Industry) 1975-75, Parliamentary Under-Secretary (Department of Environment) 1974-75 (UK Parliament, 2013).

10.3.9. Change factor – veto power

Giessen (2011) draws on the work of Tsebelis (1995; 2000; 2011) to describe the “ability of individual or corporate actors to block the policy process.” Tsebelis concentrated on formal veto, contrasting presidential and parliamentary systems. While this work has a rather formal game theory approach based on legalistic forms of veto, Tsebelis usefully characterises the British system as “unicameral”, noting the lack of veto power residing in the House of Lords (actually a forum for a great deal of forestry discussion). Veto actors can have the right to block a change, but they might also play a role in blocking something else which facilitates change in another area. Giessen suggests that in fact; “few actors or institutions have factual veto power these factors are not reported frequently.”

Issues for Assessment:

Can agents with veto power be identified?

What is the source of this power and how is it applied?

10.4. Theoretical approach – institutional policy analysis

Ostrom (2005) described the “Institutional Analysis and Development” (IAD) framework, based on the dissection of systems, paying attention to a classified range of rules. She defined institutions as:

...the prescriptions that humans use to organize all forms of repetitive and structured interactions including those within families, neighborhoods, markets, firms, sports leagues, churches, private associations, and governments at all scales.

James Scott (1999, p.40) relates: externalisation of symbolic meanings and structures; objectification of these as outside facts; and finally internalisation in consciousness. One of his examples is the “institution” of German productivist coniferous forestry in the nineteenth century. New institutionalism proposes a political conception of “symbolic action” (March and Olsen, 1984) The term “new” distinguishes between earlier consideration of formal political and other institutions by, for instance, Weber (1964).

10.4.1. Change factor – institutional change

The nature of society and institutions has changed during the century under study. March and Olsen (1984), from a 1980s vantage point, suggested that: “Social, political, and economic institutions have become larger, considerably more complex and resourceful, and *prima facie* more important to collective life.” They suggest that modern political society operates at a symbolic level, with politicians playing various roles: making statements that are not genuinely believed privately; organising public consultations, where the action is already decided; and using other rituals intended to reassure or manipulate. They substantiate their suggestion that these “symbols, rituals and ceremonies” are just that; by pointing to the way in which:

Information is gathered, policy alternatives are defined, and cost-benefit analyses are pursued, but they seem more intended to reassure observers of the appropriateness of actions being taken than to influence the actions... (March and Olsen, 1984)

10.4.2. Bureaucracy

Weber (1964, p.338), provides the foundation for much modern thinking on bureaucracy:

The question is always who controls the existing bureaucratic machinery. And such control is possible only in a very limited degree to persons who are not technical specialists. Generally speaking, the trained permanent official is more likely to get his way in the long run than his nominal superior, the Cabinet minister, who is not a specialist.

Weber and “Weberians” acknowledge the importance of “deep structures” in capitalist society, but see an opportunity for “surface actors” in identifying problems and agendas (Parsons, 1993). This may be particularly relevant where influential professional interests are involved. Consadine (2005) argues that specialist domination reduces “openness to policy initiative”. Peters (1981) proposed that:

It is by now almost trite to say that bureaucracy and administration are an increasingly significant – if not the most significant – feature of modern policy-making.

Peters suggests that bureaucrats may “seek to maximise security” through budgets and agency size.” The case against bureaucracy is summarised:

An overstated version of the argument of institutional weaknesses is that if politicians have ideas, they will be prevented from implementing them, and civil servants do not and will not have ideas to implement.

Krott (2005, p.139) draws attention to the “informal goals” of forestry officials (in Germany). These may coincide to varying degrees with those of their organisations, or the views of sectors of the population at large. Krott suggests that in Germany forest utilisation for timber may accord with rural communities’ values, but not necessarily those of city dwellers, a clash between “utilitarian and romantic forest values” (Kennedy, 1985). Cabbage et al. (2007) note that “professionals seek to expand their responsibilities and their pay, as well as the influence and power of their agency.” A belief in professional education and status may cause resistance to wider social needs. Miller notes the complex place of individuals in a bureaucracy:

Individuals orientate themselves to their social surroundings through their actions. The determination of whether an action is adequately grounded or “makes sense” is a subjective determination. (Miller, 1990)

Mannheim (1960, p.105) posited “bureaucratic conservatism”, characterised by a “fundamental tendency of all bureaucratic thought to turn all problems of politics into problems of administration”. There is a conundrum in wider attitudes to bureaucracy:

...it is ironic that government workers who are often depicted as drab, “faceless”, timid, and obscure should be called self-directing, dominant and sinister ... (They have also been described as incompetent, bungling, lazy and stupid, and at the same time as diabolically clever self-seeking conspirators.) (Kaufman, 1981)

Individuals within an organisation can be intentionally conditioned, Kaufman (1967) describes the way in which in the US Forest Service, individuals' satisfaction:

...seems to depend upon their participation in a fairly centralised organisation rather than upon any idea of being rulers in their own little kingdoms.

This results in a largely unconscious conformity to the values of an organisation, dominated by forestry professionals at all levels, (highly applicable to the Forestry Commission). Tipple (1991) points out that Kaufman treated forestry policy as "preformed decisions" and focused on the Forest Service as a bureaucracy and institution, perhaps ignoring the way it influenced policy.

Krott (2005) notes the way in which institutions "informally" seek to preserve their independence, scope and resources. Peters (1981) lists the bureaucrats' tools: "...bureaucrats defeat politicians by obfuscation, delay and the use of rules, regulations and procedure".

Peters (2001) suggests that because United Kingdom bureaucrats move within and between departments, their power of obstruction may be weaker than in other countries where civil servants are recruited to individual agencies and ministries and can develop greater expertise and experience with which to obfuscate. However, the Forestry Commission is more on the "non-UK" model, with professional experts at the highest levels, "almost unique" in the British system (Ryle, 1969, p.11). Peters makes the point that in Sweden agencies have more independence, whereas in the UK the Treasury has great power. Again, the Forestry Commission is different, having access to timber income, partly freeing it from Treasury control. This also undermines the suggestion, for forestry, that "ministerial responsibility in the United Kingdom makes even ineffective political leaders powerful in theory if not always in practice" (Peters, 2001, p.200). As a *non-ministerial* department the Forestry Commission's chair can act to some extent like the politically appointed head of an agency in the USA, escaping the theoretical power of a United Kingdom minister.

10.4.3. Change factor - bureaucratic entrepreneurs and local experimentalism

A specialist bureaucracy may develop policy change from within:

The professionals in the agencies become the source of new policies within their sphere of competence, having both expert knowledge and some interest in the expansion of their agencies. Those bureaucrats interested in changing policies may have to wait a number of years before implementing their ideas, until sufficient popular and political support is developed. (Peters, 2001, p.199)

This suggests that a learning expert bureaucracy might be an engine of change. Dryzek (2005, p.97) explores conflict between learning organisations capable of adaptive management, and administrative discipline, required to avoid "implementation deficit". Kaufman (1967) observed some experimental freedom in the US Forest Service of the 1960's, a type of policy entrepreneurship. Roberts and King (1991) identified "bureaucratic entrepreneurs" inside the government machine, where external policy entrepreneurs "cultivate" bureaucratic insiders. Ellefson (1989, p.269), surveying bureaucracy in US forestry policy, also noted "advocacy from within". He predicted that forestry bureaucracies might become more participative as a response to complexity and pace of change, allowing internal debate

“without being fearful of charges of insubordination”. Ellefson also notes the power (and efficiency) of bureaucracies, and the fact that forestry bureaucracies may have strong “constituencies which are willing to come to an agency’s defense”.

In an interesting contrast to the British situation where clearfelling systems have been dominant, Šinko (2004) draws attention to the way in which the “close to nature paradigm” of Slovenian foresters may influence their identification of issues.

Peters et al (2005) provide an alternative view, suggesting that the leadership of an institution and the conjunction of events *can* result in change. They also suggest that academic focus upon bureaucrats and structures means that political parties are neglected. This research seeks to avoid such neglect by explicit examination of the role of political actors and manifestos.

Du Gay (2000) defends the bureaucratic ethos, suggesting that the concept of civil servants and politicians as partners, where the former had a duty to influence, has been replaced by a clearer “policy/operations dichotomy”. Krott (2005, p.136) suggests that politicians resisting the setting of detailed objectives “hinders the bureaucratic model”.

The role of bureaucracy and “institutions” is an important dimension to the British forestry policy narrative. Questions about their involvement, interaction and power will be posed, together with evidence for institutional change.

Issues for Assessment

What institutions are involved and what is their character?

How do they interact with each other, what are the power relations involved?

Is there evidence of gradual institutional change?

10.5. Theoretical approach – policy network analysis

Rhodes (2008) lists notions related to the formal and informal links between government and “other state and societal actors. These include: “iron triangles”; policy subsystems; policy communities, and epistemic communities.

Many groups will want to influence policy, some will be insiders and some outsiders. Rhodes (2008, p.427) brings this to life pithily in the case of “professions” in welfare states:

Over the years, such interests become institutionalized. They are consulted before documents are sent out for consultation. They don’t lobby. They have lunch.

Rhodes distinguishes “issue networks” and “policy communities”. The first have many participants and are a ferment of comment, criticism and ideas. The second have limited membership with some groups excluded, high quality interaction, and similar values. They are associated with policy stability and a share-out of benefits.

New cross-sectoral solutions will disturb established balances of power. Krott and Hasanagas (2006) note that such change may be resisted by a sector and its stakeholders even if “they formally welcome” the need for shared exploration of new solutions. Drawing on the work of Jordan and Schubert (2006), they reproduce three network strategies for change: formalised financial incentives to other sectors; incentives to less formal actors; formal pressures in the society without strong underlying state commitment. Marsh and Rhodes (1992) focused identified the creation of policy communities by government when it wished to take an interventionist approach to agricultural policy.

Cunningham (1992) examined whether sea defence policy in the United Kingdom represented a “professionalized network ... dominated by the engineering professions and by an ideology which regards water policy as being subject to technocratic, rather than political, considerations”. In the Forestry Commission professionals dominate up to the level of Director General, just as Marsh and Rhodes noted engineers at “chief executive levels”. Cunningham looked at a case study where engineers had advocated a flood defence construction, but this had to be negotiated with a regional hierarchy and to an extent with the Ministry of Agriculture for funding. She concluded that the dominance of the “technocratic profession” was not certain, if finance was partly controlled elsewhere.

Rhodes (2008, p.428) helpfully, for the sake of parsimony in this research, comments that a:

...lepidopteran approach to policy networks – collecting and classifying ... has become deeply uninteresting.

10.5.1. Change factor - iron triangles

Howlett (2002) considered whether networks describe rather than explain policy developments. He notes the American concept of “iron triangles” where interest groups, congress and government agencies combine to assure “stable, routine, policy-making in which outputs tended to incrementally advance the interests of subsystem members”. The term “military-industrial complex” was coined by President Eisenhower (1961), perhaps a professionalised policy network in forestry could combine with industrial interests and politicians to form a “forestry-industrial complex.”

Networks can also be facilitated by the so-called “revolving door” of personnel transfer between agencies, legislature and lobby groups. A member of the House of Commons may become Chair of the Forestry Commission, or of a private forestry company.

Issues for Assessment

Is there evidence of Iron Triangles?

10.5.2. Pluralism and competing interests

Pluralism proposes an explanation based on a market for ideas and policy solutions. Desirable solutions should emerge, since in liberal democracies the range of stakeholders, interest groups and others, will provide appropriate balance (Dahl, 1967, p.24):

...the existence of multiple centers of power, none of which is wholly sovereign, will help (may indeed be necessary) to tame power, to secure the consent of all, and to settle conflicts peacefully.

Others are more sceptical:

In area after area ... no single identifiable office or individual commands either the knowledge or the authority to make decisions. A search for the responsible party leads through an endless maze of committees, bureaus, offices, and anonymous bodies. (Schaar, 1981, p.34)

Miliband (1969) (from a Marxist viewpoint) rejects pluralism as merely competition among elites. Krott (2005, p.273) considering German forestry policy, is also sceptical about “pluralistic access”, suggesting that “it is mainly the elite who define the problems” including forest owners. Krott (2009) explores the idea of “salience” in a pluralistic situation, or “the relevance of information for an actor’s decision choices, or the choices that affect a given stakeholder”. Krott (2005) emphasises interests in forestry policy (in a German context) citing “empirical-analytical political theory”:

...because interests determine the actions people take, they constitute one of the most important factors describing the political process.

Interests are based on action orientation, adhered to by individuals or groups, and they designate the benefits the individual or group can receive from a certain object, such as a forest. (Krott, 2005, p.8)

Individuals and other actors may actually have difficulty in identifying their own interests accurately, for a variety of reasons, but in forestry long time scales are particularly problematic. Krott advocates equipping lobbyists better for their role.

Strategies for obtaining acceptance and legitimacy amongst competing interests include: the use of empty formulas on which all can agree; variable choice of short or long-term impacts; misleading information and dogma (Krott, 2005). Krott identifies a tendency to seek spurious harmony, and proposes a “call for conflicts.”

Krott suggests a fundamental dichotomy between a society based on interests and one based on a holistic common welfare. This latter requires a “social bargaining process which regulates conflicts of interest in utilizing and protecting forests according to the programs of the forest sector” rooted in the “traditional view of German forest policy scholars”.

Issues for Assessment

What networks and subsystems can be identified?

How do they fit the characterisations of different types of networks in the literature?

10.6. Theoretical approach – critical policy analysis

For Parsons (1993) critical policy analyses are “deep theories” - psychology or ideology may not be clearly evident in face-value power relationships between politicians, bureaucracies and others.

Arts (2012) uses the term critical policy to cover Marxian approaches, together with discourse theory and social constructivism. Giessen (2011) treats Marxism as distinct because of its rationalist argumentation. This research needs useable tests for forestry policy decision processes, so uses two formulations: ideas, narratives and discourses; and a more Marxian approach focussing on class, capital and distributional dimensions.

10.6.1. Change factor – ideas, narratives, frames and discourses

Language frames our conception of problems, policy agendas and potential solutions. This could be neutral code, or a more complex discourse affecting shared and constructed “meanings” (Parsons, 1993).

“Framing” describes the way a “complex reality” is organised and comprehended. We all do it, with implications for how we see the world, and hence discussion and conflict. Rein and Schön (1993) distinguish between factual disagreements which occur within a frame, and controversies, “which cannot be settled by recourse to fact alone”, resulting from conflicting frames. This concept provides a means of analysis, and of policy development; inviting actors to “engage in frame-reflective discourse”. In a policy struggle, those who can control the way in which issues are framed linguistically can gain influence. Words like “forest”, “plantation”, “crop”, “woodland”, and “ancient woodland” are loaded with constructed meanings. Fischer and Forester (1993, p.1) raise the challenge in “The Argumentative Turn”:

What if our language does not simply mirror or picture the world but instead profoundly shapes our view of it in the first place?

Specific understandings of environmental issues can be dominant and authoritative at some times and discredited at others. This has a resonance for many of the ideas of productivism and other environmental values in British forestry (and agriculture). Language may mould new meanings and identities:

...history and humans are not so much “driven” by objective interests, rational calculations, social norms or overt power struggles, but by knowledge production and (collective) interpretations of the world. (Arts and Buizer, 2009)

Humphreys (2009), examining neoliberal discourse in international forestry processes, suggests that discourse can:

...help to shape common understandings of an environmental problem across a broad range of actors. In policy making circles an established discourse will favour certain policy options, and inhibit and exclude the selection of others.

Organisations and individuals can use language to create a geographical and intellectual space for a kind of forestry, such as mapable “ancient woodland” (Tsouvalis-Gerber, 1998).

Dryzek (2005) identifies the “argumentative turn” as challenging both positivism and, “objectivist and instrumentalist notions of judgement and action in the name of practical reasoning.” Dryzek cites the

concept of “frames” as antithetical to objectivism since each frame may treat issues and topics as of different “salience”.

Kaplan (1993, p.167) suggests that a “plot”, with a beginning, middle, and end, might impose a structure normal in fiction on “actual happenings,” but alternative narratives cannot easily be applied to the future. Kaplan suggests that a plot narrative makes it more likely that the mind of the actors will be understood:

...the lack of appreciation for stories also stems from a failure—even among policy professionals with a less positivist notion of their work—to accept the usefulness of good stories in making claims about both the past and the future.

Discourse communities and genres are described by Paltridge:

...members of a discourse community have particular ways of communicating with each other. They generally have shared goals and may have shared values and beliefs. (Paltridge, 2006, p.24)

Genre in discourse analysis refers to types of communication event, and “kinds of text”. Paltridge cites Bhatia (1998) who describes genre as like a game played by writers and readers seeking to “exploit and manipulate” the rules to achieve objectives. Reviewing the use of discourse in forestry policy Arts and Buizer (2009) set out four approaches:

- Communication
- Texts
- Frames
- Social Practices

They proposed a discursive-institutional approach to forestry, and explored the way in which “new ideas, concepts and narratives” can emerge and become institutionalised, causing institutions to change. Arts and Buizer applied their approach to the international forestry processes. They draw attention to “re-framing”, suggesting that this is occurring in “the introduction of the idea of forests as ‘sinks’ for carbon dioxide”.

Scrase and Ockwell (2010) noted framing as part of the way in which a high energy economy has been perpetuated through energy policy documents subtly favouring nuclear power. They define framing as “the underlying assumptions policy is based on and the ways in which policy debates ‘construct’, emphasise and link particular issues.” Scrase and Ockwell note that in this situation “discourse is fundamental to the way that institutions are created, but in the short-term institutions also have a constraining or structuring effect.” Seeing policy as “messy and political,” and determined by interests, they advocate a discourse perspective. Adams et al. (2003) note that: “It is precisely when different stakeholders (of different sizes and operating at different levels) reveal different interpretations of key issues that the policy debate can be most productive.” There needs to be challenge if all involved “share an understanding of the problem”. Three types of knowledge are suggested:

Empirical context – both experience and research.

Laws and institutions.

Beliefs, myths, and ideas.

Hajer (1995, p.43) points out that the development of a “story-line” becomes part of a struggle for power. As a story becomes more widely used, it can take on a “ritual character” or “trope” which rationalises “a specific approach to what seems to be a coherent problem”, (for instance timber imports or utilisation of the uplands). This means the story “sounds right”, due to trust in the originator, and the “acceptability of the story-line for their own discursive identity”, rather than inherent “plausibility”. This research has a constructivist dimension, in that the use of autoethnography and the researcher’s background mean that there is an interaction between knowledge and the knower (Guba, 1990, p.93). This is described by Bobrow and Dryzek (1987, p.83) as pursuing “how individuals and organizations (alone or in combination) arrive at judgments, make choices, deal with information, and solve problems.” They contend that people make decisions based upon “pre-established” conceptions; programmed internally with a model with results “well short of optimal, maximizing decisions”:

The cognitive “stock” held by individuals determines what information they will search for in a novel situation, what heed they will pay to it, and the options for action they will recognize, examine and pick. Individuals develop a set of scripts embodying both a menu of alternative representations of a novel situation and an appropriate response once a selection from this menu has been made. (Bobrow and Dryzek, 1987, p.84)

The new availability of large bodies of digital material makes possible quantitative statistical analysis (Monroe and Schrod, 2008). This makes information-processing a useful lens to explore evidence of the cognitive processes revealed by content analysis and discourse of actors in key periods of British forestry policy formulation, decision and non-decision. Qualitatively, archives, personal communication and interviews can provide evidence of actual attempts to change discourse, and to assess whether “collective ideas, interpretations and meanings attached to (parts of) the world” (Arts and Buizer, 2009) are important in understanding the dynamics.

Issues for Assessment:

Is there evidence that the way people are collectively seeing and attaching meaning to the world is important rather than more rational calculations?

Evidence of paradigm shift?

10.6.2. Change factor – class, and the state

Giessen uses the term “class and capital” under the rather catch all heading of “other explanatory factors”. Parsons (1993) categorises it as Marxian and “deep theory”. Miliband (1969) examined the conjunction of politics and administration in a post-war Britain of public corporations, including the (still in 2014) state-enterprise-dominated forestry sector. Miliband sees officials as political, rather than obedient servants of politicians. They have implicit or unconscious class identities and loyalties, “at least at the levels where policy-making is relevant.”

Parsons (Parsons, 1993, p.146) refers to Gramsci, those in power may control the way in which people see “social reality”. Parsons notes the logic that:

...the idea of a free and autonomous process of problem definition and agenda-setting is a nonsense which is sustained only as a legitimisation myth for the political order: the reality is that the policy process is determined by the hegemony of capitalist ruling ideas and interests.

In moving to a second aspect of “deep theory”, Parsons summarises the position of the Frankfurt School:

...the idea that the policy process involves a free definition of problems is erroneous. The real power of capitalism is the power which it has to influence the individual's sense of reality.

Marxist thinking also underlies:

...a stance which treats state action as to a considerable extent constrained and determined by economic institutions. ... echoed today by many who would certainly not wish to be portrayed as Marxists (Hill, 2004, p.41).

Marx and Engels (1998, p.37) contended that:

The executive of the modern state is but a committee for managing the common affairs of the whole bourgeoisie.

The state may be involved with infrastructure for the purpose of assisting the accumulation of capital in a class society (Hill, 2004, p.39). As production has become more complex, capitalists have required greater such investment. O'Connor (1979, p.101) sets out three types of state investment:

Physical capital can include agricultural production, (perhaps also primary wood production).

Transportation investment facilitates capitalism, to “insure a regular flow of goods ... at stable, minimal prices”. (This argument might apply to the provision of otherwise little used rural public roads accessing forestry areas.)

Human capital social investment includes education, health, and other expenditure to provide capitalists with effective labour. (Perhaps universities teaching forestry.)

Marxian analyses of the role of the state in supporting capitalism might be relevant to a history of British forestry policy. If:

...the state in these class societies is primarily and inevitably the guardian and protector of the economic interests which are dominant in them. (Miliband, 1969, p.265)

The Forestry Commission might be to some extent, to paraphrase Marx and Engels, “a sub-committee for managing the forestry affairs of the bourgeoisie”. Just as provision of transport and other public services may benefit capitalist interests, so perhaps does a continual supply of timber produced by the state at a subsidised cost.

Kitchen et al. (2002) examined the relationship between communities and the Forestry Commission in South Wales, citing neo-Marxist theorists and noting that political resistance is more plural than simply based on class and can be: “focused on issues such as age, gender, ecology and the environment.”

Some public choice theorists propose an alternative argument, that plural demands and rational choice theory mean that the state develops such as to *interfere* with the operation of capitalism (Hill, 2004, p.53).

Marx took what Dryzek describes as a “promethean” or perhaps “imperialist” approach to exploitation of nature. Dryzek notes that attribution of environmental ills to the nature of capitalism has to address the way in which former eastern bloc countries failed environmental challenges in pursuit of anthropocentric modernism. Marxian approaches have been little applied to forestry policy Arts (2012).

If the positions of actors are determined by their self-interests, then the sharing of benefits from a given policy may be revealing. Distributional analysis could identify which interest groups have benefited. Many policy outcomes are perverse or unpredictable, interest groups can also adapt to take unexpected advantage. In the United Kingdom distributional effects should be analysed:

...if more in depth analysis is undertaken, it should focus on how the cost and benefits of a proposal are spread across different socio-economic groups.

A proposal providing greater net benefits to lower income quintiles is rated more favourably than one whose benefits largely accrue to higher quintiles. (HM Treasury, 2003, p.24)

It is not clear that this best practice has been followed in recent British forestry policy-making. Few examples of forestry analyses are available in the literature. Riera et al (2007) looked at the social equity of subsidy, certification and command and control in a Spanish forestry context. They concluded that subsidies provided benefit, in welfare terms, to the whole society, but were less clear in equity terms (Riera et al., 2007). This aspect of forestry policy would appear to merit further exploration.

Issues for Assessment:

Is there evidence of class-conscious behaviour?

What are the distributional impacts of policy changes or stability and the class relevance of those involved?

10.6.3. Potential change factor – gender

Very few women were involved in forestry during the first three quarters of the twentieth century:

Forestry has traditionally been one of the professions in which men have been most firmly and exclusively entrenched. It is not long since forestry schools – and hence the profession itself – were, in many places, open only to men. (Wazeka, 1984)

By the twenty-first century it was still the case that “men still make up by far the majority of those employed in forestry” (Leslie et al., 2006), but with an increasing number of women “holding important managerial posts within the sector”.

Whether this accounts for changes in forestry policy in the last decades of the twentieth century depends upon assumptions about female and male attitudinal differences. Vandana Shiva refers to

the masculine nature of scientific forestry, and the potential for “recovery of the feminine principle” as a “response to multiple dominations and deprivations not just of women, but also of nature” (Shiva, 1988, p.53). More recently a similar proposition has been made by Varghese and Reed:

...women employed in the USDA Forest Service are more likely than men to hold positive expectations and higher levels of trustworthiness regarding environmentalists, range users, citizen activists, and tribal representatives. (Varghese and Reed, 2011)

Giessen (2011) suggested that; “Due to differences in the thinking and differences in the relative positions of men and women in social networks, gender may also be an explanatory factor for policy change”. Almost no women appear in earlier phases of the study period, the impact of gender on the later stages is discussed in Chapter 19.

10.7. Theoretical approach - Advocacy Coalition Framework

This survey of theory and selection of change criteria ends with the Advocacy Coalition Framework proposed principally by Sabatier and Jenkins-Smith (Sabatier, 1988; Sabatier and Jenkins-Smith, 1993). Sotirov and Memmler (2011) note that it takes account of cognitive research and social psychology “which highlighted the strong perceptual biases and limited information processing capabilities of humans”. This leads to a conception of policy change based on learning and changes in the attitudes of coalitions of policy-makers and those who influence them.

10.7.1. Change factor – coalitions, values, beliefs and policy learning

The framework provides a useful model for “checking” changes in perceptions, as well as considering the coalitions which may support policy stability or change. Sabatier and Jenkins-Smith (1999) identify key issues:

Role of information and analysis.

Recognition of time processes perhaps of decades-length to understand cycles.

Rejection of formal governmental institutions or programmes as units of policy analysis and replacement with “policy subsystems”, composed of private and public actors, extending widely to include journalists, think tanks and others.

Recognition that a policy can be “conceptualized in much the same way as belief systems”, including “value priorities” and “perceptions of world states”.

A set of hypotheses is clearly set out as part of the Advocacy Coalition Framework. Interestingly the approach has been much applied to natural resources issues and to forestry policy in particular, perhaps because the approach seems adapted to long-term activities and ongoing conflicts (Sotirov and Memmler, 2011).

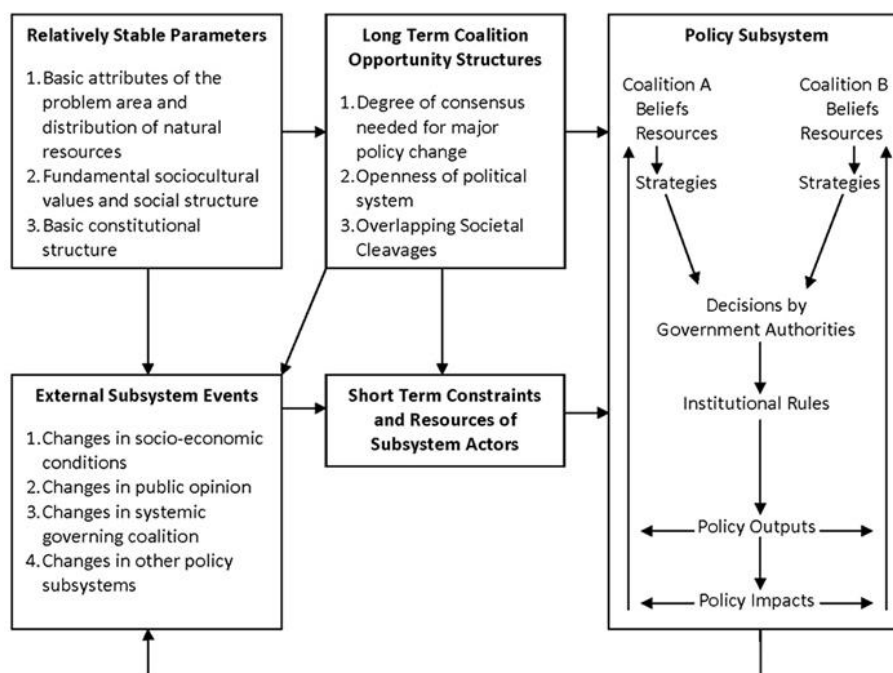


Figure 10-3 Advocacy Coalition Framework (From Weible et al., 2009)

Burnett and Davis (2002) examined the relationship between environmentalists and timber interests in the USA between 1960 and 1995 and the way in which a more “environmental” policy emerged in the 1980s. Three advocacy coalitions are identified: environmental; “commodity”; and “scientific management”. Content analysis of 350 testimonies to congressional committees was used to test some of Sabatier’s hypotheses. Testimonies were coded for core and secondary beliefs, demonstrating that over time environmentalists’ core beliefs had changed.

10.7.2. Change and sub-systems

Howlett and Ramesh (1998) explore the role of policy subsystems in individual sectors, and suggest that the nature of this system can reveal the likelihood, speed and nature of change based upon its “propensity to respond to change in ideas and actors”:

Once something has been accepted as a policy core belief however, powerful ego-defense, peer-group, and organizational forces create considerable resistance to change, even in the face of countervailing empirical evidence or internal inconsistencies. (Sabatier and Jenkins-Smith, 1993, p.33)

Reviewing the use of the Advocacy Coalition Framework between its conception in 1981 and 1999, Sabatier and Jenkins-Smith (1999) outline their original change hypotheses:

No significant revision of a policy if the relevant advocacy coalition “remains in power”,
Change is unlikely “in the absence of significant perturbations external to the subsystem”.

In the light of work during the 1990s they proposed a qualifier:

Perturbations are a “necessary but not sufficient” cause of significant policy change.

Such “perturbations” include:

- Socio-economic conditions.
- Public opinion.
- System-wide governing coalitions.
- Policy outputs from other subsystems.

Reviewing developments more recently, Weible et al. (2009) set out paths to change:

- External shocks.
- Policy-oriented learning of secondary beliefs with “the rigidity of the belief system”.
- Internal sub-system events highlighting failures.
- Alternative dispute resolution by negotiation.

Sabatier et al. identify nine likely conditions for negotiation:

...a hurting stalemate, effective leadership, consensus based decision rules, diverse funding, duration of process and commitment of members, a focus on empirical issues, an emphasis on building trust, and lack of alternative venues. (Weible et al., 2009)

Lertzman et al. (1996), explored this in British Columbia, tracing the development of an Environmental Advocacy Coalition of increasing strength. Lertzman et al. drew a cogent response from Hoberg (1996) suggesting that much more evident political power relations had a significant role in the policy changes in British Columbia, rather than learning processes.

Maser (1994) suggests that without a change in thinking; “coercion” of individuals may be needed. Forestry Commission personnel refusing to accept new objectives are noted by (Kitchen et al., 2006).

Weible and Sabatier (Weible and Sabatier, 2007, p.123) suggest that the Advocacy Coalition Framework may have a particular role as a “lens” where beliefs are involved, and where there is:

...goal disagreement and technical disputes involving multiple actors from several levels of government, interests groups, research institutions and the media.

This appears to describe much of the nature of the British forestry and industry “network” after the Second World War. Haas (1992) suggests that “epistemic communities” resist change:

Because the behavior within and by an epistemic community is guided by various kinds of normative and causal beliefs as well as circumstance, it will differ from the behavior typically analyzed and predicted by rational choice theorists and principal-agent theorists.

This accords with Kaufman’s (1967), account of the US Forest Service; many of the “controls” are not perceived by those who conform to them. Haas points out that epistemic communities:

...strengthen the commitments of individuals and inhibit them from subsequently recanting the beliefs shared with and reinforced by their fellow community members. (Haas, 1992)

Alternatively, institutions or communities can adopt ideas from other communities (e.g. nature conservationists):

Policy dimension-shifts occur when strategic policy entrepreneurs import arguments from another proximate linked subsystem. (Nowlin, 2011)

The Advocacy Coalition Framework and the diagram at Figure 10-3 provide a useful check and means of systematically considering coalitions and policy communities.

Issues for Assessment:

Is there a stable advocacy coalition in place and does it stay in power?

What coalitions can be identified within the policy subsystem?

What are their beliefs?

What are their resources?

What is the balance between “stable parameters and external events”?

Can external shocks, hurting stalemate or accumulation of evidence be observed?

10.8. Conclusion

The plethora of policy theories and conditions for policy change present a complex matrix with many overlaps and potential alternative typologies. Some simplification is needed to arrive at a useful set of five groups of tests to apply to the narrative and to the quantitative data available which can now be applied to the eight policy decision processes identified for examination in the next chapter.

Chapter 11.

Identifying policy decision processes in British forestry policy

11.1. Identification of policy decision processes

This chapter introduces the next eight chapters which deal with recognisable policy decision processes in twentieth-century forestry policy. Such processes meet three tests:

Clear policy questions recognisably stated.

A period of policy consideration.

A clearly expressed policy outcome.

This systematic approach is used since identifying where no actual change resulted is important in testing the hypothesis that change could have taken place but did not.

11.2. Phases of twentieth-century British afforestation policy

The eight afforestation policy decision processes are set in more general phases of forestry history since 1900. Traditional nineteenth century estate forestry continued until the First World War. Afforestation programmes were proposed but not enacted. Following a German submarine blockade, which interrupted timber imports, a state afforestation programme was devised. This was relatively consistently pursued until the late 1980s. It can be subdivided into two periods according to its stated purpose. The first, **strategic**, objective was to create a three-year supply of timber in a standing reserve. This was reconfirmed, and afforestation targets increased, in 1945. From explicit rejection of the strategic objective in 1958, a socio-economic emphasis was associated with the continuation of the afforestation programme. Post-productive forestry followed a turning point in the 1980s, leading to a policy of “balance” between different objectives. It resulted in a dramatic change in scale and type of afforestation.

11.2.1. Segmentation of afforestation phases

The proposed policy decision processes can be put into the context of actual afforestation action. Further points of change can be identified regardless of whether there were accompanying policy statements. Figure 11-1 sets out the context graphically, and Table 11-1 provides a statistical summary.

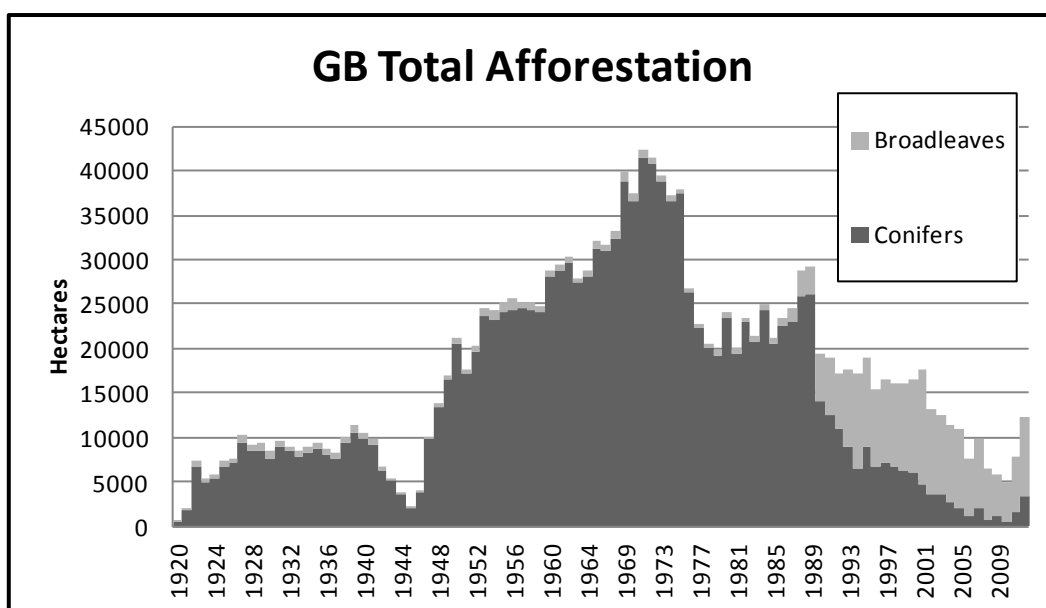


Figure 11-1 State afforestation by Forestry Commission or grant aid to private owners²⁹

Afforestation data before 1919 is not available. The Committee on British Forestry (1902) suggested that deforestation was taking place.

Table 11-1 Breakdown of coniferous afforestation statistics by period

Period	Years	Average Annual afforestation (Thousands of hectares)	Total afforestation in Period (Thousands of hectares)
Establishment of Forestry Commission	1920-21	1.1	2.2
Interwar Progress	1922-41	8.1	161.5
Wartime	1942-46	4.2	21.0
Productivism	1947-75	27.6	772.1
Stable Progress	1976-89	22.6	316.9
"Balance"	1990-99	8.9	88.6
Total	1920-99	17.2	1,362.4

²⁹ Produced from Forestry Commission data in Excel file NPRS1920, obtained from Forestry Commission, Edinburgh.

Table 11-2 Identification of afforestation policy decision processes

Event	Policy Question	Consideration	Statement	Delivery Change
Pre First World War	Preventing coastal erosion, favouring employment and rural development.	Royal Commission.	Report and government response.	Very modest.
First World War	Timber supply under blockade.	Acland Committee.	Forestry Act 1919.	Afforestation project initiated.
Geddes Axe	Cut public expenditure	Geddes Committee	Government response to report.	No change.
Lakeland Afforestation	Preservation of landscape.	Joint committee of Forestry Commission and NGO.	"Agreement".	Minor change in Lakes only.
Post-War Forest Policy	Timber supply under blockade.	Forestry Commission	1945 Forestry Act.	No change.
Use of marginal land	Role of forestry in uplands.	Zuckerman committee.	Government response.	No change.
Cost-benefit of Forestry	Government review of economics.	Treasury managed study.	Government response.	No change.
Changes to Forestry Taxation 1988.	Media criticism.	Internal government Consideration.	No change in forestry policy Announced.	Not intended?

Eight policy decision processes could be identified. These are now considered in turn.

Chapter 12.

Policy decision process - the decades before The Great War

12.1. Introduction

On the face of it, the establishment of the Forestry Commission and the launching of the Great Spruce Project in 1919 was a rational reaction to the crisis of the First World War submarine blockade.

The Forestry Commission's origins are in the First World War, and difficulties Britain had meeting wartime demands on timber. (Forestry Commission, 2013a)

This chapter examines the prelude to the First World War, focussing particularly on the role of policy entrepreneurs who sought a policy change.

A number of official investigations took place, the Royal Commission on Coast Erosion and Afforestation recommended major afforestation. However, the Government remained resistant to policy change. Reviewing the policy lenses, the key component missing appears to be an “external subsystem event”, such an event waited in the wings, predicted by few.

12.2. The nature of “Liberal England”

It is important to dispel the idea (in hindsight) of a calm and halcyon Britain before the First World War. The actors were operating in a time of social, political and constitutional ferment which is well described by Dangerfield in *The Strange Death of Liberal England* (1935). A reforming Liberal government was confronted by: labour disputes; unemployment; rural poverty; suffragette unrest; and conflict for and against home rule in Ireland. Nail (2008), writing on England alone, relates forestry to social change, agricultural depression and industrialisation reduced the power of large landowners. Laissez-faire ideology was supreme, and according to Foot (2010, p.34), discouraged intervention by the state in favour of long-term projects. This despite the influence of thinkers like Hume and Bentham who Price (1993, p.116) suggests would have seen state intervention for the sake of future benefits as “among the chief duties of governments”.

12.3. Sequence of forestry policy processes

There were a number of other formal forestry policy processes from the late nineteenth century up to the First World War.

There was a substantial investigation into forestry in 1885-7 by a House of Commons Select Committee. Focussing on forestry education it explored the potential for a more “scientific” approach

to “more remunerative” forestry (Select Committee on Forestry, 1886). No major conclusions were reached on the desirability of afforestation.

In 1902 a Departmental Committee of the Board of Agriculture explored the “present position and future prospects” of British forestry (Committee on British Forestry, 1902). The Committee included Sir William Schlich.³⁰ It recommended the establishment of “at least two large State forests” as demonstrations. In 1905 “The Speaker”, under the title “*A Forestry Department*” suggested that action was required on the grounds that would supply “threatens to become exhausted”, and that forestry provided valuable rural employment.

The *Royal Commission on Coast Erosion and Afforestation (1909c)* recommended a very large afforestation programme and is the key policy decision process which this chapter deals with.

Some actors were keen to develop more refined practical proposals, and in 1912 another Departmental Committee presented a report to Parliament on forestry in Scotland (Stirling-Maxwell, 1912). This focused upon the establishment of a “Demonstration Forest” and included a note on “Forest Education in Germany”. The proposed demonstration forest, with a Forest Officer, a Head Forester and a Foreman for each 1,000 acres, is recognisable as the structure of a Forestry Commission “Forest” of a few decades later. The Committee also advised generally on the development of silviculture, advocating a “Chief Advising Forest-officer”. Two identifiable policy entrepreneurs were involved: the Committee was chaired by John Stirling Maxwell and included Lord Lovat, both future Forestry Commissioners.

These debates were initiated by active policy entrepreneurs and experts influenced by productivist, modernist mindsets. Their efforts did not overcome policy inertia. But they laid out the scope of afforestation, and a model of organisation which would be adopted in the form of the Forestry Commission. The evidence suggests the importance of policy entrepreneurs and in this case, their failure to change policy.

12.4. Policy decision process – a Royal Commission

The most significant policy decision process was the Royal Commission established in 1906 to consider coastal erosion. In 1908, it received the additional task of considering the benefits of an “experiment in afforestation as a means of increasing employment during periods of depression in the labour-market”. The committee examined a considerable number of witnesses. The Royal Commission concluded that afforestation was “practical and desirable” and that it should be on an “economic basis” (Royal Commission on Coast Erosion and Afforestation, 1909c). Two programmes were set out; 9 million acres (3.6 million hectares), or 6 million acres (2.4 million hectares), with planting at two rates, over 80 years and over 60 years. The higher option required planting of 60 thousand hectares per year for sixty years, (including a total of 200 thousand hectares in Ireland).

³⁰ Sir William Schlich, German-educated former Inspector General of Forests in India.

The conclusions on the means of implementation presaged those of the Acland Committee during the First World War. There was to be a strong role for the state with the appointment of commissioners, with the power to acquire land, including compulsorily.

12.4.1. Employment arguments

The Commission concluded that considerable employment (its main remit) could result from an afforestation programme. Particular emphasis was placed upon the value of temporary employment for agricultural workers in the winter, linked to the stemming of rural depopulation.

It has been given in evidence that, as at present utilised, such land provides employment for one man on 1,000 to 2,000 acres. Even taking the lower figure, which is that adopted by the Forestry Committee of 1902, it means that land under forests can maintain ten times the population that finds a living under pastoral farming.

While early afforestation may have been more labour-intensive than other rural activities, it was followed by a relative employment hiatus until felling. Hindsight now suggests that employment benefits were overestimated. Johnson and Price (1987) concluded that there were likely to be few relative employment benefits at later stages.

12.4.2. Foresight and timber prices

The Commission reported an increase in the price of imported timber over the previous twenty years. It expected significant price increases throughout the twentieth century, based upon likelihood of worldwide “Timber Famine” and insufficient substitution by other materials. Costs and revenue flows were examined, and provide recognisable attempts at what would later be called evidence-based policy-making.

The balance of forest management objectives can be assessed by using computer-aided text analysis (described in Chapter 7). The Royal Commission report is dominated by employment-related vocabulary compared with the other objectives.

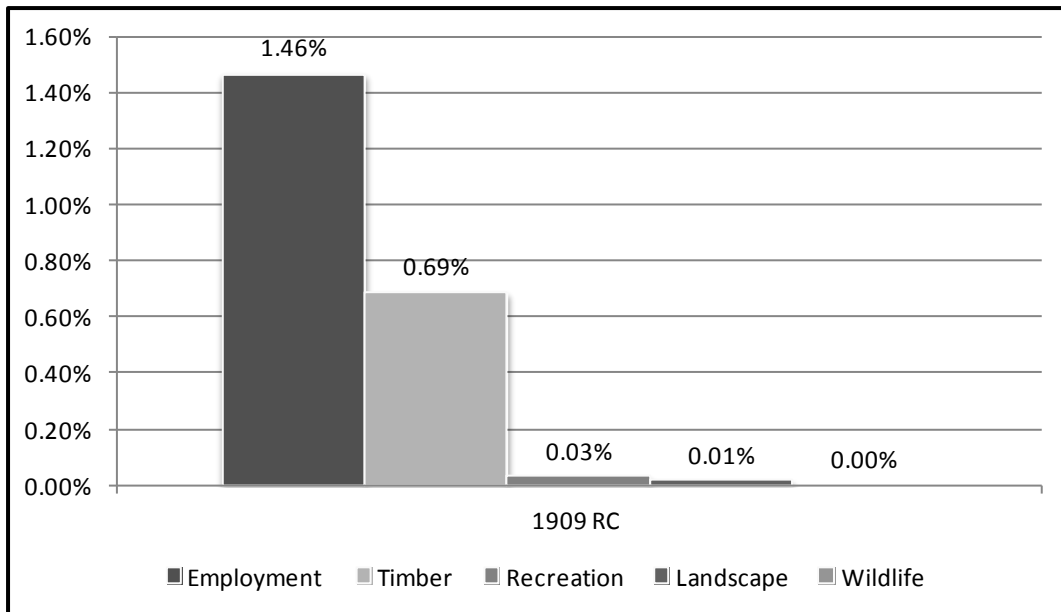


Figure 12-1 Frequency of vocabulary related to “objectives” in 1909 Royal Commission Report³¹

12.4.3. Policy decision – policy stability

The government included modest forestry powers in the Development and Road Improvement Funds Act 1909 (Royal Commission on Coast Erosion and Afforestation, 1909c), which set up a “Development Commission.” This could recommend treasury funding of various bodies for the purpose of:

(b) Forestry

(Including (1) the conducting of inquiries, experiments, and research for-the purpose of promoting forestry and the teaching of “methods of afforestation;

(2) the purchase and planting of land found after inquiry to be suitable for afforestation).

The government’s lack of enthusiasm for the scale of action proposed was shared by a number of MPs, but the advocates also had a voice. Many of the individual political actors appear to have been policy entrepreneurs.

12.5. Rational policy analysis

Individuals: forestry policy entrepreneurs and issue experts

Published polemical works show individual agents arguing for policy change and large-scale state afforestation, they appear to have succeeded in influencing the policy process to the extent that a major scheme was proposed in an official report.

³¹ No statistical test has been applied to this single set of categories.

While it is possible that the production of a slim polemical book was a more normal medium of argument than later in the twentieth century, the number of such books is striking. A Worldcat³² search using the term “British forestry” yields a number of hits; some works are substantial, others pamphlets. When official reports, conference proceedings and Forestry Commission publications are excluded, then of sixteen items containing this term, seven were published in the twenty years before the end of the First World War. Other books specifically on forestry in the United Kingdom include fifteen books by thirteen authors.³³ Seven of these are not referred to by recent researchers (Foot, 2010; Nail, 2008; Oosthoek, 2013; Tsouvalis, 2001). These works are digitally available and have been analysed using NVivo.

An enumeration of all those listed as members of, or as giving evidence to, these committees shows fourteen individuals involved in two or more processes, together with those who published significant works. At the risk of getting lost in the policy theory labyrinth, the interactions between them are reviewed under policy network analysis and their discourses and mindsets considered as part of critical policy analysis; they also seem to have formed a “advocacy coalition”. They represent a *dramatis personae* for the period.

Schlich

Sir William Schlich (1840-1925), was a German forester who had made a career in British India, ultimately as Inspector General of Forests. He arrived in Britain in 1885 to set up a forestry department at the Royal Indian Engineering College at Coopers Hill (Troup, 2004).

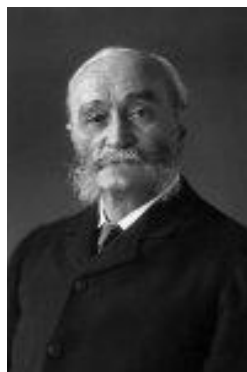


Figure 12-2 Sir William Schlich (Forestry Commission Picture Library)

Schlich lobbied for afforestation in Britain and Ireland, starting with the publication of a pamphlet in 1886 and culminating in a book: *Forestry in the United Kingdom* (1904). This book exhibits an explicit policy influencing agenda: the titles of the first two chapters are:

³² Online library database: <http://www.worldcat.org/>

³³ (Boyd, 1918; Forbes, 1910; Forbes and Fisher, 1904; Grenfell, 1912; Lovat and Stirling, 1911; Maw, 1909; Nisbet, 1900; Schlich, 1904; Simpson, 1900; Somerville, 1917; Stebbing, 1916; Stebbing, 1919; Summerbell, 1908; Webster, 1919).

1. *The importance of the forestry problem to the nation.*

2. *The measures which should be taken in this country to insure the benefits offered by forestry.*

Making clear that he “took up the subject of British forestry, and it has occupied me ever since I returned from India in 1885.” Schlich complained of the lack of heed to his arguments and attacked unscientific forestry:

Economic forestry, to be successful, must be conducted on true silvicultural principles, and the yield must be so regulated, that, approximately, the same quantity of material may be brought into the market every year ; in other words, the principle of a sustained and well-regulated yield must be recognized. (Schlich and Fisher, 1895, p.vii)

Schlich (1904, p.4), listed potential benefits of forestry, including “they [trees] increase the artistic beauty of a country”. In another work he set out six criteria (Schlich, 1906, p.48) for increasing forest area:

Security of communications with other countries.

Potential substitution for forest produce.

Land value and returns.

Population density.

Waste land.

Capital available.

Simpson

Simpson (1900, p.5) described himself as a “consulting forester”, and makes quite clear his advocacy of a “new system ... based upon rational and intelligible principles.” He cites Brown (1847) as an explicit representative of “old methods” and sought to “dispose of them before recommending new ones”. Simpson’s criticism of Brown’s unscientific approach (and ignorance of German silviculture) is scathing: “one sees evidence that he viewed forestry not so much from an industrial and financial as from an artificial cultural point of view” (Simpson, 1900, p.37). Further sections criticise Brown’s vague approach to both thinning practice and to the concept of rotations. Simpson also criticises the excessive use of mixtures and over wide initial spacing of hardwoods.

Some of these issues will be interestingly familiar to an early twenty-first century forester in Britain considering “continuous cover” mixed species forestry and wide planting of broadleaves for non-timber purposes. Indeed, as Tsouvalis points out, Simpson’s (1900, p.4) comment that “old methods have got a grip of the rank and file of foresters and their employers and have been followed too unquestioningly and too long” might be said of “practitioners of scientific forestry” more than a century later. The advocates of European “close to nature silviculture” returning from field trips to Germany or Slovenia do seem to have something of the air of Simpson’s rather different feeling of “mission” almost exactly a century earlier. It is interesting that their approach is in effect the opposite, since they are advocating a partial rejection of uniform scientific silviculture based on new continental experience.

Simpson appears to be a policy entrepreneur with a new mindset in British forestry discourse. Others sought to improve and foster the scientific approach, and in 1904, the Worshipful Company of Carpenters published two prize essays on afforestation (Forbes and Fisher, 1904).

Fisher

Fisher worked with Schlich at the Coopers Hill College, training forest officers for India. Fisher's essay drew attention to increased demand for softwoods and rising prices.

...the British Isles constitute the best timber market in the world, whilst the sources of our supply are being curtailed, and it is certain that our national wealth would be greatly increased were our woodlands extended and well managed...

This represents (in addition to employment), a form of the "strategic argument".

Forbes

The second essay was by Forbes, Chief Forestry Inspector to the Department of Agriculture for Ireland. His paper concluded with policy comments:

No impartial reviewer of the facts can deny that a very large area of land exists in Great Britain which may be profitably afforested.

However, Forbes sets potential British timber production in perspective by noting that Scandinavian countries could increase production on a scale which would dwarf British needs (Lindbladh and Bradshaw, 1998).

Extensive planting operations in Great Britain, therefore, should be undertaken more with a view to the better and more economical utilisation of semi-waste land, the increase of its capital value, and the general development of rural industries than with any definite ideas of rendering this country independent of foreign supplies of timber. (Forbes and Fisher, 1904, p.61)

The key concepts in the quote appear to be "waste" and "rural development". Forbes undermined hope for increased capital value:

A glance at hundreds of existing plantations throughout England will convince the experienced forester that they have failed to return the money originally invested in them. They may have produced trees, and even timber, but their rate of growth has been so slow, or disease has made [so] much havoc among them, that they cannot be considered examples of profitable forestry by any means. (Forbes, 1904, p.41)

It is worth noting that Forbes (1904, p.109) was aware of the potential value of Sitka spruce (Menzies spruce at the time):

Its rate of growth on damp cool soils is extremely rapid ... although it probably makes its best growth on damp but porous soils of a peaty nature.

Forbes (1904, p.50) calculated, referring to Schlich (1904), that:

...it is not difficult to obtain 2 per cent, from money invested in forestry, although this return may be deferred for a length of time which takes it out of the reach of the original investor.

There is something extraordinary in the similarity of these numbers to the Treasury Cost-benefit Analysis (HM Treasury, 1972), sixty years later. With hindsight we know that the Treasury was, in fact, to become Forbes's "original investor", from 1920 onwards. By 1986 the National Audit Office thought the original investor should be disappointed:

In overall terms, some £2,058 million at 1984-85 prices has been spent on the forestry estate since 1946, but the current value on an expectation basis is £1,452 million ... (National Audit Office, 1986)

In fact Forbes proposed that government loans at below market rate would be justified on the basis that it would allow landowners to enhance the value of their land and provide employment and support industry. Forbes subscribes to the possibility of a return on investment combined with employment and rural development benefits. In a later book, Forbes reported that:

The State is beginning to recognise the absolute necessity for action being taken on afforestation. (Forbes, 1910, p.v)

Exploring the "adequate" forest area of a country, Forbes sees no sign of a world timber famine:

Up to the present, a world's timber famine has not occurred, although it has been predicted at one time or another for the last two centuries. (Forbes, 1910, p.10)

With hindsight we can now say *three* centuries. While noting the unusually import-dependent nature of Britain, Forbes (1910, p.33) suggested that the forest production of Europe as a whole was "greatly in excess of its actual requirements" (this is probably true in 2014 as well). The lower cost of timber imported by sea in comparison with that produced in Britain is illustrated by anecdote:

A leading Scottish timber merchant recently stated that timber could be delivered in Aberdeen from St. Petersburg, 400 miles distant, at the same cost as from Deeside, 40 miles distant...It is more than probable, therefore, that the supply of small coniferous timber from easily accessible countries is sufficient to meet present requirements in these Islands. (Forbes, 1910, p.33)

This example is interesting in hindsight. While it is a general rule that international sea trade in timber has satisfied Britain for centuries, submarines are not the only geopolitical interference. For much of Hobsbawm's short twentieth century, St Petersburg would be Leningrad and much of Britain's former Baltic timber hinterland would be inaccessible. Forbes (1910, p.51) quotes an unknown contributor to the *Timber Trades Journal* who was scathing about the financial case made by the Royal Commission on Coast Erosion, describing them as "in the highest degree unsound":

If your readers compare the proposal of the Royal Commission financially with current values in any European wood-exporting country they cannot but see its absurdity as far as coniferous wood is concerned.

Despite this trenchant criticism and scepticism about financial returns, Forbes (1910, p.228) concluded:

But after all favourable factors are taken into account, it is evident that economic forestry at present prices is not a particularly attractive speculation. Regarded from a national point of view, however, mere monetary gains sink largely into the background ... the gain in increased employment must be looked upon as a national asset of the greatest importance.

This appears to indicate some development in Forbes's view between 1906 and 1910, a greater pessimism about the rate of return but continued emphasis upon employment. The policy entrepreneurs were not united upon likely financial returns.

Maw

Maw (1909) represents the clearest expert sceptic. He was the Professor of Forestry at the Royal Agricultural College, Cirencester, perhaps the target of Simpson's (1900, p.5) disdain:

...while as late as the present year, 1898, we have a Professor of Forestry in one of our most noted agricultural colleges publishing a work on forestry in which principles are laid down and practices advocated ... now regarded as wrong by all competent authorities.

Maw (1909, p.1) gave reasons for supporting afforestation:

- (1) The Effects of Woodland Areas upon Local Climatic Conditions, and upon the Locality.*
- (2) The Effects upon the Labour Market.*
- (3) The Financial Returns which Afforestation is likely to Yield.*

While Maw (1909, p.vi) made clear a commitment to "scientific" approaches he also suggested that:

As regards Forestry education, I should like to express my opinion that British foresters can only learn their Forestry in this country.

Simpson's writing suggests that he would have been infuriated by such a view. More balanced than some of the other policy entrepreneurs, Maw lists arguments for the "inadvisability of general afforestation":

European forest area capable of supplying more than Europe's needs especially if prices rose.

Potential for considerable increase in Canadian and Siberian supply.

Remote locations of British "waste lands" compared with cheaper and easy sea transport from Scandinavia, Canada and the Baltic.

Maw (1909, p.18) also comments upon poor financial prospects, and upon uncertainty:

...in view of the great uncertainty which prevails, and of the long period which must elapse before any returns can be anticipated, it would seem impossible to deny that afforestation, dismantled of its sentimental clothing, is other than an hideous gamble in futures, for, apart from fluctuations in the prices of timber, forests are liable to destruction by hidden dangers, such as insects, fungi, and fire, the number of which is legion.

Maw (1909, p.19) is similarly sceptical about public subsidy, and reveals a degree of debate within the forestry community:

But why, it may be asked, should the credit of the community be mortgaged in order to foster a private industry of a very risky nature?

If such a scheme were set on foot and largely made use of, it would, in all likelihood, result in the cry of the socialists, for the State ownership of Land, being at last realised, in respect of a considerable area.

...it is earnestly to be hoped that no schemes, involving the deferred payment of all interest, be ever sanctioned. It will doubtless be urged that such are justifiable, inasmuch as the profits will be realised in the future. But supposing that, as is highly probable in so many cases, a direct

loss were sustained, then a future generation must, nolens volens, inherit an undertaking in respect of which a heavy debt has accrued, and for which they are in no way responsible. What a legacy for one generation to leave another!

The work of the National Audit Office (Pieda, 1986), provides evidence that in terms of state investment, such a legacy was left to other generations. An *Economist* editorial supported the state afforestation proposals, on grounds of investment and employment provision (*Economist*, 1909). A correspondent disagreed, and after outlining his knowledge of Baltic timber supplies, concluded:

...that the whole enterprise of afforestation, in England is as subject as any other enterprise to economic factors, regulated by the law of supply and demand, and that one cannot but regard it as anything else than a huge commercial speculation, and feel anxiety if the taxpayers' money should be used for such an object. (Philips Price, 1909).

Morgan Philips Price, was a landowner and Labour politician involved in a family timber firm. He was subsequently a Forestry Commissioner. *The Economist* responded that there was land which could be profitably planted and that timber prices were likely to rise. The majority opinion in the media at the time appears to have been supportive of government afforestation. Returning to Maw's (1909, p.19) dissenting view on value for money, he proposes another overseas solution:

...if it be the duty of the Government to take steps to anticipate a possible timber famine, it would be far preferable for the Government to acquire extensive timber limits in Canada, in close proximity to the coast, instead of fostering and favouring schemes of afforestation in Great Britain. ... Would not a scheme such as this be infinitely more profitable than sinking large sums of money in works of afforestation at home?

German U-Boats in the Atlantic were of course to make this an un-serviceable argument within five years.

Having reviewed the writings of five afforestation advocates in detail, their relative uniformity of argument suggests not merely the presence of policy entrepreneurs but of a community and collective behaviour, with some similarities with that observed by Meijerink and Huitema (2010) in water policy change. Their linkages with each other are discussed below. The existence of other kinds of policy entrepreneurs must now be considered.

12.5.1. Individuals: environmental policy entrepreneurs – the call for nature reserves

There was another, small, group at this time advocating the values of nature. N. C. Rothschild had initiated the formation of the Society for the Promotion of Nature Reserves, through a letter to *The Times* (1912). Later, Lankester,³⁴ an influential director of natural history at the British Museum, set out some “arcadian” views only embodied in policy after the Second World War, and only mainstream at the end of the century:

³⁴ Lankester, Sir (Edwin) Ray (1847–1929). He was a keen supporter of the scientific method and something of a “free-thinker”. He attended the funeral of Karl Marx but was not considered a “socialist”. He wrote substantial scientific works as well as popularising biology by means of articles in the *Daily Telegraph*.

The land is enclosed, drained, manured; food plants produced by the agriculturist replace the native plants; forests are cut down and converted into parks and pheasant-runs; foreign trees are substituted for those native to the soil... (Lankester, 1915, p.15-16)

He went on to set out views similar to those of commentators in the early 1980s.

The wilderness is fast disappearing, and it is by this name that we must distinguish from the mere country, as much besmirched and devastated by man as are the sites of his towns and cities, the regions where untouched nature still survives and is free from the depredations of humanity. Many beautiful and rare plants which once inhabited our countryside have perished; many larger animals (such as wolf, beaver, red-deer, marten-cats, and wild-cats) have disappeared, as well as many insects, great and small, such as the swallow-tailed butterfly and the larger copper butterfly, and many splendid birds. Here and there in these islands are to be found bits of wilderness where some of the ancient life — now so rapidly being destroyed — still flourishes. There are some coast-side marshes, there are East Anglian fens, some open heath-land, and some bits of forest which are yet unspoilt, unravaged by blighting, reckless humanity.

Some of Lankester's mourning of "wilderness" chimes with more recent twenty-first century complaints (Monbiot, 2013). Lankester (1915, p.19) also (paradoxically perhaps) bemoaned the lack of a "forest service" which he believed might provide protection for wild places:

...we shall not only enjoy them ourselves but be blessed by future generations of men for having saved something of Britain's ancient nature, ... In Germany and in Switzerland a good deal has been done in this way. Owing to the existence of forestry and a State Forest Department in Germany — which has no representative in this country — there is machinery for selecting and guarding such reserves.

It would be a long time before these values were to be incorporated into British forestry policy. The forest services he referred to had already started to reject the single purpose monocultural approach of the nineteenth century, even as it was being enthusiastically proposed by some of the British scientific forestry policy entrepreneurs (Scott, 1999). There was of course still a tension between the conservation of forest resources espoused by Pinchot in the USA, and the related but eventually distinct wilderness ideas of John Muir. The strongest idea in Britain was of materialistic scientific forestry. Lankester and Rothschild appear to have been isolated voices.

A socialist view - Fabian Society

The Fabian Society's Tract 161, *Afforestation and Unemployment* (Grenfell, 1912), was written by a former Indian colonial forest officer, it refers to the UK's low forest area, it notes the perhaps surprising support from *The Field*, which it describes as the "organ of country gentlemen". The commercial grounds are "sound but unattractive", with unemployment highlighted as the most powerful reason for state afforestation.

Surveyors Institution

During the First World War, the Surveyors Institution set up a committee to investigate "Unemployment after the War" (Surveyors Institution, 1916). It set out to identify suitable conditions for the success of agriculture and forestry, seeing provision of employment as a by-product of this. The committee concluded that there should be at least 400,000 hectares (1 million acres) available for planting. It suggested that the Royal Commission on Coast Erosion and Afforestation had produced a

rather high estimate (Royal Commission on Coast Erosion and Afforestation, 1909a). The final recommendation was that “the Government should without delay prepare schemes for the employment of surplus labour on planting”.

Evidence based policy making

The Royal Commission policy decision process involved many characteristics to be expected of evidence based policy-making. There was a clear “foresight” exercise with regard to costs, prices and timber growth rates. The question of a predicted “timber famine” was discussed and assessed, and the likelihood of increased prices considered.

12.6. “Timber famine”

This research seeks to identify the response of policy-makers to time and foresight. Timber famine has been predicted on and off over the period dealt with in this research. The exact phrase appears 13 times in *Hansard* between 1900 and 1951, and on 52 occasions in the pages of *The Times* between 1900 and 1974 (with one outlier in a Timber Growers’ press release in 1975). The term occurs on eighteen occasions in the writings of the individual policy entrepreneurs advocating afforestation before the First World War. This frequency is too small to draw statistically significant conclusions and the three comments by Maw (1909) are in fact dismissive of the risk, and those of Forbes nuanced. The term was used ten times in the minutes of evidence for the 1909 Royal Commission. The evidence of a timber merchant, Samuel Margerison, is typical of an alarmist position:

I have not the slightest doubt, in view of the coming timber famine, which I believe is absolutely certain, prices will rise.

Forbes (1910, p.49) takes a more balanced position:

...while we do not believe a timber famine is so imminent as some alarmists would have us believe, we consider the position such as to justify the intervention of the government.

Maw (1909, p.17) makes three references to timber famine, his discussion contrasts with that of Margerison in being somewhat dismissive of the problem:

Even if a timber famine were certain, it would often be preferable, from a financial point of view, to re-afforest easily accessible areas in foreign countries than to afforest waste land at home.

In six cases of text search, the phrase “timber famine” and the word “price” occurred within 20 words of each other in the chosen writings of the policy entrepreneurs (Schlich, 1904; Stebbing, 1916; Summerbell, 1908; Webster, 1919).

The media shows some evidence of wider concern about timber supplies, although there is a certain circularity: the policy entrepreneurs were active in writing to the newspapers, lecturing and publishing. They were seeking to be opinion formers.

Timber famine only appears once in parliamentary proceedings in this period (becoming more frequent in the 1920s to 1950s), although the sentiment is expressed for instance in the phrase “dearth” of timber (HL Deb 15 March 1904 vol 131 c1116). This represents a good, if relatively trivial, example of the need for care in comparative text analysis. The word “dearth” appears 125 times in the 1900s and 147 times in the 1990s. The use of its near synonym, “lack” increased from 1,722 to 20,325. This is in line with the increase in total volume of debate. The use of “dearth” clearly declined in popularity.

Timber prices and afforestation costs

The Royal Commission report suggested a price rise of fifty percent in fifty or sixty years. However, as a foresight exercise the Royal Commission was clear that:

In every detail of the forecast, Your Commissioners have aimed at underestimating rather than over-estimating the receipts, while the opposite course has been taken in dealing with the various items of expenditure.

This included using then current prices, rather than assuming the higher prices they had been convinced were to be expected.

At least twelve expert witnesses were interviewed over as many days spent collecting afforestation evidence. Factual material from Germany was cited to support the possibility of commercial success from scientific forestry in Britain, with rates of return of 3-3.5% (using evidence from Schlich). This was based upon what, with hindsight were extremely optimistic price assumptions. Timber prices have in fact fallen very significantly in real terms over the last century. It is not clear that that could have been predicted by the Royal Commission. Their attempt at foresight can be compared with current costs and revenues.

Table 12-1 Financial assumptions - Royal Commission on Coastal Erosion and Afforestation

Operation	Royal Commission 1909 £(2012 ³⁵)/ha	Current Estimates 2013 FC (Standing Sales prices ³⁶ and Management Tables ³⁷)
Cost of establishment	£1,600	£2,000 ³⁸
Clearfelling at yr 40	£15,500	£3,100
Clearfelling at yr 80	£44,300	£5,100 ³⁹

Schlich had published figures five years earlier (1904), which allow a more forensic breakdown of the assumptions. He made international comparisons of costs and prices, most particularly in the state forest service of Saxony. The cost in (£s 2012) of establishing a hectare of spruce is placed at about

³⁵ £1(1909)=£102.96(2012), Bank of England calculator.

³⁶ (Forestry Commission, 2013b)

³⁷ Assumed Yield Class 12 Sitka spruce. (Hamilton et al., 1971)

³⁸ Based on Standard Cost Model used in: (Scottish Government, 2012)

³⁹ This may be an underestimate. A price size curve has not been applied; 90 year old timber will be unusually large, by usual modern standards.

The Royal Commission (1909a, p.38) set out a broader case for the programme proposed. This is worth examining since it represents an attempt at financial foresight of a sort considered in 1971 and again in 1986. The key point is that predictions of future prices over long periods and appropriate interest (or effectively discount rates) were attempted over a century ago. While hindsight makes clear that these predictions were not realised, it is difficult to identify any alternative evidence which could have been considered by the actors at the time.

EXAMPLE 1

[illegible]

Based on their forecasting, the Royal Commission exhibited considerable confidence about the economic viability of afforestation, and its efficacy in supplying employment. Hindsight tells us that while the costs have escalated modestly in real terms, the prices for timber have fallen to perhaps ten or twenty percent of those expected a century ago.

While there was economic and social uncertainty in the period, no clear external shocks can be identified which might have provided conditions for policy change.

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12.6.2. Political parties

MPs on all sides were active in pressing for afforestation action, and had been since the late nineteenth century. Giessen lists “political parties” as potential agents of policy change, and Krott (2005, p.111) sees political parties as representing interests. It is very hard to relate the four political parties of the time directly to the issue.

William Abraham, an Irish Parliamentary Party (IPP) MP introduced a Reafforesting (Ireland) Bill in 1901. The IPP held most Irish seats, and their MPs were responsible for 110 references to afforestation in the House of Commons during the first decade of the twentieth century. This representation of rural Irish interests seems to fit Krott’s “interests” model.

Party manifestos were brief, often a one page address from the party leader. There is no mention of forestry in the election addresses of the governing Liberal Party or the Conservative or Labour parties (*Political News*, 2013). The Liberal party had radical attitudes to land taxation in the general elections of 1910. The rural development aspirations of Lloyd George were included in the “People’s Budget” of 1909. The landowning classes were uncertain, wavering between accommodation and resistance (Offer, 1981, p.360).

Parliamentary responses to the policy decision process

Hansard reveals complaints from MPs frustrated at slow consideration of the Royal Commission report. The government did not take a clear line, generally responding that any steps to be taken fell “within the scope of the Development Commission, and will no doubt, be considered by them in due course” (HC Deb 12 July 1910 vol 19 c198). There was some opposition to the scale of the afforestation proposed:

...and this question of afforestation, I am glad to think, is not being unduly hurried forward by the Treasury. A few months ago, after a comparatively short inquiry, a Report on afforestation was presented by the Royal Commission, which was composed almost exclusively of experts on coast erosion. As one interested in the development of sylviculture, I think that Report was so extravagant that practical afforestation in this country has been put back at least 10 years. The Government happily has completely shelved that Report. It was largely based upon the researches of some actuary in Whitehall. (David Lindsay MP (Con.). HC Deb 06 September 1909 vol 10 c1001)

Sir Francis Channing suggested to the government that agriculture was a higher priority than afforestation, and even Munro Ferguson, a supporter of afforestation and Chair of the 1902 committee, questioned the scale of the proposals:

I think it would be folly to go in for a scheme involving millions and millions of acres at a cost probably of £10,000,000, in the present stage of sylviculture. (HC Deb 06 September 1909 vol 10 c953)

A Conservative MP was more forthright:

I believe they would obtain the money on easy terms for the purpose of indulging in all sorts of mad enterprises, foolish experiments in afforestation, and other matters. (Mr Frederick Banbury MP, HC Deb 30 September 1909 vol 11 c1496)

Arthur Balfour, Leader of the Opposition (but “speaking for himself alone”), gave a traditional class based response:

I do not much believe in afforestation. I hope it will succeed, but I cannot get rid of a certain amount of scepticism on that point. I have known too many who have tried to make a large amount of money in this way, and have failed, to be very confident that the Government are going to make a much better job of it than others have made before them. But let them try. Let us see whether it is going to produce these wonderful results.

There are those who believe that when the land has been acquired by the State it will be far more valuable in the hands of the community, that they will get all the unearned increment, and all the rest of it, which would otherwise go to the private owner, and I daresay there are those who support this proposal on a semi-Socialistic basis. I think they will very soon discover that the owner of land in this country is not the otiose vampire receiving vast revenues to which he contributes nothing... (HC Deb 30 September 1909 vol 11 c1485)

Clearly some Conservatives were unwilling to countenance state ownership and expenditure. An exchange between a Labour MP and Lloyd George, the Chancellor of the Exchequer, provides evidence of the government’s caution, bordering on inaction:

Mr. LLOYD GEORGE

It is part of the proposal of the Bill that the money should be expended with a view to giving additional employment.

Mr. KEIR HARDIE⁴¹

May I ask whether any schemes have been prepared to meet that contingency?

Mr. LLOYD GEORGE

I know that afforestation schemes have been considered, but it is very desirable that we should proceed very carefully with regard to afforestation, and I think the hon. Gentleman, on going into the matter, will fully approve of that precaution. I know that they are going into it very carefully and preparing schemes. (HC Deb 30 April 1913 vol 52 c1182)

Party politically, apart from the (small) Labour party and its support for public ownership, there was no clear political direction. Views in parliament show some division between class interests of Conservatives and more interventionist Liberals. There was a shared political wish to alleviate unemployment. The Chancellor of the Exchequer was a focus of power sceptical about large scale afforestation.

12.7. Institutions and bureaucracies

The Office of Woods⁴² had a modest land holding and started to undertake afforestation experiments, for instance the purchase of the Hafod Fawr estate in North Wales (Office of Woods, 1914). The Board of Agriculture had a role, while some afforestation policy entrepreneurs argued for a new separate central authority, other politicians could not:

⁴¹ Labour MP for Merthyr Tydfil and Aberdare, who had represented the Labour Party in giving evidence to the *Royal Commission on Coast Erosion and Afforestation*.

⁴² Office of Woods, Forests and Land Revenues.

...understand why experiments which are to be made in forestry, which I think very desirable, should not be carried out by the Board of Agriculture or by the Department of Woods and Forests, that already deal to a certain extent with this matter. (Viscount Morpeth, HC Deb 06 September 1909 vol 10 c924)

Morpeth was opposing the creation of the Development Commission with afforestation powers. This actually appears to have had the effect of kicking the issue into the long grass, to the frustration of many members of the House of Commons, who persisted in asking for reports of afforestation progress. The Development Commissioners themselves reported modest ambitions in their first report:

...no scheme of State afforestation on a large scale can be considered until investigation has shown where state forests might be economically and remuneratively provided... Development Commission (1911)

In this they were respecting the terms of the Development and Road Improvement Funds Act, which emphasised research and education,⁴³ not acquisition of land. The Commissioners also noted receipt of a memorandum from the Board of Agriculture “outlining a comprehensive scheme of forestry for England and Wales’.

The overall bureaucratic and institutional picture was thus confused. A new bureaucracy, the Development Commission, was created as part of the very modest acceptance of a need for experimental afforestation, with some confusion between its role and the existing Office of Woods and Boards of Agriculture.

12.8. Policy network analysis

12.8.1. Policy networks and subsystems

The policy entrepreneurs were well connected to the bureaucracy and the political establishment. Various reports have been analysed and the involvement of seventy individuals identified: Forty-five members of deliberating bodies, and thirty five as witnesses. Eleven were involved in more than one “process”. Nine of the participants published significant, usually polemical works. Eleven of the seventy participants were MPs and a further three were Lords. These overlapping relationships were plotted for Figure 12-4. It is clear that that Sir William Schlich and A C Forbes were at the centre of this network; involved in three and (all) four policy processes respectively, as well as publishing books.

⁴³ Including £500 a year to University College of North Wales Bangor.

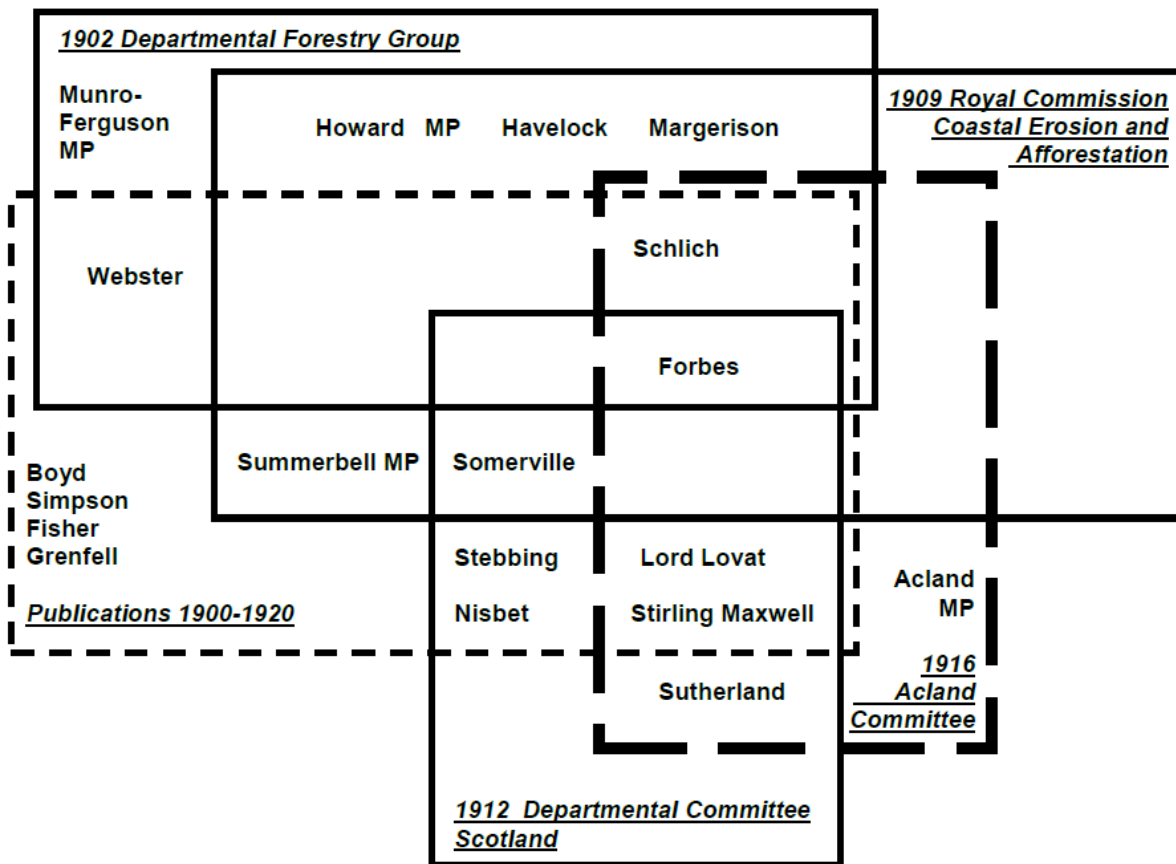


Figure 12-4 Schematic analysis of participants in policy processes, 1900-1920

Internationalisation, policy diffusion and multi-level governance

Trade in timber across the British Empire was a form of internationalism, and forestry practice in India represented a form of multi-level governance. Schlich (1904, p.1) advocated afforestation in the “mother country”, and others discussed security of supply from other British territories. While the levels of government in Britain and (particularly) Ireland were (very) divisive issues at the time, it is not clear that there was policy influence beyond the perception that extreme rural problems in Ireland might be addressed through afforestation.

International influences - Germany and the raj

Scientific forestry was invented in Germany (Scott, 1999), and reached Britain partly through colonial forestry development in India, via German scientific foresters like Schlich, who retired from service in India to become involved with forestry education in Britain Oosthoek (2001; 2012). The Coopers Hill forestry school was “inextricably linked” to India and drew on German and French experience (Tsouvalis, 2001, p.27). (Shiva, 1988, p.61) saw this as a “one dimensional, masculinist science of forestry”, Barton and Bennett (2010) set out an alternative view:

What is clear is that many Britons did love India’s nature and believed they were protecting and conserving it for future generations. Foresters held a variety of opinions and beliefs that were not reflected in their day-to-day work.

Tsouvalis points out that the “continental scientific” vs. “traditional estate” approaches to forestry were being debated until the very eve of the First World War. The merits of “continental” practices, were debated in the pages of the *Quarterly Journal of Forestry* in 1914 (Tsouvalis, 2001, p.30). Tsouvalis identifies the eventual establishment of the Forestry Commission as the “birth of a new tradition”. This it certainly was, but the proposers had a long and unfulfilling struggle until the geopolitical shock of the First World War provided a decision point which allowed, or catalysed, policy change.

12.9. Critical policy analysis

12.9.1. Ideas, narratives, frames and discourses

“Collective ideas, interpretations and meanings attached to (parts of) the world” (Arts and Buizer, 2009) may have been more important than rational calculation. This was the age of “Taylorist technocracy” (which focused on efficiency and incentives in industry). Originating in the USA, its impact on European attitudes to production and modernity was evident in the discourses of the afforestation policy entrepreneurs. Countervailing arcadian thinking, around “nature reserves”, for example Rothschild (Times, 1912), appears to have gone unnoticed by the forestry policy community. Even those advocating conservation of nature welcomed a central forest service.

The digital availability of much of the writing of the actors in the policy decision process means that their use of scientific forestry rhetoric can be quantified. This statistical evidence from text analysis is mixed.

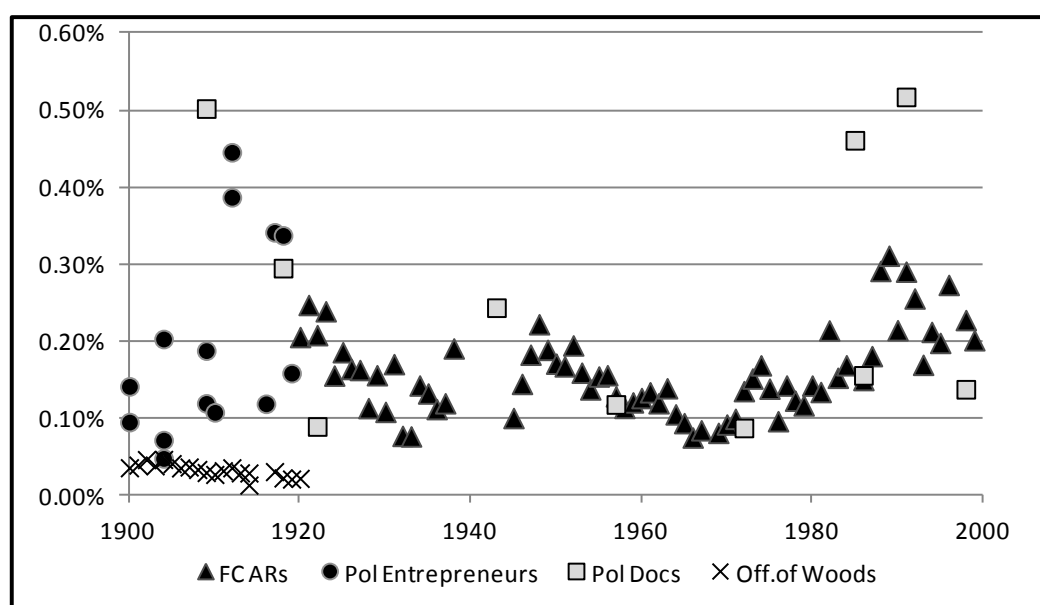


Figure 12-5 Frequency of vocabulary related to “science”⁴⁴

⁴⁴ There was no statistically significant relationship between year of annual reports and words related to science ($R^2 = 0.054$, $P=0.05$). Later Forestry Commission annual reports include “Sites of Special Scientific Interest”, a phrase now more associated with biodiversity values.

While the policy entrepreneurs up to the end of the First World War were using “scientific” discourse, some later government documents exhibit the same, including two towards the end of the century. The Forestry Commission used more scientific vocabulary, similar to that of the policy entrepreneurs while the Office of Woods did not. In that sense, this graph suggests that they got what they advocated, and secured it for decades. A selection from some of the policy entrepreneurs’ writing provides qualitative evidence, these usages would be unusual in the twenty-first century:

Schlich:

...the returns hitherto yielded by British woodlands might ... be doubled by following the rules of rational silviculture and by systematic management. (Schlich, 1904, p.39)

Forbes:

...the more advanced nationalities abroad, such as France, Switzerland, the German States, etc., were inaugurating a system of scientific forestry. (Forbes, 1910, p.12)

Simpson:

A knowledge of forestry conducted on rational principles would soon dispose of foresters of this stamp (Simpson, 1900, p.195)

Nisbet:

We waste simply by not pursuing scientific methods. I do not like to compare us with Germany. (Nisbet, 1900)

Boyd:

...no unnecessary delay in getting the planting set agoing on systematic principles. (Boyd, 1918, p.9)

Webster:

Probably there is no trade in the Kingdom to which so little science has been introduced, and there is certainly none other in which science would be more useful. (Webster, 1919, p.109)

12.9.2. State thinking

Scott (1999) opens his book *Seeing Like a State* with a description of Germanic scientific conifer forestry. A range of modernist productivist advocates had proposing a “solution” to the problems they identified, primarily employment, rural economy and the best use of “waste” land.

Employment

Text analysis indicates the significance of employment-related rhetoric on the part of many but not all of the policy entrepreneurs. As a group their writings appear to have been less dominated by employment than the 1909 Royal Commission report which they influenced.

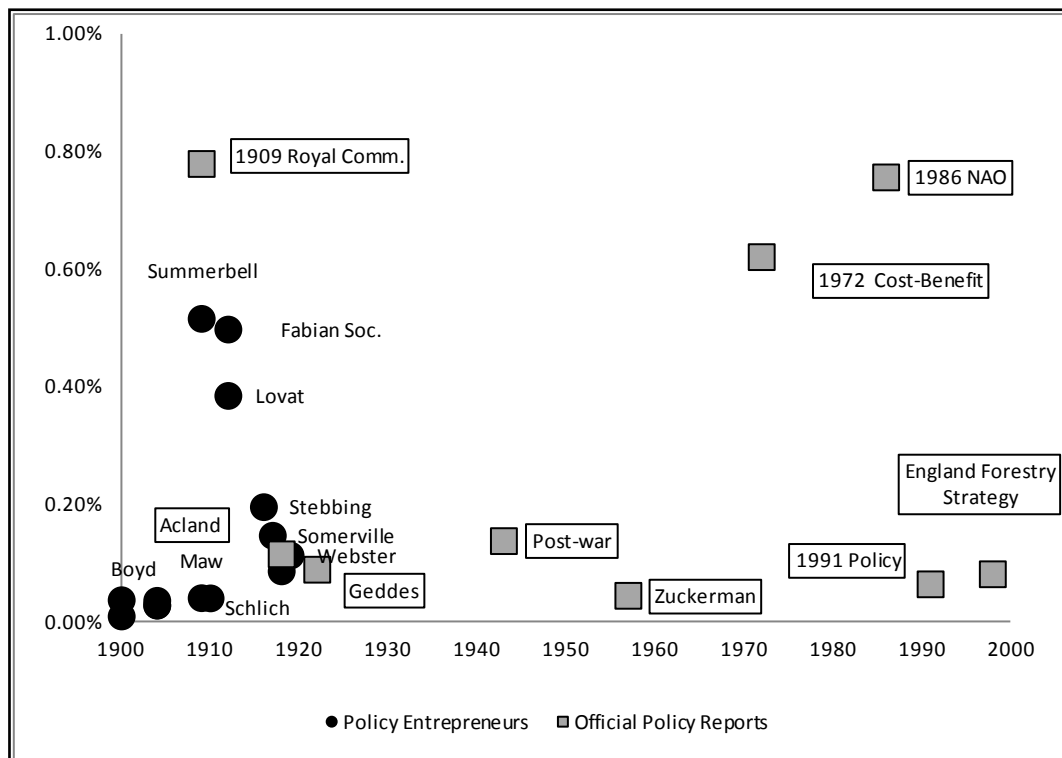


Figure 12-6 Frequency of vocabulary related to “employment” used by pre-First World War policy entrepreneurs and range of official forestry policy documents⁴⁵

Waste land and return on investment were less cited, and more contested. Little weight was given to strategic trade issues. Overall, government remained unpersuaded of the need for the major programmes proposed. Such a major programme was only to be adopted as an indirect result of the assassin’s bullet fired by Gavrilo Princip on 28th June 1914.

Knowledge and technology

The actors were unaware of submarine warfare technology. Silvicultural knowledge probably did not match the scale of afforestation proposed. This lack of technical certainty was a key argument of those who shelved the proposals and merely facilitated trial and experimentation.

Class and capital

The failure of the advocated policy change appears to owe nothing to class conflict. A coalition including landed aristocrats and the founding fathers of the Labour party may have hoped that Taylorism and technocracy could benefit both classes (Maier, 1970):

Whereas in America the commitment to technological efficiency and productivity pervaded almost the entire culture, in Europe it appeared more selectively. ... It is noteworthy that the ideological breakdown between the enthusiasts and the indifferent or hostile did not follow any simple left-to-right alignment.

Rabinbach (1992) puts it simply: “Productivism, in short, was politically promiscuous”.

⁴⁵ There is no significant trend in vocabulary related to “employment” in official reports over time ($R^2 = 0.004$).

The Royal Commission report itself noted that the support for “State afforestation” was “remarkable, coming as it may be presumed to do, from men of diverse political opinions.” The recommended powers of compulsory purchase are startling. Perhaps the landowning classes sought to maintain land values through state purchasing or subsidy. Offer (1981) suggests that Balfour, a Conservative, considered that the “state financed withdrawal of the aristocracy from Ireland was a suitable precedent for England” (and presumably Scotland). Socialists and Irish Nationalists saw the same policy in progressive ideological and class terms.

The outcome of this policy decision process is policy stability: the enthusiasm for a massive technocratic forestry project was *not* shared by the Liberal Government and its middle class constituency. Maier addresses this point:

In England, before the war, schemes of scientific management awoke scant interest among engineers and managers. ... with the premises of a liberal regime in a country where the middle-classes felt little anxiety about the social order...

The sheer scale of the proposed afforestation project unsettled some of the landowning classes. Oosthoek (2013) notes the concern of a key Scottish advocate, Lord Lovat, writing in the journal of the Royal Arboricultural Society:

...the colossal schemes advocated in the Report have roused the fears of ... individuals whose means of living were bound up in the present uses of the land indicated for wholesale afforestation.

Lovat (1911) expressed concern that such fears “might easily be converted into a determined opposition”.

From the “labour” point of view, revenue from state ownership and relief of unemployment went usefully hand in hand. The assessment of potential return was considerable: 7% was predicted based upon a revenue of £247/ha at clearfelling (£100/acre), equivalent to about £25,000⁴⁶/ha in 2012. The political and ideological position of the Independent Labour Party was made clear in a leaflet published during the preparation of the Royal Commission report (Summerbell, 1908). “*Afforestation, the Unemployed and the Land*” stated:

The land in any country is really the property of the nation which occupies it, let that be our ideal, but in the meantime it is our duty to lay hold of each and every reform that will carry us to the goal we have in view.

Summerbell was a Labour MP and member of the 1909 Royal Commission, he was clearly happy to make common cause with the landed gentry on afforestation.

⁴⁶ Bank of England Inflation Calculator:

<http://www.bankofengland.co.uk/education/Pages/inflation/calculator/index1.aspx>

12.10. Advocacy Coalitions

The Advocacy Coalition Framework provides a systematic way of combining theories and change criteria. The coalitions evidenced around the Royal Commission appear to have been united and committed to identifiable rationalistic productivist belief systems. Despite their political resources they were unable to cause change, though evidence was amassed, and the conditions for learning and technological development were put in place. As there were no significant external events capable of causing change, the outcome was a stalemate.

The Garbage Can Theory of problems, solutions, actors and decision points, provides a test. There was a problem recognised: unemployment; it did not attract enough support for the solution, afforestation. The actors were in place, the solution had been developed. However, a bigger problem was not long in coming, and it was nation-threateningly big, and provoked a decision point.

A number of “stable parameters” were in place; land-use issue and rural unemployment were issues. The constitutional function was manifested in Royal Commissions and parliamentary committees. The “external subsystem events” were stable, and thus not conducive to change even if “long term coalition opportunity structures” were present, indeed increasing, as evidenced by the intensity of action by policy entrepreneurs. There was considerable consensus, the combination of landed gentry with socialist political policy entrepreneurs overlapped normal “societal cleavages”. Applying the Advocacy Coalition Framework model in this way appears to describe a situation very close to a tipping point, with only an external subsystem event absent. The future of British forestry policy teetered at the mercy of the youths plotting in the cafes of Sarajevo.⁴⁷

12.10.1. Strategic arguments and pre-first World War policy entrepreneurs

A text search of *Hansard* and the forestry policy sources identified has not uncovered a single suggestion that there was a case for timber reserves to offset a submarine blockade beyond Schlich's (1904, p.15) general concern that “supplies from outside rest on a very unsafe basis”. Perhaps this is not surprising, military strategists themselves do not seem to have grasped the full potential of submarines (Harris and Boyne, 2001), or the likelihood of their unrestricted use for blockade. There are examples of science fiction, such as *When William Came* (Saki, 1914) which predicted a German victory due to Britain's need of supply by sea. The usefulness of submarines was debated in the newspapers in the years leading to the First World War. The activities of naval policy entrepreneurs are beyond the scope of this research. Three quotations serve to underline the uncertainty and difficulty of foresight involved:

Jules Verne: *While my book “Twenty Thousand Leagues Under the Sea” is entirely a work of imagination, my conviction is that all I said in it will come to pass. ... The next war may be*

⁴⁷ The Bosnian nationalists who were plotting the assassination of the Archduke Franz Ferdinand which triggered the First World War (Clark, 2012).

largely a contest between submarine boats.’ (Telegram from Jules Verne, September 1898, Harris and Boyne, 2001, p.138).

Admiral Von Tirpitz before the First World War: *The submarine is, at present, of no great value in war at sea. (Davies, 1995)*

Admiral Von Tirpitz: *We have learnt a great deal about submarines in this war. We thought they would not be able to remain much longer than three days away from their base... but we soon learned that the larger type of these boats can navigate around the whole of England and can remain absent as long as a fortnight. (Times, 1914)*

The key point is that a fully developed case for a major afforestation scheme was developed without any reference to the geopolitical argument which would eventually, ostensibly, cause the policy change.

Chapter 13.

Policy decision process – “The Great War” – instituting the Great Spruce Project

13.1. Introduction

The period of productivist afforestation in Britain, described in the next 6 chapters, closely coincides with Eric Hobsbawm’s “Short Twentieth Century” of 1914 to the end of the Cold War in 1991.

The adoption of the afforestation recommendations of the Forestry Sub-Committee of the Reconstruction Committee (Ministry of Reconstruction, 1917), or “Acland Committee” was the biggest forestry policy change in two hundred years. The role of the policy entrepreneurs identified in the previous chapter is explored, together with the external shock the war provided.

The scale of social and political change was enormous:

...the great edifice of nineteenth century civilization crumpled in the flames of world war (Hobsbawm, 1994).

For forestry, two aspects are germane: the advent of submarine blockade; and a clear acceptance of planned state intervention in the economy and land use. Timber imports were a significant strain on limited shipping space, and various aspects of the economy were subject to state intervention and central organisation (Hardach, 1981, p.74).

The Forestry Act 1919 has been characterised by most authors as a simple stagist rational action in response to a clear policy problem. Others have recognised the preparative thinking of the pre-war lobbyists (Nail, 2008; Oosthoek, 2013; Tsouvalis, 2001). This research adds evidence and uncovers the policy entrepreneurs’ role more comprehensively.

A large and well connected advocacy coalition spanned social and ideological boundaries and was rooted in a modernist and technocratic belief system, originating in industrial thinking and exhibiting imperialistic approaches to nature. The power of these policy entrepreneurs has been underrepresented. There is evidence that they acted as an advocacy coalition which had to wait for a shock or crisis for its position to be accepted. It may therefore be wrong to see the decision as a rational policy process rather than the victory of a mindset and world view.

This thesis presents the evidence to support the argument that the subsequent stability of the productivist afforestation project of the twentieth century founded in its origins in the period *before* the First World War and was not primarily related to security of timber supply in time of war. This explains why, once started, the project was not significantly questioned when the “strategic argument” was nullified by the advent of nuclear weapons.

13.2. War-time timber supply poses a policy question

The importance of the naval war and submarine blockade can be obscured by commemoration focussed on the war in the trenches. Some context is necessary in order to understand the mindsets and experiences of the participants:

It was as much a war of competing blockades, the surface and the submarine, as of competing armies. Behind these two blockades the economic systems of the two opposing groups of countries were engaged in a deadly struggle for existence, and at several periods of the war the pressure of starvation seemed likely to achieve an issue beyond the settlement of either the entrenched armies or the immobilized navies. (Salter, 1921, p. 1)

German Field marshal von Hindenburg is quoted by Salter (1921, p. 1):

We shall conquer if we persevere till the submarine war shall have done its work.

The Prime Minister, speaking at a crucial time in the German submarine warfare campaign, set out a good contemporary description of the situation, at a time when Acland's committee was deliberating⁴⁸ future forestry policy:

The PRIME MINISTER (Mr. Lloyd George) ... Let us take the articles of the greatest bulk which consume our tonnage. The first is timber. Last year we imported 6,400,000 tons of timber from abroad. That does not include what was taken direct to France. That means that there is still another very considerable figure to be added on to that. Therefore the figure for the tonnage of timber brought to these islands in the course of last year is 6,400,000 tons. Of these two millions are pit props for our collieries. The bulk of the remainder is used for the military forces here and in France. Some of this has been sent direct to France. That is necessary for the efficiency of the Army, for the construction of dug-outs, for railway sleepers, for trench boards, and for a variety of other things. It is quite obvious that if tonnage is to be saved, this is one of the first problems to be attacked. (HC Deb 23 February 1917 vol 90 c1595)

The rest of his speech detailed increased timber felling in Britain and France and the need for economy in use of timber. Lloyd George identified the timber issue in compiling his war memoirs, (Foot, 2010, p.39).

Wartime timber supplies were organised by a Home Grown Timber Committee, established in November 1915, under the chairmanship of Sir Francis Dyke Acland, an MP and former member of the Government. The committee focused on supply of timber for government purposes. The Timber Supplies Department was headed by R L Robinson, with whom Acland must have been by then acquainted (Long, 1953). Acland became a logical choice as chair of the Forestry Sub-committee of the Committee for Reconstruction established in July 1916 with Robinson as its secretary.

13.3. The Acland Committee proposes 1,770,000 acres

The Acland Committee had fourteen members. Its remit appeared to assume that the forestry resources of the United Kingdom were the answer to the supply problem:

⁴⁸ The Acland Committee had been appointed in July 1916, and held 32 meetings.

To consider and report upon the best means of conserving and developing the woodland and forestry resources of the United Kingdom, having regard to the experience gained during the war.

The absence of a requirement to consider other options is not evidence of a rational “stagist” approach. The focus was thus very largely upon the wartime reserve argument:

...we were dependent before the war and have continued to be dependent during the first two years of the war on from one-seventh to one-eighth of the commercial tonnage entering our ports with cargoes being devoted to the transport of timber and pulp of wood, and the question arises whether it would be possible in some future war, if adequate supplies of timber were growing at home, to cease timber imports altogether and to devote the tonnage thus set free to other more urgent purposes. (Ministry of Reconstruction, 1918, p.22)

The Acland Committee did not examine witnesses, but made use of the Royal Commission described in the previous chapter. It received some memoranda from interest groups.

Recommended policy

The report (Ministry of Reconstruction, 1918), was clear:

...to arrive at the minimum area [of afforestation] which would make us self-supporting during a three years' war., The answer is 1,770,000 acres.⁴⁹

The attitude to silviculture and yield management was focused on the strategic reserve intention, and a rotation was chosen which would build up a stock of standing timber:

Rate of Planting.—The rotation of coniferous timber which would give such a margin of mature trees as would enable 15 years' normal cuttings to be obtained in three years is, as we have said, on an average about 80 years.

This was modified to create the reserve more urgently:

We consider it legitimate, bearing all the necessary factors of the case in mind, to aim at planting two-thirds of the required area in half the time of the full average rotation. This means planting 1,180,000 acres of conifers in 40 years. We think that this should be the practical objective which the State should keep in mind.

These recommendations demonstrate a long term commitment to the forestry concept of sustained yield. The Acland Committee were considering the landscape of Britain up to the year 2000 when they thought the first rotation of conifers would have been ready for rotational clearfelling. In hindsight, the plan was considerably exceeded, and the trees grew faster than expected. Text analysis of the Acland Report shows a dramatic change in the balance between employment and timber production vocabulary compared with the 1909 Royal Commission.

⁴⁹ Approximately 716,290 hectares, including afforestation in Ireland.

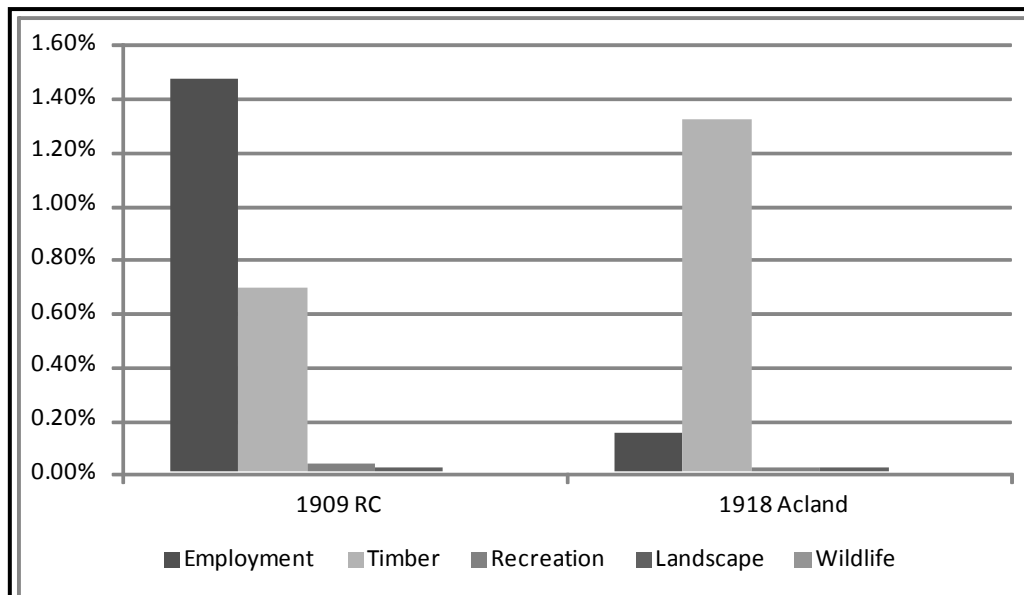


Figure 13-1 Frequency of vocabulary related to “objectives” in 1909 Royal Commission report and Acland report, from NVivo text analysis⁵⁰

13.4. Policy decision

The report was addressed to the Prime Minister, and accepted by the cabinet, but only after opposition to a central authority from the Minister of Reconstruction (Addison) and the Secretary of State for Scotland (Munro). The matter was referred to a Cabinet sub-committee of Curzon and Barnes (TNA: CAB 24/5, 1918). Foot (2010, p.43) sees Lovat as the key exponent of a central structure who “fought against closeted departmental interests.” Curzon and Barnes also drew attention to the fact that Addison had ignored the Acland report’s recommendation that grants be made to private landowners and pressed for this. The outcome was announced on 8 August 1918 and a Forestry Bill was introduced in the House of Lords on 24 June 1919. West (2003) describes the Act as dramatic. There were very few objectors to the afforestation programme, one of the clearest, J.M. Hogge, a Scottish devolutionist Liberal MP for Edinburgh, provides a salutary point about hindsight and foresight:

Houses are much more urgent than afforestation. The urgency for this Bill suggested by my hon. Friend is an urgency which is disappearing every day. Apart altogether from legitimate competition with other countries in the world, the urgency of this Bill is that, in the event of the outbreak of another great war, we should not again be left without a proper supply of timber. I do not think, unless all our hopes are going to be falsified, that we need build up huge forests with the object of providing for another great European war. Therefore I think we may dismiss that and say that housing is far more urgent than afforestation, (HC Deb 05 August 1919 vol 119 c231)

Hogge would be proved disastrously wrong. The treaty of Versailles probably led to the Second World War. But, to complicate the theme of forethought and foresight it should also be noted that Hogge

⁵⁰ A chi-square test showed a very strong relationship between employment and timber terms and the two reports ($\chi^2 = 608$, df-3, $p > 0.01$).

“opposed a stern peace with Germany as he held it calculated to lead to future disputes” (Elder, 2001). Many historians would think him right, it provides a reminder of the difficulty of foresight: the Second World War was not inevitable. In a counterfactual history which followed Hogge’s views; the Treaty of Versailles would not have been so severe. Hitler might not have come to power; and timber imports might never have been of strategic importance again.

A survey of media available in online databases reveals very little questioning of the thrust of policy. *The Economist* welcomed the Acland report uncritically, describing previous government attitudes to afforestation as neglect, concluding: “Dwindling world supplies, rising prices, and scarcity of ship room make the recommendations of the report a matter for urgent consideration” (The Economist, 1918).

The Forestry Act 1919 received the Royal Assent on 19 August 1919. The first trees were planted within days.



Figure 13-2 Forestry Commission squad planting (Forestry Commission / J W L Zehetmayr)

13.5. Rational stages approach

Establishing a committee to examine an issue, and propose solutions, is redolent of a rationalist or stages approach to policy-making. However, the policy question does not appear to be impartially rationalistic. Other questions could also have been posed which would have been more rigorously rational, for instance:

How can coal mining production be maintained when timber imports are constrained in time of war?

Other options might have been considered: for instance, a timber stock at dockside.

Technological innovations in mining itself could have been proposed or considered, such as the steel mine roof bolt only commonly introduced in the late 1940s. However, its use is recorded as early as 1917 (Mark, 2002).

A rational stages approach involves systematic analysis of evidence, Tsouvalis notes that the committee was handicapped by lack of information on the current state of British forest resources, although it did have the Royal Commission report of 1909 (Tsouvalis, 2001, p.34-35). Most historians, four of them potentially partial as former members of Forestry Commission staff (Foot, 2010; Pringle, 1994; Richards, 2003; Ryle, 1969), accept a rationalist narrative. Ryle, like Tsouvalis, notes that the committee recognised a “lack of information” about standing timber stocks. He sets out the work as rationalist analysis, but then approvingly quotes allusions to national values.

Other commentators echoed the view of the Acland report that “if thirty years ago 100,000 acres had been planted annually at a cost of half-a-million a year, today we should not have required one stick of pit-wood from abroad” (Robert Galloway addressing the Scottish Arboricultural Society quoted by Diack (1918)).

Individuals: policy entrepreneurs and issue experts

Five of the Acland Committee members are identified as active policy entrepreneurs in the last chapter: Schlich, Forbes, Lovat, Stirling-Maxwell, and Sutherland. Sir Francis Acland should now be added to this group. He showed a certain self-identification as a policy entrepreneur:

I'm not at all disinclined to chuck politics⁵¹ but the every now and then occurrence of chances to be useful such as I have had as Chn of the Afforestn Commee and as I may have at Reconstr. in Agriculture make it not easy to make up one's mind (Acland, writing to his wife, 8 August 1917, in Tregidga, 2006, p.101)

The Earl of Selborne further confirmed the role of Acland as a policy entrepreneur:

I think the country owes a debt of gratitude to my right hon. friend Mr. Francis Acland, who presided over the Forestry Committee. ... if forestry is put in its true position as a great national industry the statue of Mr. Francis Acland ought to be put in the entrance hall of the Office. (HL Deb 07 July 1919 vol 35 c258)

This has not (so far) been done. Three other MPs were members of the committee; a search of Hansard provides no record of their having ever spoken on forestry in the House of Commons. The representative of the Board of Agriculture and Fisheries, Middleton, appears fleetingly in War Cabinet minutes for March 15, 1917 discussing in detail the potato supply estimates; contextual evidence of the desperate effect of the submarine blockade.

As secretary to the committee, Roy Lister Robinson was an issue expert. In 1909 Robinson had been a newly appointed Assistant Inspector for Forestry in the Board of Agriculture and Fisheries. Long

⁵¹ It adds perspective to the sense of time and history to note from the rest of the letter that his frustration came from a vote that evening which had rejected the adoption of proportional representation in the United Kingdom by 32 votes.

(1953) suggests that Schlich was asked to recommend someone, and chose Robinson. Long goes on to note his later role:

...as Secretary to the Acland Committee, which resulted in the first comprehensive home forestry report ever produced in this country and in which it is not difficult to discern the major part he played.

Long may have had personal knowledge of Robinson's role. Sir William Schlich is another obvious issue expert, deftly using the wartime timber shortage as a new argument. West (2003) gently mocks Schlich:

What was different in July 1916 in Schlich's restatement of the forestry question was that he could present his case with much greater urgency by citing the threat that a timber shortage posed to national security. This urgency was more rhetorical than substantial, having no noticeable influence on Schlich's actual proposal ... for the first time in his career placing significant emphasis on securing the country against an unexpected emergency.

Table 13-1 Membership of the Acland Committee

Member	Forestry Interests	Institutional Links	Origin	Party
The Right Hon. F. D. Acland, M.P. (Chairman).	General interest in land use.	MP	Country landowner.	Lib.
Mr. L. C. Bromley, Treasury.	NA	Civil Servant	NA	NA
The Right Hon. Lord Richard F. Cavendish, Development Commission.	None found.	Former MP No Hansard forestry ref.	Hereditary landowning peer.	Lib.
Major the Viscount de Vesci.	NA	NA	Hereditary Irish landowning peer.	NA
Lieutenant-Colonel F. D. W. Drummond.	NA	NA	NA	NA
Sir John Harwood-Banner, M.P.	None found.	Parliament.	Family accountancy firm.	Con.
Major-General the Lord Lovat, K.C.V.O., C.B., D.S.O.	Active as landowner and activist.	Royal Scottish Arb. Soc.	Hereditary landowning peer.	
Mr. T. H. Middleton, C.B., Board of Agriculture and Fisheries.	Scientific reputation. ⁵²	NA	Unknown.	NA
Professor Sir William Schlich, K.C.I.E., F.R.S.	Professional, German education.	Oxford University.	German.	NA
Sir John Stirling-Maxwell, Bart.	"Main interest of arboriculture" ⁵³	Former MP	Hereditary aristocrat. Large scale landowner.	Con.
Mr. John Sutherland, Board of Agriculture for Scotland.	From estate management.	Civil Servant.	Lawyer, Land Agent and forestry administrator.	NA
Mr. S. Walsh, M.P.	None found.	MP	Street orphan. Coal miner. Son killed in war.	Lab.
Mr. W. Tyson Wilson, M.P.	None found.	MP	Carpenter.	Lab.
Mr. R. L. Robinson, His Majesty's Office of Woods, &c. (Secretary).	Profession.	Civil Servant	Australian.	NA
Mr. A. C. Forbes, Department of Agriculture and Technical Instruction for Ireland.	Profession. German education.	Civil Servant.	NA	NA

⁵² HC Deb 26 February 1912 vol 34 c1020.

⁵³ The Times May 31 1956.

Other members of the committee were part of the coalition who had been lobbying for state afforestation before 1914. Oosthoek (2013, p.45) notes that:

The story of British State forest policy did not start with its first formulation by the Forestry Subcommittee of the War Reconstruction Committee in 1918. It started around the turn of the 20th century with the activities of a small group of men, mainly Scottish landowners and foresters, who were to become the founders of the Forestry Commission. They were farsighted men who had become uneasy at the perceived lack of planting for timber production. Among the most important people were John Stirling Maxwell, Lord Lovat, Roy Robinson, and John Sutherland. They all contributed in different ways to the development of Scottish forestry but their ideas concerning the need for a State forestry authority were very similar.

West (2003) describes the same situation:

Britain's dramatic Forestry Act of 1919 is widely acknowledged as legislation in response to crisis, while the more subtle but no less relevant role of the war in America's policy making of the 1920s has been largely overlooked. Yet despite these differences, both Britain's immediate and America's prolonged forestry debates culminated in policies that were framed around the pre-war agendas of prominent forestry professionals.

Robinson and Schlich, perhaps disciple and mentor, probably worked closely on the wording of the report. Ryle (1969, p.21) is less certain that Robinson's appointment had been recommended by Schlich, but describes Schlich's admiration of Robinson as "well known in the department". Long notes the importance of the report to Robinson in striking terms: "...the report itself formed his Bible for future action throughout his career."

Acland, writing to his wife, gives an insight into the role of some of the other individuals involved, providing more evidence of the role of policy entrepreneurs:

Yesterday I mostly fussed about forestry. Addison⁵⁴ has been hatching a scheme which would really set things going – a new central body, £6,000,000 to spend – a definite 20 year planting programme to accomplish. Lovat is opposing it & Selborne inclined to back him because it's not all we asked for in our report & they are both booming about like mad bumble bees. And as I see it, if they don't stop booming they'll get no scheme at all. So as you can imagine long talks to Vaughan Nash⁵⁵ etc, & then long letters to Selborne & Shirly⁵⁶ Maxwell. The Report will be published in the coming week. (Acland, 18th January 1918, in Tregidga, 2006, p.115)

The dissention caused referral from the Cabinet to Lord Curzon and G N Barnes (Minister without Portfolio). Acland's reminiscences in a speech to the House of Commons in 1933 shed some light on these conflicts:

I remember the changes and vicissitudes through which the Commission has had to go. It was very nearly strangled before it came to birth because there was disagreement, as was

⁵⁴ Liberal Minister of Reconstruction. An advocate of nationalisation of land, he joined the Labour party in 1923. Kenneth O. Morgan. Addison, Christopher, first Viscount Addison (1869-1951). In: Oxford Dictionary of National Biography (2004): Oxford University Press. Chaired the "National Parks Committee" in 1931. Morgan Kenneth O. (2004); (The National Park Committee (Chairman Rt Hon Christopher Addison), 1931)

⁵⁵ Part of the secretariat of the Ministry of Reconstruction. A former (and future) member of the Development Commission he had a considerable interest in rural affairs (J. M. Lee, 2007).

⁵⁶ Presumably a transcription error for an abbreviation of "Stirling"-Maxwell.

inevitable, between English and Scottish Members of the Cabinet. It had been our duty to point out that Scotland had been extraordinarily supine in having done nothing which was of any use in regard to timber. The Scottish Board of Agriculture, because we were proposing to take away their responsibility for forestry, and although they have done nothing at it, thought that we were depriving them of an opportunity of continuing to do nothing, which they valued very highly. Therefore there were disagreements between the Secretary of State for Scotland and other Members of the Government from which we were only saved by the wonderful industry and perseverance of the late Lord Curzon, who was appointed by the Government to go into the matter very fully and consider whether the report, like so many other reports, should be pigeonholed and come to nothing, or whether something should be done and the Forestry Commission be set up. Without Lord Curzon's work the Commission probably would never have started. (HC Deb 03 July 1933 vol 280 c75)

The institutional interactions and institutional result are discussed further in a later section below.

Lobbyists

Although the Acland Committee took no evidence, a number of organisations sought to influence it. Foot (2010, p.42) notes “a triumph for the Scottish [forestry] Society” in emphasising afforestation, and that the English society was more ambivalent and more focused on existing woodland. For the Royal Scottish Arboricultural Society the strategic argument, so prominent in the Acland Committee report, is the sixth of six priorities.

- (1) It would turn many barren wastes into profitable woodlands.
- (2) It would retain, in the rural districts, thousands of men who now have to seek employment in the towns.
- (3) It would keep in this country, for the benefit of the country, millions of pounds now paid away to foreigners.
- (4) It would enable a large number of small holdings to be established on economic lines.
- (5) It would lead to the development of many new industries.
- (6) It would ensure such a supply of timber as would enable British industries to be carried on, without curtailment and without anxiety, in the event of another great war.

It seems clear that the society's approach was one of longstanding productivism. This research traces the resilience of the afforestation programme to change when the strategic argument was no longer relevant. In this it can build on the reflections of West (2003), that the First World War strategic argument was not the rational reason for the policy – it was the policy change condition which allowed previously existing arguments and advocacy coalitions to succeed.

External shocks and crises

The nature of the First World War as an external shock is hard to overestimate in socio-political terms. It was a paradigm changing event for society in general. Submarine blockade was a shock to timber supplies and forestry. The establishment of the Forestry Commission and the afforestation project are usually attributed to this shock, but the drive for state-organised afforestation was well established in the minds of policy entrepreneurs and nascent policy coalitions well before the War. While war may not have been the origin of this thinking, it clearly provided a problem and choice opportunity which coincided with a solution (already developed) and decision makers, to result in a “garbage can” policy

change (Cohen et al., 1972). The afforestation programme was perhaps a solution waiting for a problem. The problem was real, and shockingly felt by the actors. A poignant reference is relevant, Boyd's (1918, p.6) polemical book, simply entitled *Afforestation* is dedicated:

"TO THE MEMORY OF MY SON"⁵⁷

By 1918 all of the men involved will have been touched in some way by the experience of industrial "total war" or "*materialschlacht*" (Hobsbawm, 1994, p.45). Their modernist instincts and mindsets were probably strengthened. This is discussed further below under critical policy analysis; it does not seem reasonable to describe it as part of a rational stages approach.

The First World War was clearly a crisis, or perhaps better described as a historical discontinuity; trends were broken by shock. Howlett et al. (2009) suggest the speed of such change is faster if new players are introduced. Acland was new, other key players in the committee had new access to political power.

Political parties

The Acland Committee afforestation programme was referred to in the "Conservative and Lloyd George" manifesto in the 1918 general election:

Arrangements have been made whereby extensive afforestation and reclamation schemes may be entered upon without delay. (Lloyd George and Bonar Law, 1918)

Forestry was not mentioned in any of the other party manifestos. Speaking in 1924, Lord Lovat emphasised the cross party consensus:

When the 1917 Committee sat, on which the Liberal, Conservative, and Labour Parties were represented, it was one of the matters which caused them most serious thought, and on which ultimately they reported unanimously (HL Deb 29 June 1926 vol 64 c662).

Veto power

There is little evidence of any veto power in terms of the afforestation programme, though there were those who opposed the creation of a central authority. Stronger impetus to the movement for home rule in Scotland would clearly have produced a potential veto power. It must be recorded that the success of Sinn Féin in the general election of 1918 led indirectly to the total loss of Forestry Commission authority in most of Ireland, despite Irish conditions having been a significant driver of the pre-war afforestation policy entrepreneurs.

⁵⁷ Boyd, Gavin, Rank: Second Lieutenant. Date of Death: 13/07/1916, Regiment/Service: Royal Engineers 4th Bn. Berles Position Military Cemetery, France. <http://www.cwgc.org/find-war-dead/casualty/2766769/BOYD,%20GAVIN> Retrieved 18/9/13

13.6. Institutional policy analysis

Institutions and bureaucracies

The complexity of the previous arrangements was set out by Major Samuel Strang Steel, who later became a Forestry Commissioner:

...we have had so many Departments competing with one another in trying to run this question of forestry. You have the Development Commissioners, and the English and Scottish Boards of Agriculture, and the Irish Department of Agriculture, and, after all, what have we found? In Scotland, notwithstanding the efforts of the Scottish Board and of the Development Commission, all that has been done is a forestry survey in one county and the training of a few individual foresters. I think that that fact alone is clear proof that some central authority is needed. (HC Deb 05 August 1919 vol 119 c239)

In addition there was the Office of Woods managing crown forests, (of which Robinson was Superintending Inspector). There was conflict within the Acland Committee (and the Cabinet) about the establishment of a central authority, in place of these existing but criticised institutional interests. Bromley, Treasury member of the Acland Committee, objected formally in a “reservation” to the report, that a new organisation and “multiplication of departments” was unnecessary. Sir F Banbury echoed this in the Commons:

My reason for objecting to this Bill is that the time has come when the Government itself should set an example of economy. Every day we come down to this House and are brought face to face with Bills which increase our bureaucracy, and which increases the money that is to be spent in providing for new Ministries with big salaries. (HC Deb 05 August 1919 vol 119 c260)

The existing institutions and the Treasury failed to prevent the establishment of a new and unusually powerful arms length institution (Pringle, 1994).

13.7. Policy network analysis

Policy networks and subsystems

The pre-existing forestry policy network had failed to achieve political traction. The First World War allowed the network to restate its case with the additional, apparently urgent and dramatic rationale of national security.

Internationalisation, policy diffusion and multi-level governance

Irish and Scottish governmental arrangements were relatively weak. Leaving aside the geopolitical reason for the establishment of the Acland Committee, there was, through Schlich and others, a German-Indian policy diffusion already observed before the war. The comparison with the state afforestation of the *Landes* in France provided modest international context.

The alternative proposal, for more diffused delivery and multi-level governance, was a compromise proposed by Addison; placing the new forestry authority under the Development Commission, with Scottish, Irish, and England and Wales Agricultural Authorities.

Curzon and Barnes dismissed Scottish concerns:

...we came to the conclusion that personal and political considerations had engendered a heat which we were not fully competent to understand and were wholly powerless to allay. (TNA: CAB 24/5, 1918)

The Cabinet committee placed an emphasis upon the need for centralisation and saw it as necessary if a “bold and consistent policy was to be successfully pursued over several generations”. They noted that if the French or Indian model were followed there would be “an adequate field for promotion and securing an interchange of the best men”.

13.8. Critical policy analysis

Ideas, narratives, frames and discourses

This was a long-term policy decision, were the authors exhibiting foresight? Computer text analysis reveals more use of vocabulary related to the “future” compared with other policy documents.

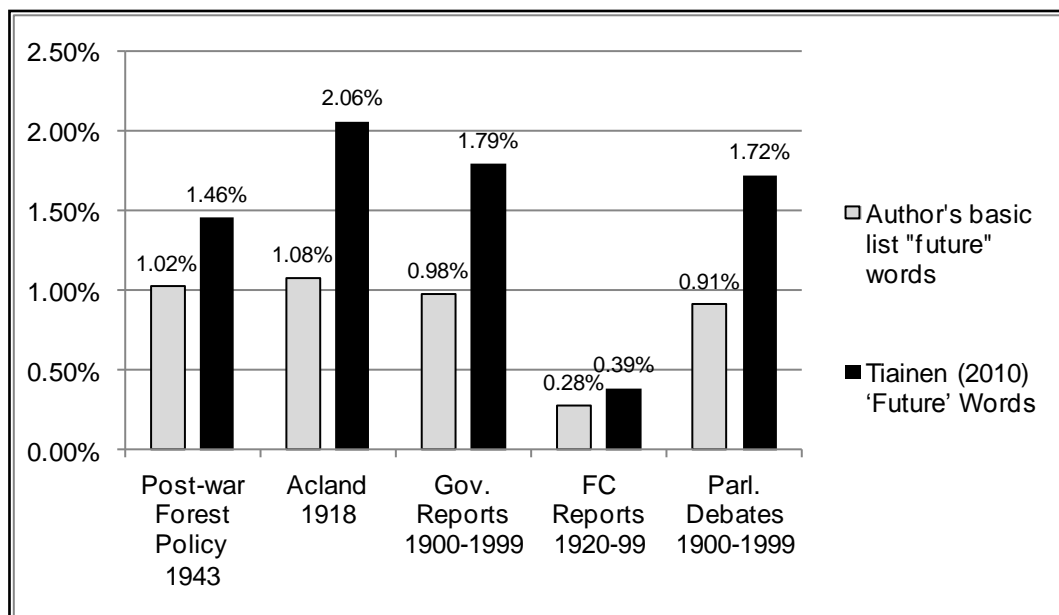


Figure 13-3 Frequency of vocabulary related to “future” in the Acland Report and three corpora.⁵⁸

This suggests an attempt at foresight, and the report contains explicit passages addressing uncertainty in an apparently rational stagist way:

It may be argued that there may be such revolutions in industrial processes that wood will become unnecessary, both in war and in peace; there may be such a revolution in human nature that wars or trade boycotts between nations will become inconceivable. There may be climatic or other natural changes which will either make the areas which are now afforestable unsuited for timber growing, or less valuable to the State for timber than for some other purpose which as yet we cannot imagine. We regard all these possibilities as very unlikely to happen in forty years, and we therefore cannot too strongly emphasise our conviction of the

⁵⁸ A chi-square test showed a relationship between future words in parliamentary debates and Forestry Commission annual reports ($\chi^2 = 485.4$, df-4, $p > 0.01$).

necessity for steady, progress upon a definite plan for at least that time. (Ministry of Reconstruction, 1918)

Tsouvalis (2001, p.38) identifies a mindset in the Acland Committee deliberations with a “Hochwald” materialistic approach to forest production. Land had to produce timber in scientifically efficient rotations as part of a material conquest of time and space. Simple computer aided text analysis provides a test of this.

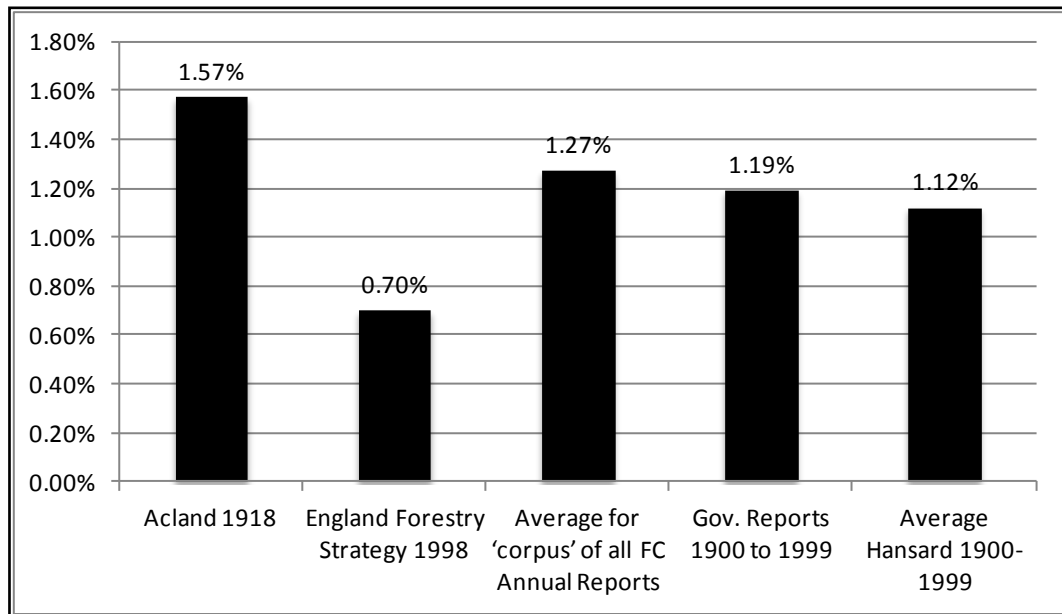


Figure 13-4 Frequency of vocabulary related to “time or space” in the Acland Report compared with the England Forestry Strategy and three corpora.

It appears (Figure 13-4) that the Acland report shows slightly above average content of words associated with time and space (such as: “rotation”, “period”, “acre”, “hectare”, etc).

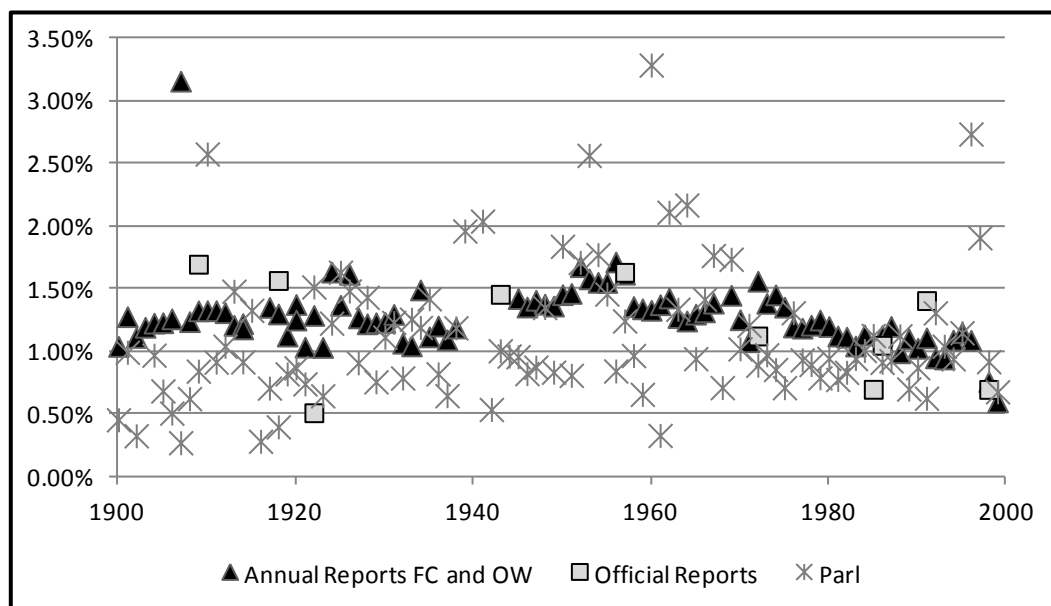


Figure 13-5 Frequency of vocabulary related to “time or space” in annual reports, official reports and parliamentary debates

However, an analysis of three corpora over a century does not reveal a statistically significant trend in space and time words (Figure 13-5).⁵⁹ In contrast to Tsouvalis's view, the report included reference to emotive values:

...the question how far the planting of waste land is likely to prove directly profitable. We submit that this aspect of afforestation, though much discussed in this country, is not from a national point of view the most important, and that it has never been so regarded in the countries where silviculture has been longest practised and is most valued. The direct gain or loss is relatively a small matter compared with the new values created these values being expressed partly in terms of population, and partly in terms of wealth. It is on such values that the strength of nations depends.

"Waste" appears to imply a moral requirement to utilise land. Ryle, writing forty years later saw this passage as evidence of a *less materialistic approach* than prevalent in 1969. He alludes to the "healthy strength of the country" (Ryle, 1969, p.27), as an idea neglected by the "narrowly-trained Treasury official of today". This seems a slightly strange conclusion by modern standards, since the use of "value" in the Acland Report appears to be "material" if not purely financial.

Bengston and Xu (1995) developed a list of "spiritual/moral" words for use in forestry text analysis. Five such words appear in the Acland Report, many more occur in documents later in the century, with a highly statistically significant and consistent *rate* of growth over the whole period. In case this was the result of changes in the use of language in forestry as a subject, two non-forestry texts contemporary with Acland have been tested: Lankester's *Diversions of a Naturalist* (1915) and Rawnsley's *A Nation's Heritage* (1920). These appear to demonstrate that the word list includes words in use in general discourse in that period, but not in forestry texts.

⁵⁹ There is no statistically significant relationship between vocabulary related to "space" and "time" and years of Forestry Commission annual reports or forestry related parliamentary debates $R^2 = 0.015$, $P=0.22$) annual reports $R^2 = 0.07$, $P=0.01$).

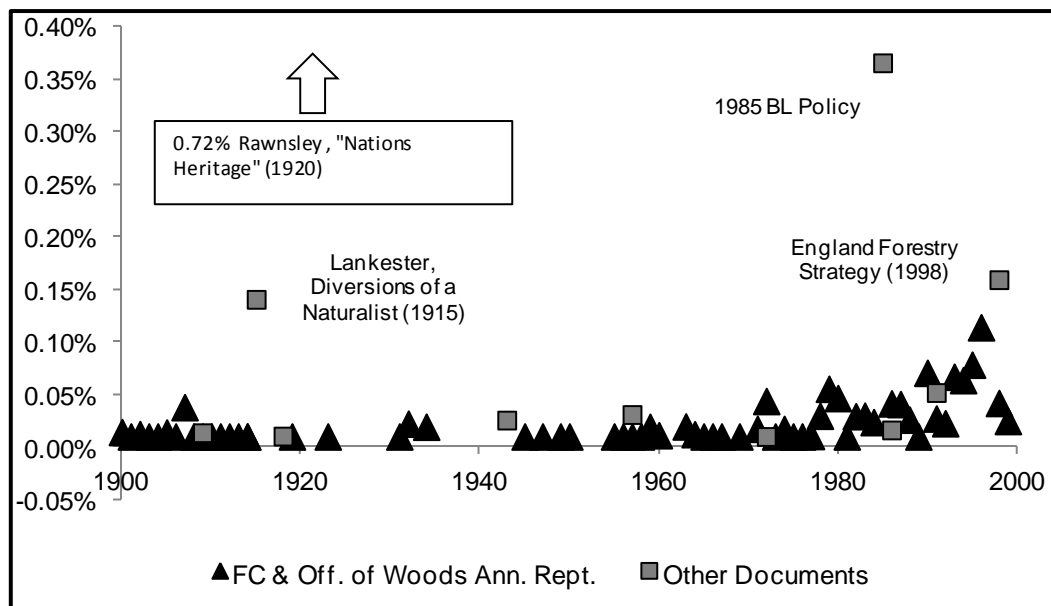


Figure 13-6 Frequency of spiritual/moral words (Modified from Bengston and Xu Bengston and Xu, 1995)

Indirect comment on the aesthetics of plantations was made by Rawnsley (1919) in a chatty book on a tour of early National Trust properties (he was one of its co-founders): “plantations are sometimes made that entirely hide beautiful landscape or river or lake scenery”. Controversy in the Lake District, is discussed in Chapter 15. Other commentators drew attention to aesthetic risks:

These devastated woods have to be repaired. Furthermore, the war has shown that we have got to extend our woodlands. Scientific afforestation will take the place of the more haphazard planting of the past, and while the second has made for beauty, the first will tend rather to monotony.....We have to see that afforestation and intensive agriculture are made as little - destructive of beauty as possible. (Observer, 1919)

A “spiritual” argument was supported by Barnes, the member of the Cabinet who had considered the proposals with Curzon:

The hon. Member ... only put up one argument in favour of the Bill, and that was the possibility of another war. May I put forward two other reasons for the Bill, one human and psychological, and the other financial? This Bill proposes a new and healthy occupation and interest for the country. (HC Deb 05 August 1919 vol 119 c276)

The underlying narrative is that it simply seemed desirable: the war had provided a rationalistic shock, but having more forest and a forest service like so many other countries made sense. There had been a nineteenth century debate, mainly in Germany, on the choice between soil rent (a rate of return) and net annual income theory (Johnston et al., 1967). The Forestry Commission head of economics would be explaining to the House of Commons Public Accounts Committee that other countries simply seek annual income some sixty years later (see later chapter). This is easier to comprehend when the forest is near “normal”, with felling revenues and costs in a constant stream. In this model, or narrative, future values are not discounted (Price, 1989, p.101).

In a religious magazine Sherren (1918), commented on the dangers of materialism in “Reconstruction” while supporting the material value of a strategic reserve. Overall there is little evidence for narratives or discourses related to natural or aesthetic values. That said, these discourses were not “unthinkable”, Lankester’s work exhibits them, but in the forestry policy community there is almost no evidence of environmental and landscape discourse.

Class and capital

Some members of the Acland Committee were landed aristocrats, Sir William Schlich, was a technocrat (of foreign origin) rather than part of the traditional ruling elite. One, (Walsh) had been a street orphan and miner (Times, 1929), another (Wilson) was a carpenter and trade unionist. Robinson was of relatively humble Australian origin. Overall the committee included (in overlapping categories): five landed aristocrats; two immigrants; two working class; two German-trained foresters; five technocrats; and two soldiers (Table 13-1).

Their joint enthusiasm for an essentially “socialistic” state enterprise is striking. Oosthoek (2013, p.47) points out that Lord Lovat, as an advocates of state afforestation in Scotland, sought to mollify fellow landowners concerns by a survey of afforestation potential in the Great Glen. The Acland proposals were significantly less radical than those of 1909 (1,770,000 acres vs. 9,000,000).

The eight initial Forestry Commissioners were more representative of technocratic and landowning interests (Ryle, 1969, p.37). Foot (2010), notes the “striking” dominance of landowners “even in the context of 1919”. That may be true of the Forestry Commissioners, but the Acland Committee appears socially balanced even in the context of 2013.

13.9. Advocacy Coalition Framework, values, beliefs and policy learning

The various writings from the late nineteenth century until 1917 provide evidence for the existence of an intellectual community lobbying for a national afforestation effort as comprising an Advocacy Coalition. While key policy entrepreneurs might have been voices in the wilderness before 1909, by 1918 they were embedded within the power structures. The Development Commission had started desultory work, and Lovat, Stirling Maxwell and others had become involved in developing potential trial areas, and participated in the Scottish Departmental Committee of 1912. Some of this activity was calculated to overcome the objection that more research was needed. Robinson had been appointed, perhaps at the behest of Schlich, and then, with Acland, had a leading role in emergency wartime timber operations, with Lovat similarly involved, both in France and Britain. A forestry-related subsystem had developed immediately before and during the war. This had not existed before 1909. Much of this activity involved new state action. The arguments and confidence of those suggesting grand schemes of state control must have been considerably strengthened.

The existing coalition between landed aristocracy and those of socialist ideology had also been maintained and strengthened by wartime experience.

Taylorist productivism had been strengthened by war production and “*materialschlacht*”. The War as a shock external event had undermined “stable parameters” in the Advocacy Coalition Framework model (see Figure 10-3 Advocacy Coalition Framework).

Radical policy change which had not occurred in 1909 was now possible. Timber supply had become an additional problem to rural land and employment. The “opportunity structures” were significantly enhanced by the better embeddedness of policy entrepreneurs in the political system as a result of wartime activity, combined with a much clearer consensus for policy change.

Chapter 14.

Policy decision process - “Geddes Axe” –abolition of the Forestry Commission?

14.1. Introduction

The First World War involved massive public expenditure and taxation (McDonald, 1989). Reconstruction measures, including the Great Spruce Project, represented further expenditure commitment.

Sir Eric Geddes was a businessman appointed Chair of the Committee on National Expenditure in August 1921, to explore “all possible” reductions in expenditure. The Forestry Commission was young, but protected by the policy entrepreneurs who had fostered it. The Cabinet decided against abolition.

14.2. Public expenditure becomes a policy question

In 1919, anti-waste agitation developed in the press:

The campaign traded in sensational stories of public waste, railing against the excesses of a so-called “spendocrat” bureaucracy. (McDonald, 1989)

McDonald notes that while the press were reluctant to identify specific savings, these campaigns “were at one in their opposition to most manifestations of post-war reconstruction”. The “imprecision” in the potential economies to be made allowed widespread support, and made politicians’ agreement almost mandatory. This was reinforced by by-election victories to anti-waste campaigners. The Treasury was not in complete sympathy with what it saw as an unsophisticated movement (despite itself proposing a 20% cut in expenditure), and it seems that there was no coherent “Treasury view” (McDonald, 1989). In 1921 the Prime Minister backed the establishment of what became known as the Geddes Committee.

14.3. Recommended policy

Forestry was dealt with in a three-page chapter (TNA: CAB/24/132, 1922), and the committee appeared to pride itself on terse and unambiguous recommendations: “the scheme of afforestation by the State should be discontinued.”

The Forestry Commissioners had provided five justifications:

(i) That the drain on the coniferous forests of the world is increasing yearly, and any country which has no indigenous supplies is to a certain extent placing her industrial future in the hands of others.

(ii) That practically every civilised country in the world has recognised the need for securing future timber supplies, and considerable developments are taking place, not only in Europe, but in America and the Dominions.

(iii) That timber production is a matter for the State rather than the private individual.

(iv) That a home supply of timber is a general insurance in peace against profiteering and also provides a form of rural employment.

(v) That Home Forests are a necessary asset in War.

The Geddes Committee dismissed all five. On the first, they were “quite unconvinced” of the likelihood of home-grown timber ever being competitive. Secondly, they saw no need to emulate afforestation activity simply because other, diverse, countries had programmes. Thirdly, they saw no reason for investment in “distant and doubtful” returns, given the state’s lack of surplus capital and high interest rates. Fourthly, they said that to “create employment on an uneconomic basis cannot be justified.” Finally, while recognising the value of forests in time of war as “perhaps the most important”, they were dismissive:

This may be so, but the same might be said of Home-grown wheat, and the whole gamut of articles of food, clothing and armament which we do not produce in this country.

The Committee were sceptical about remote poor quality land meeting even this objective.

There were some minor provisos. The Committee did “not wish to say that no money should be spent upon encouraging the growth of indigenous timber in this country”, but there should be a cessation of funding and action, and a serious review, and the Forestry Commission should be absorbed into the Board of Agriculture (whose activities were also to be curtailed with a budget cut of 20%, although in a far-sighted decision, the light horse-breeding programme survived).

14.4. Policy decision

A Cabinet Committee report on the forestry issue was discussed at a Cabinet meeting on 24th February 1922 which minuted the Chancellor’s view that:

...while he had been in favour of adopting the recommendation of the Geddes Committee to terminate this Department, the Cabinet Committee did not share this view... (TNA: CAB/23/29, 1922)

In fact the Cabinet Committee saw “the burden on the State” as “trifling.” The Forestry Commissioners lost their authority to purchase land in March 1921, but were eventually able to continue with the afforestation of up to 10,000 acres per annum. This was subsequently increased to 25,000 acres in order to reduce unemployment (Pringle, 1994). The outcome was announced by the Chancellor of the Exchequer in March 1922:

The Committee on National Expenditure recommended that the Forestry Department be abolished. The Department itself has not been very long in existence, and if we abolished it now, we should lose the results of £107,000 of expenditure which the Department has embarked upon in the conduct of forestry operations. We should also have to give

compensation to officers who are established in that Department, and we should still have considerable expenditure in carrying on some of the functions of the Forestry Department by the Office of Woods and Forests and the Board of Agriculture. Taking all these things into consideration, and especially having in view that the Forestry Department will only cost the Exchequer next year a sum of £40,000 because they have savings in hand which will make up the difference, we have determined to carry on the Department of Forestry in the meantime. It would be, I think, a misfortune if we hurriedly came to a conclusion which would have the result that Great Britain, of all the countries of the world, would be the only country which has not a Department to deal with forestry. (HC Deb 01 March 1922 vol 151 cc443-4 443)

In terms of policy analysis, this is full of phrases redolent of inertia rather than an incisive evidence-based refutation of the conclusions of the Geddes Committee. The strategic objective is not mentioned; only consistency with other countries is cited.

The *Times* (1922) was disappointed, noting that much less had been cut from the agriculture and forestry budget than recommended by Geddes. The *Guardian* covered the increased expenditure of £50,000 (£2.4m 2013) on unemployment relief (Manchester Guardian, 1922). The government was in fact on the point of allocating further funds to the Forestry Commission for employment, more in line with the thinking of 1909 than 1918.

14.5. Rational stages approach

The Geddes Committee exercise was radical. At a distance of more than eighty years, Burrows and Cobbin (2009) considered the Committee's processes "*arguably the most profound analysis of British public expenditure ever undertaken*". This would appear to support the view that the Geddes approach was more incisively evidence-based and rational than the original Acland Committee.

Individuals: policy entrepreneurs and issue experts

The policy entrepreneurs of the Acland Committee and before were mobilised in defence of the Forestry Commission and the newly established afforestation programme. Ryle (1969, p.43) ascribes the outcome primarily to the efforts of the Forestry Commission's Chair, Lord Lovat, who "went direct to see several of his friends in the government and even in the Cabinet." Lord Curzon may have been such a friend, keen to defend his position on the creation of the Forestry Commission taken only two years before. He was at the relevant cabinet meeting. Acland (whose tendency to reminisce in the House of Commons is a boon to researchers) was within earshot of the Prime Minister:

...we were cut short by the Geddes Axe and narrowly escaped complete extinction. I remember now with what gratitude I heard my right hon. Friend the Member for Carnarvon Boroughs (Mr. Lloyd George), who was then Prime Minister, say that he had repealed so many Acts which he had passed only a short time previously, that he had to draw the line somewhere, and therefore the Forestry Commission, at any rate, would be allowed to continue. (HC Deb 04 June 1924 vol 174 cc1353-99)

McDonald describes "the ministerial parochialism which represented such an obstacle to the reduction of expenditure", concluding that:

This diversity and the plurality of interests involved encouraged progress by compromise. Consequently, radical reorientations of policy of the sort attempted by the Geddes committee were doomed to fall far short of their ambitious objectives.

The Geddes report alludes, almost sarcastically, to the lobbying it received:

We have been supplied with a great deal of information on the subject, but are quite unconvinced that there is any prospect of State afforestation in this country being an economically sound proposition.

The Forestry Commission also appears to have sought to marshal some outside lobbying, including memoranda from organisations such as the North of Scotland Timber Merchants and the Highland Reconstruction Association. It was starting to make use of its institutional power. Pringle (1994) notes the Forestry Commission argument that global timber supply from virgin forests was being depleted. This represents a departure to an extent from the pre-eminence of wartime security objectives.

While Geddes did not result in the Commission's abolition, it resulted in "drastic staff cuts" (Ryle, 1969). Ryle described the situation as "grotesque", since significant cuts, from £289,619 to £219,870 were in effect almost immediately reversed by expenditure on unemployment-related measures to £373,887 (Ryle, 1969). The number of Forester Schools was reduced (Pringle, 1994).

The Commissioners' second Annual Report indicates their lobbying role:

The Commissioners regret the delay in the presentation of their second annual report. At the time when the report was due to be prepared the whole future of state forestry was in the melting pot and they were engaged in presenting afresh the national need for a forest policy. In the circumstances they felt it less urgent to report progress than to ensure that there should be progress to report. (Forestry Commission, 1921)

The Commissioners complained of the instability of policy, including an interesting attitude: "the reasons which rendered it necessary to have a forestry policy at all are not evanescent but arise from a worldwide movement" (Author's italics) (Pringle, 1994).

External shocks and crises

The recession of 1920-21 was an external shock, which led to the Geddes Committee and the questioning of the afforestation programme. The media were part of the pressure, but no record has been found of any specific call for economy in the afforestation programme.

Political parties

There is no evidence of party political division. The strongest direct recorded criticisms identified are those of George Lambert, who was a Liberal MP – albeit one with Conservative sympathies in the complex party politics of the time.

14.6. Institutional policy analysis

Institutions and bureaucracies

The Forestry Commission was an organisation fighting for its existence, supported by lobbyists. It rapidly transformed itself into an employment relief instrument. In this it was reverting to the main pre-war argument for afforestation.

In terms of other institutional interactions, the Committee's simple and radical proposal may have exceeded even the Treasury's approach.

...there are instances in which the committee's zeal exceeded that of its parent department. For example, it is not clear that the Treasury sought the abolition of the Forestry Commission and the termination of the ten-year forestry programme, though it had long been critical of both. The committee showed no such restraint. (McDonald, 1989)

This type of recommendation may have been partly the result of the way in which the Geddes Committee had been set up. Simple cuts of "major blocks of expenditure and of discrete units of administration" were required (McDonald, 1989).

14.7. Policy network analysis

The nature of the lobbying involved at the highest levels of government makes it difficult to see what types of networks were in operation. The simplest description appears to be "old boys", based on the evidence on the nature of the lobbying carried out by Lord Lovat in particular.

14.8. Critical policy analysis

The class and ideological coalition evidently held in place, in particular through the re-emergence of the employment creation argument, evident before the war in the position of the Labour Party and the Fabian Society. The place of employment-related vocabulary in the Forestry Commission's annual report following Geddes suggests that it was able to marshal the forestry-related employment arguments.

Advocacy Coalitions

The evidence suggests that a stable advocacy coalition was in place. The Forestry Commission, as a nascent institution, was able to marshal support. The arguments used in the face of the Geddes Committee's challenge suggest that a new paradigm was in place; an afforestation programme was a "good thing", once started it should continue. The political system was not open to reconsideration. The opposing coalition which sought expenditure cuts lacked influence over governmental decisions. The external shock of the recession and public expenditure crisis was insufficient. The Forestry Commission as an institution learned that a switch of rationale for the same activity, from wartime reserve to labour creation, was effective.

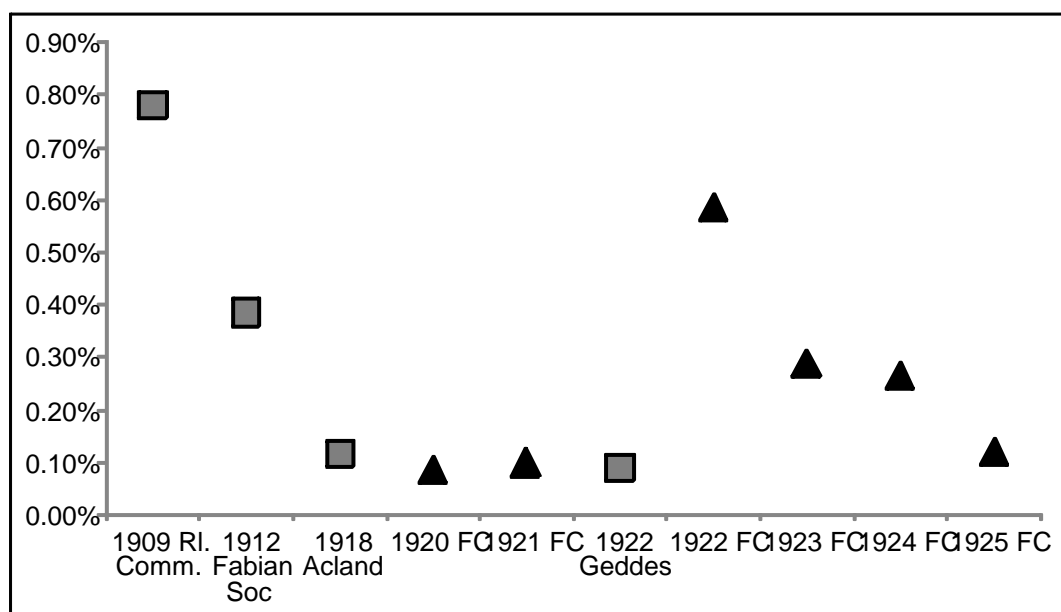


Figure 14-1 Frequency of vocabulary related to “employment” in various documents between 1909 and 1925 (“FC” = Annual Report)

There was a political power play, confused by what McDonald describes as “some of the most flagrant examples of economic and financial heterodoxy on the part of Liberal ministers during their ruminations on the unemployment problem”. McDonald saw more diversity in the way in which the whole exercise represented:

...the sum of a series of decisions and compromises reached by a wide range of agencies, of whom few had any concern with the overall budgetary situation.

This made individual policy decisions susceptible to the interventions of interest groups and lobbyists on behalf of continued afforestation (see Figure 10-3 Advocacy Coalition Framework).

Chapter 15.

Policy decision process - challenge to afforestation in the Lake District

15.1. Introduction

Between the Geddes Axe and the Second World War, there were no significant national policy decision process. There was a challenge to the policy in the English Lake District. A considerable coalition assembled in opposition to the negative impact of coniferous afforestation on the landscape. This could have been a significant turning point, but resulted in modest compromise, without affecting the general thrust of the afforestation project.

Why did this fail to result in significant policy change? The role of institutional power and the productivist idea appear to explain the inertia and stability of policy, despite well organised opposition from an ostensibly powerful coalition.

The opposition to Lake District afforestation was led by the Friends of the Lake District, set out in a polemical book by Symonds (1936). Tsouvalis explores the defensive reaction of the Forestry Commission in its annual reports (Tsouvalis, 2001, p.115). The scale of public opposition and its influential members (Symonds, 1936, Appendix A) was striking.

15.2. Afforestation and the Lake District

The Guardian (1919) had approvingly reported the first purchases of land for Lake District afforestation:

It is to be hoped that the negotiations between the Government Forestry Commission and the Thornthwaite Mining Company for the purchase of 1,080 acres in the Lake District for afforestation will be successfully concluded. The land is amongst the most suitable for the purpose in these islands. Its beauty, which rightly is jealously guarded by all who know it and love it, will not be diminished by the plan; and a start will have been made on one of the most important problems of reconstruction.

In 1926 G M Trevelyan wrote to the *Times* advocating protection for The Lakes for the sake of the twenty-first century. Abercrombie, the founder of the Council for the Protection of Rural England, suggested at the same time that a national forest service was likely to be beneficial to landscape values. He accepted, even welcomed a potentially beneficial type of afforestation:

It has been complained that in certain parts of the Lakes famous views are being planted out and that some of the wonderful glades in the Crown forests are being choked with conifers. The Forestry Commissioners should consider the public's claims in these matters: they have also great opportunities for creating beautiful effects such as broad glades between afforested blocks and for setting apart for the public benefit the higher slopes and hill-tops necessarily acquired in connection with their extensive schemes, but of little use for profitable tree-growing.

The best way of preserving some of the wide tracts... will be to afforest them on the above lines: the face of nature is changed, it is true, but in a way no one could seriously cavil at. (Abercrombie, 1926)

This strategy rings true with modern approaches to forestry and even in the conception of the shortly to emerge Forest Parks. In 1926, Acland responded to some critical letters in the pages of the *Guardian* (Acland F.D, 1926):

I feel certain that many of those who now protest against planting a certain place would, if they could see the same place eighty years hence when the trees (being vegetable) are ripe for felling, be the first to protest at the vandalism...

This is a familiar argument throughout the story of the Great Spruce Project. It assumes that even-aged plantations would be managed by a silvicultural system of clearfelling. If they were (and they generally have been), managed that way, of course the argument suggests a flow of disbenefit at planting *and* felling (Price, 1971).

An article in *Nature* (1937) reviewed the controversy, in particular the report of the Joint Informal Committee. *Nature* considered it optimistic to assume that compromise was possible between “large-scale afforestation and the preservation of areas of typical natural beauty.”

In September and December 1936, Abercrombie and “influential” supporters wrote to the *Times* (Abercrombie et al., 1936a; Abercrombie et al., 1936b) dissatisfied with the Forestry Commission’s failure to rule out afforestation in a wider area, and hoping that they would afforest “suitable land” elsewhere.

The coalition assembled by the Friends of the Lake District appears to have been formidable, signatories to the petition and those involved in the delegation to meet with the Forestry Commission included bishops, aristocrats, academics and politicians. This coalition seems to have had surprisingly little access to political power, especially in the face of the constitutional and bureaucratic power of the Forestry Commission and its lack of direct democratic control.

One source of stability was evident in the exchanges of 1937: frequent comments on the part of opponents that they had little quarrel with the general national project of afforestation for timber production and employment:

Lord Balniel: There are plenty of districts elsewhere, not very far from the lake area, where the right hon. and gallant Gentleman would be welcomed. Those districts are crying out for trees, and they are districts that would be eminently suitable for whatever kind of trees the Commissioners wished to grow. (HC Deb 08 December 1937 vol 330 c525)

Nicholson: I say quite definitely, before I make any criticism, that, in fact, on the whole, by and large, the Commissioners are a good thing within their limitations. Their limitations are very severe. (HC Deb 08 December 1937 vol 330 c483)

An editorial in the *Observer* (1927) railed against damage to ancient trees in the New Forest while suggesting that scientific forestry should be welcomed with “open arms.”

Other more general criticism was made, the MP for Lowestoft, Mr Piers Loftus, complained more generally about the appearance of new plantations, suggesting that a “balance” of objectives and some concessions would meet the objectives:

...these grievances, where they are at all legitimate, might be met quite easily by the Commission. In my own counties, Suffolk and Norfolk, undoubtedly the miles of conifer forests introduce an alien element into the landscape. As one motors through miles of these conifers, one feels that they are alien, and one might almost call them totalitarian woods. I suggest that the Commission would improve matters very greatly if they planted the borders between the roads and the forests of conifers with deciduous trees. (HC Deb 01 July 1938 vol 337 c2346)

There clearly were alternative voices and a coalition of opposition.

15.3. Policy decision

The policy process was an interesting precursor to late twentieth century approaches to governance and collaboration. A Joint Informal Committee of the Commission and of the Council for the Preservation of Rural England was set up.

The committee published an agreement (Joint Informal Committee of the Forestry Commission the Council for the Preservation of Rural England, 1936) that a core area of 300 square miles would be excluded from the Forestry Commission plans. This represented about one-third of the future National Park (Miles, 1967). There was also a “hatched area” where afforestation would be subject to discussion. More specifically, 178 hectares of land in Upper Eskdale would not be planted, but the Forestry Commission would require financial compensation for not so doing (Oosthoek, 2013, p.98).

The Friends of the Lake District did not agree. Their case was ultimately embodied in Symonds’ book (1936), subtitled *A Reply to the Forestry Commission’s White Paper of 26th August 1936*.

15.4. Rational stages approach

Individuals: policy entrepreneurs and issue experts

It is clear that Symonds was a policy entrepreneur in championing the protection of the Lake District. He retired from a successful teaching career at the age of fifty, in 1935, apparently to devote himself to protecting the Lake District. Rawnsley and Abercrombie had both been policy entrepreneurs in the setting up of the National Trust and the Council for the Protection of Rural England. All three of these organisations are now of major significance. It is hard, from a twenty-first century perspective, to understand how they could be relatively impotent in the face of a relatively young forestry institution.

External shocks and crises

No external shocks can be identified. The international situation became gradually more threatening to Britain during the late thirties, a further war with Germany became an increasing possibility. This is not evident in the forestry evidence, even in 1937. Some perspective is provided by the fact that the full phrase “German submarine” appears fifteen times in Hansard of 1937 (UK Parliament, 2012). This

suggests that the original purpose of the afforestation programme may have been in the minds of actors on all sides.

Political parties

The Conservative manifesto in the general election of 1935 was silent on forestry policy, but included aspirations for agricultural production. The Labour Party proposed nationalisation of land in 1931 and 1935. In 1931 it advocated “the scientific re-organisation of agriculture.” Both parties prioritised relief of unemployment.

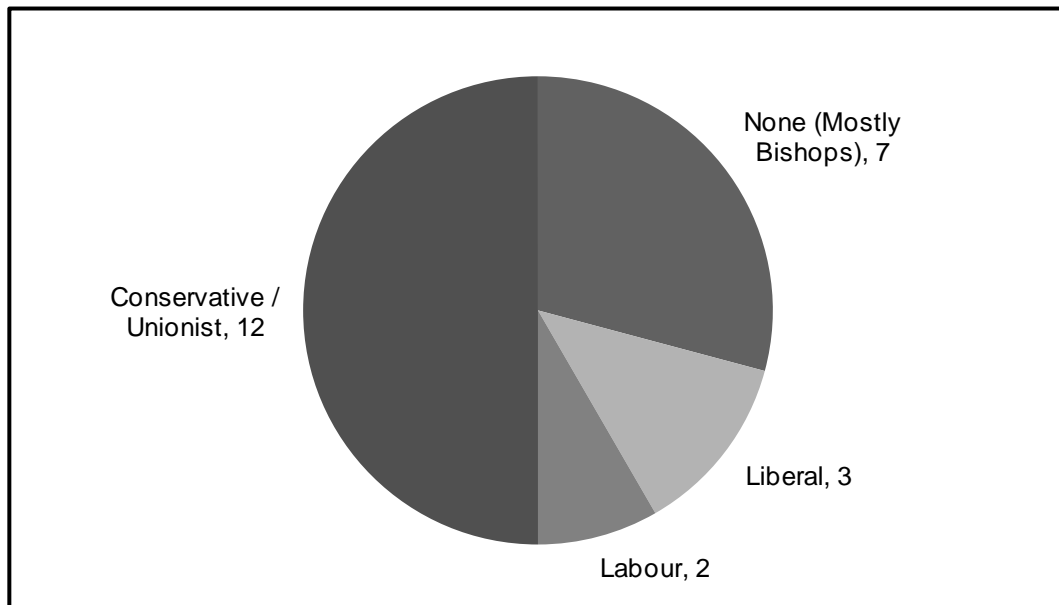


Figure 15-1 Political affiliations of parliamentary signatories to petition against Lake District afforestation (Symonds, 1936)

The Liberal Party manifestos were similarly silent on forestry. A parliamentary quote from David Grenfell, Labour MP for the Gower, (a Forestry Commissioner) described attitudes:

Two of my colleagues are on the other side of the Committee. There are not usually two sides upon the Forestry Commission. I have never had the satisfaction of working upon a body where party politics were so completely absent. (HC Deb 01 July 1938 vol 337 c2294)

It seems clear that the political and ideological consensus from before the First World War had persisted to the eve of the Second World War. A pithy Treasury memo noted that: “there can be no danger of the agreed policy being endangered by the luck of the polls for all parties are agreed in the support of afforestation”.

The Forestry Commission was directed to concentrate its work on providing employment in Special Areas. One of these was west Westmorland, which made afforestation in part of the Lake District a priority. The claimed employment benefits of afforestation (justified in these early labour intensive phases) continued to support the Forestry Commission’s position.

Veto power - legal

There is some evidence in the case of this policy decision process of a strict legalistic veto power described in the literature. Both critics and supporters of the Forestry Commission, and the Treasury, referred to the fact that the Commissioners were not legally empowered to take account of “amenity”.

Sheail (1981, p.183) describes inter-departmental conflict between the Treasury and the Forestry Commission. This started with the Treasury Solicitor advising in the early 1930s that the Forestry Commission did not have the power to engage in providing outdoor recreation, and includes a memo from the Permanent Secretary, Sir Warren Fisher, opposing the conversion of the Forestry Commission into “an agency for promoting hiking”. The Treasury took the view that if such recreation was to be supported then it should be at the expense of the Ministry of Health. The Prime Minister, Ramsay MacDonald, intervened to advocate control recreation, which might cause damage by “fires and less disastrous incidents”.

Symonds (1936) makes clear his frustration at the Commissioners’ “total intransigence” in the face of powerful individuals and popular petitions. He draws attention to the lack of political accountability:

Once they have received their annual grant nothing can hold them, for no Cabinet minister is responsible for their conduct.

This is however more institutional than “veto” in the legal or constitutional sense implied in the literature. The Treasury memo of 1927 (TNA: CAB/24/190, 1927), notes that the Commission were “placed in a unique position of controlling an assured (budgetary) provision”.

Sir Godfrey Nicholson MP (Conservative), proposed a confusingly double-barrelled motion (dealing with afforestation in the Lake District and advertising hoardings in general) in December 1937:

That this House, recognising the importance of the preservation of amenities, wishes to call attention to the ... anxiety that exists with respect to the activities of the Forestry Commission in the Lake District and other areas of great natural beauty.

Nicholson set out two limitations of the Forestry Commission. The first was legal and thus in the realm of “veto”:

...there is the limitation of their terms of reference in the Act of 1919 which set them up. The terms of reference imposed on them are purely economic. Section 3 does not say a word about preserving the beauties of the landscape or anything of that sort, and in another section directions are given for the composition of consultation committees. You have the representation of all the economic interests and of the purely afforestation interests, but there is no representation for the people who are interested in amenities. That is a very severe restriction. (HC Deb 08 December 1937 vol 330 c484)

This debate in December 1937 drew out a number of further concerns about what would be called “balance” in the 1980s:

It ought to be the duty of someone to ask: Is it in the national interest that a conifer forest shall be placed in Eskdale? That question is not being asked. The Forestry Commission say, quite rightly, that they have no authority to ask it, and they are not even allowed to ask it. Their duty is laid down in various Statutes. ...There is no mention of beauty or amenities. That is not only

the view that I take of the duty of the Forestry Commissioners from looking at the Statute; it is quite clear that it is the view that the Commissioners take themselves. (Henry Strauss MP (Conservative) HC Deb 08 December 1937 vol 330 c489)

Stalemate

There was effective stalemate: the Forestry Commission wanted to afforest more, but could not, and the Friends of the Lake District and others wanted to tighter limits. An attempt to reach an agreement appeared to be nothing of the sort, in that 10,000 people signed a petition after it had been reached. However, “hurting stalemate”, as described in the literature (Weible, 2006), requires suffering from failure to agree, and that there be no further venue for discussion. The informal committee’s continued existence, and avenues outside it referred to by Ryle, suggest that this latter condition was not met.

15.5. Institutions and bureaucracies

The Forestry Commission was certainly characterised by some of those involved as something of a technocratic power unto itself led by a powerful individual. Recounting the experience of a meeting between a delegation and the Forestry Commission, Symonds describes the impression of power:

The Commissioners can snap their fingers at public opinion, which has been strong and definite. Men of much occupation and high repute address them in vain; all such are sent back to their proper business: they waste their time and ought to know it. If they go in deputation, urging a serious cause with some force and dignity, and not without that eloquence which as serious plea does on occasion bring to men of serious and disinterested mind, they are scolded. They are informed from the chair; We have decided... (Symonds, 1936, p.18)

This provides evidence of the considerably role of Roy Robinson, who had become Chair in 1932, having been Director General before this. He thus exercised unusual power during this period. Ryle (1969, p. 55) approvingly describes internal excitement not only at having a professional forester at the head of the institution but also one who would “balk at nothing to achieve his goal” and was a strong “silvi-political negotiator”. Indeed this was constitutionally extraordinary, as noted some years later by Earl Winterton in 1951 in the House of Commons, (below).

The Forestry Commission appears to have felt confined by its legal powers. Unable to make some of the changes proposed in the Lake District. The question arises as to what degree this position was one of ideological choice or inherent institutional mindset.

Institutional learning – Forest Parks

Forest Parks are indirectly related to the progress of the Great Spruce Project since they were effectively seen by the Forestry Commission as a use for land not suitable for afforestation. Tsouvalis (2001, p.114) alludes to in the unusually long and discursive Commission’s annual report for 1934, which suggests a capacity for learning on the part of the Forestry Commission which “...thus conceived of the idea” of National Forest Parks. A later Treasury archive document casts intriguing doubt upon this. Sir Alan Barlow wrote to his colleague Padmore:

When a storm blew up over their operations in the Lakes, the Treasury impressed on Sir Roy Robinson very strongly that he must make some concession to public opinion and I am not sure

that the Forest Park idea did not first come from here. The Forestry Commission to begin with objected to it on account of the danger of fire. (TNA: T161/1195, 1942-1945, 26 Nov. 1943)

While Barlow's reminiscence is revealing, there is other evidence of the learning ability of the early Forestry Commission, albeit, as the Lake District case shows, only to the level of modest compromise on productivist objectives. There is considerable emphasis in the Forestry Commission comments at the time on the use of unproductive land for these secondary purposes. A further section of Barlow's minute notes that the scope for Forest Parks on this basis might be reduced by "modern mechanical cultivators" with fewer open "hill tops which five years ago were thought to be useless". Tsouvalis (2001, p.115) also suggests that Pringle's description of the origin of the Forest Parks was a "re-interpretation" in the 1990s. Pringle represented the development as a change "all those years ago from an essential but narrowly-focused policy of creating a national reserve of timber to one involving the multiple use of the forests" (1994, p.24). Barlow's minute suggests the Forestry Commission had to be pushed. Pringle's case is however somewhat supported by an annual report:

It appears to the Commissioners that by taking a little thought and possibly incurring a little additional expenditure in the utilisation of the land acquired for the new forests it may be possible to provide, for the future, areas as highly prized by the public as is the New Forest today. (Forestry Commission, 1934)

Another Whitehall institutional perception of the Lake District controversy came later, in an internal memo of the Ministry of Agriculture in 1944:

The Forestry Commission have never taken any trouble about their public relations and almost to have enjoyed having fights with everybody with whom they came in contact. They have never troubled to understand the point of view of the Agricultural Departments, the National Trust, the farmers in areas in which they worked (whether hill farmers or mixed farmers) nor the Friends of the Lake District, nor the people of Wales. Their general attitude towards the activities of the interests and organisations with they are brought into contact appears to be one of hostility. (TNA: MAF 141/105 B, Oct 1947)

This paper resulted from a series of field visits by MAF staff in preparation for greater ministerial control. It is unusually forthright for an official memo about fellow civil servants.

Parliamentary interventions shed light on the technocratic nature of the Forestry Commission. The estimates debate was a constitutional opportunity to generally question Forestry Commission actions, (in the absence of a minister):

These occurrences give one a somewhat uncomfortable impression about the Forestry Commission. We find the farmers grumbling, we find the men grumbling also, and we find the new works that are being created becoming rather a scandal and getting the Commission censured in public. We are not quite sure, therefore, that the Commission is the right body. Certainly it is a very bureaucratic body, and people feel some doubt as to the value of its work. (Clifton Brown HC Deb 01 July 1938 vol 337 c2327)

The debate also dealt with the suggestion that the Forestry Commission should employ landscape experts. Sir George Courthope, a Forestry Commissioner, irritated some members with his attempt to gloss over this:

He said he wished we employed landscape consultants. Probably, if opinion was taken as to the most prominent landscape consultants for the purpose to-day, the names would be those of Sir Guy Dawber and Professor Patrick Abercrombie. We are consulting them both.

Mr. G. Nicholson: I meant as part of the Forestry Commissioner's staff.

Sir G. Courthope: We consult the Standing Committee of the Council for the Preservation of Rural England, and we get this Standing Committee's advice.

Lord Balniel:⁶⁰ But you do not take it. It is a little unfair to use Professor Abercrombie's name as a consultant without recording how anxious he was to prevent the planting of Eskdale and Duddondale, and, indeed, to increase the sterilised area. (HC Deb 08 December 1937 vol 330 c529)

This thesis explores the forestry policy inertia, MPs were calling for landscape professionalism to be available inside the Forestry Commission in 1937. It was not until 1963 that the Forestry Commission finally appointed Sylvia Crowe as a landscape consultant (Forestry Commission, 1963). Internal landscape experts were appointed after this. A twenty-six year period of inertia can thus be identified between these dissenting voices and ministers announcing that:

The Commission, ... will devote more attention to increasing the beauty of the landscape. (HC Deb 24 July 1963 vol 681 cc1467-72 1467)

Ryle (1969, p.259) describes the Lake District discussions as involving “much bitterness”, and the meetings of joint committees as becoming less “vitriolic” as time passed. He then lists opponents of afforestation in various parts of the country with a sense that they were (in 1969) less important, “Lady Sylvia Sayer for one will accept her opinions about woodlands on Dartmoor as not having been universally acceptable”. With hindsight, this odd formulation could be reversed; Ryle’s opinions are not currently “universally acceptable”.

Perhaps this settled situation of the mid-sixties is also embodied in Miles’s (1967, p.77) view of the Lake District agreement as a milestone in the recognition of heritage landscape.

15.6. Policy network analysis

Policy networks and subsystems

A number of networks appear to be involved in this policy decision process. The Forestry Commission appears dominant, with Parliament intervening. The other organisations involved included the Friends of the Lake District (Oosthoek, 2013, p.97) and the Council for the Preservation of Rural England.

The Council for the Preservation of Rural England was founded in 1926, following a pamphlet and article published by Patrick Abercrombie (1926), an event which Sheail (1998, p.13) describes as an outstanding initiative “in terms of amenity and outdoor-recreation movements”.

⁶⁰ Lord Balniel (sitting in the House of Commons) MP for Lonsdale in N Lancashire including the south of the Lake District.

A number of influential individuals aligned themselves with this opposition, in particular Dr Temple, the Archbishop of York (and future Archbishop of Canterbury). The spread of influential supporters is shown in Figure 15-2, based on Symonds' listing.

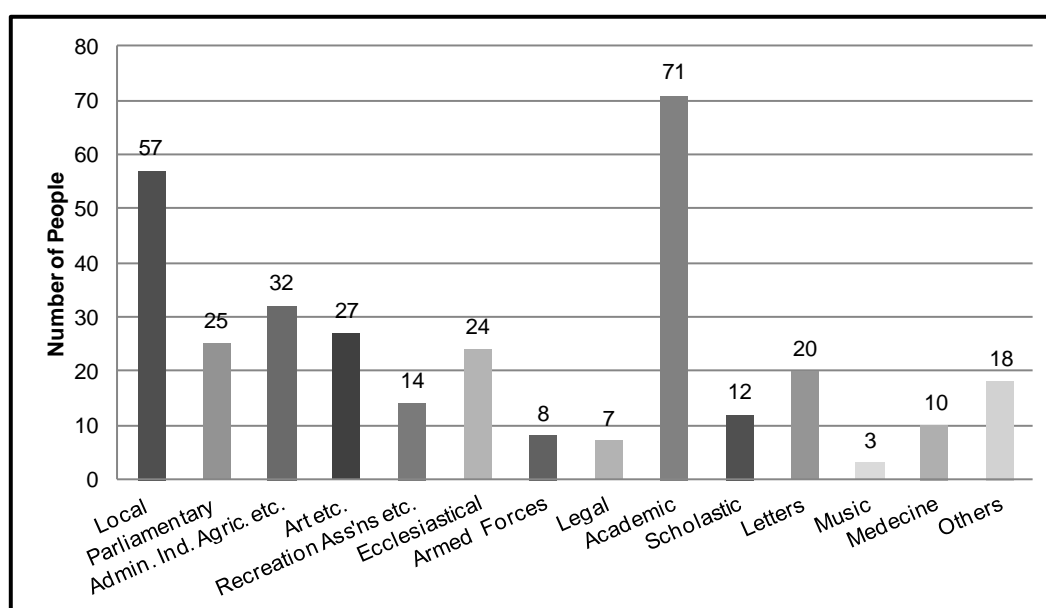


Figure 15-2 “Eminent” signatories to petition in opposition to afforestation in Eskdale and Dunnerdale and the “heart of the Lake District” (Derived from Symonds, 1936)

The signatories listed were clearly carefully presented according to status and significance. There were as many as 13,000 signatories collected between July and September 1935 (Oosthoek, 2013, p.98). Symonds notes that the vast majority, about 10,000, were collected after the Forestry Commission offer not to plant certain areas if they could be compensated. An arbitrary but representative sample of names across the fourteen categories of the more eminent published by Symonds produces: a Lord Lieutenant; an Earl; four Knights; a Bishop; a Professor; a General; a University Vice Chancellor, a Public School headmaster, and the organist of Christ Church Oxford.

Symonds noted that this apparently weighty lobby received short shrift from the Forestry Commission. The relative independence of the Forestry Commission from the government itself is striking: no evidence of government involvement has been identified. The list of supporters and petitioners provided by Symonds appears to represent significant centres of power and influence in British society, including twenty five parliamentarians, leaders of academe, and the Church of England, in addition to countryside and mountaineering organisations.

15.7. Critical policy analysis

Ideas, narratives, frames and discourses

There are various collective ideas, interpretations and meanings involved in this decision event. Lord Balniel made a point which relates to the mindsets and internal narratives, or even groupthink, of the Forestry Commission:

I know that some of the Commissioners believe that in planting spruce they are not destroying the beauty of this area and that they are not injuring it in any way. I do not believe that anyone else would agree with that view. It is a view, surely, that can be held only by people who are perhaps so interested in the work they are doing that they are blinded to other considerations. (HC Deb 08 December 1937 vol 330 c524)

Nicholson thought that in addition to legal restraint the Forestry Commission was restricting its own scope of action by a particular mindset:

...self-imposed limitations of the Commissioners. I hope that the Commissioners will not think that I am criticising them unduly, but many people have the impression that the Commissioners think that the plantations of conifers are automatic additions to the beauties of the landscape. (HC Deb 08 December 1937 vol 330 c485)

The aesthetic values involved in the perceptions of the Lake District as of “unique” value was pitted against the ostensibly materialistic utilitarian values of the Forestry Commission. Sheail noted the view of a Treasury official whose attitude fell in with the acceptance of the Lake District as special in the context of the worthwhile Great Spruce Project:

I do not think that the Treasury could object to a halt being called in the Lake District provided that the unique qualities and association of that part of the country are recognised to have made it an exceptional case... (Sheail, 1981, p.180)

Importantly, even Symonds, appalled as he clearly was by both the proposals and the high-handed attitude of the Forestry Commission, was not ready to question the afforestation policy as a whole:

Critics of the Forestry Commission ... are no critics of the general policy of afforestation. (Symonds, 1936, p.2)

To the modern reader this is startling. Symonds’ polemical book is an indictment of the visual effect of afforestation, but he explicitly recognises the general value of the Great Spruce Project. However, the Forestry Commission discourses themselves seem derived from the materialistic scientific and reductionist values of the forestry policy entrepreneurs from before the First World War.

Text analysis of three corpora reveals something of the balance between the Forestry Commission, Parliament, and the media. The individual values cannot be compared but the patterns within each corpus can be visualised.

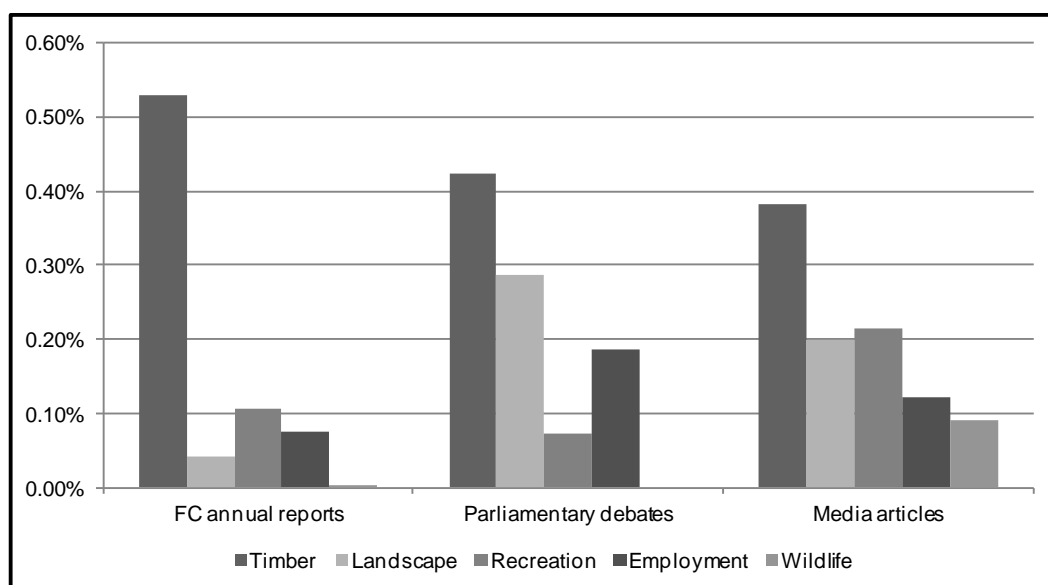


Figure 15-3 Frequency of vocabulary related to “objectives” in three corpora 1934-1938⁶¹

This analysis included a large amount of data (more than 200,000 words); five annual reports, five years of Hansard debates including the word forestry in the title and a seven newspaper articles. Chi-square analysis suggests that some of the differences are very significant. The Forestry Commission values for timber are much higher than an expected distribution, but so are the figures for landscape, while recreation is surprisingly lower, given the development of National Forest Parks at this time. Parliament showed a higher than expected value for landscape but lower than expected for recreation. Parliament appears to have shown less than expected interest in timber issues.

Questioning ideas of the afforestation programme

There is modest evidence of opposition to the afforestation project on biodiversity or landscape grounds in the 1920s. Ideas of natural heritage were developing, for instance in the purposes of the National Trust, which included preservation of natural environments. One of the Trust's founders, Canon Rawnsley, had warned of the landscape quality effects of conifer forests in 1920 (Section 13.8), and wrote approvingly in 1920 of a Trust committee which was determined to keep a woodland “in a natural state” and “Never to plant foreign trees” (Rawnsley, 1920).

The general subject of nature conservation was little developed, despite the tradition of “naturalism” stemming from as far back as Gilbert White's *The Natural History of Selborne*. A newspaper article of 1929 bemoaned the lack of protection for wild flowers, and cited afforestation as a threat (Crawley, 1921).

Nail (2008, p.70) cites Perkins's (1920) criticism of “rectangles of dark conifers”. His title itself is revealing of a different attitude (published in a forestry society journal): “*A plea for the consideration of the aesthetic side in restocking our warfelled woods*”.

⁶¹ A chi-square test (excluding wildlife) showed a relationship between the values and the different corpora ($\chi^2 = 238.0$, df-6, $p > 0.01$).

Hardwoods and softwoods – “criticisms” 1929

There was a review of the reasons for planting a “preponderance” of softwoods in the Forestry Commission annual report for 1929, and a paper was published (eventually appended to the annual report of 1934).

Tsouvalis (2001, p.113) saw this paper and the terms of its analysis as evidence of a knowledge-culture focussed on economically efficient production of timber for strategic reserves. This led to a defensive reaction to criticism. This institutional thinking might seem surprising in such a young organisation, but it was of course well rooted in the policy entrepreneurs of the early century, whose mindsets were now embodied in an institution.

Productivism

Nail (2008, p.122) suggests that since National Forest Parks involved less productive land, the development did not indicate any amelioration of the productivist mindset, but if anything was part of it, a search for some use for all land. Foot (2010, p.64) notes a “expediency” in providing access to land “too high up to be planted with trees”. On the other hand he also draws attention to the genuine enthusiasm of one Commissioner, the past Chair and a member of the Acland Committee, Sir John Stirling Maxwell.

Oosthoek (2013) focuses on Scotland, and draws a distinction between Scottish and English ideas of landscape. He contrasts the narratives of visual and cultural appreciation of Wordsworth and Walter Scott. Oosthoek sees Scott’s attitude as more utilitarian (despite criticism of non-native conifers) than Wordsworth’s, and maps this onto the scale of the Scottish and Welsh landscapes.

Class and ideology

Interesting comments on the socialist nature of the project, supported by representatives of the landed ruling classes, were made by Thomas Johnston, a Labour MP, in 1938:

The right hon. and gallant Gentleman the Member for Rye (Sir G. Courthope) would, no doubt, be very angry if I hailed him as a fellow Socialist. Yet to-day he has been advancing first-class Socialist doctrine. ... Not only has he told us to-day that he and his friends have now nationalised 1,020,000 acres of land a considerable figure—but he has shown that it has been done at a profit. He has proved that the only part of landowning in Britain to-day which is financially successful, is the part of it which is under State Socialism. (HC Deb 01 July 1938 vol 337 c2348)

15.8. Advocacy coalitions

Using an advocacy coalition lens reveals an underlying stability in the consensus about the national desirability of an afforestation project (see Figure 10-3 Advocacy Coalition Framework). Instability only relates to the more narrowly defined question of the Lake District in particular. In this respect there was a stable coalition with a belief system in place around the Forestry Commission, which succeeded in maintaining its power, making only limited retreat in the Lake District.

The frequent comments on the part of those raising the aesthetic issue that they had little quarrel with the general project of afforestation appears to have amounted to a belief system. This represents what Giessen might call a “stable parameter”. There is no clear external event which might cause significant policy change. There was an eventual compromise, with minor concessions by the Forestry Commission. This might have some of the attributes of what Sabatier and Weible (2007) term “hurting stalemate”, but the fora for resolution and modest concessions of the Forestry Commission appear to have mitigated this.

The committee members are listed in the 1935 Forestry Commission Annual Report and membership appeared to be well balanced and influential (Forestry Commission, 1935, p.11). The 1936 Forestry Commission Annual Report described the meetings as characterised by “friendly discussion”. Sheail (1976) suggests that Robinson genuinely sought consensus, or at least could see that a withdrawal in this one area was acceptable given the Forestry Commission’s progress in general.

In terms of the Advocacy Coalition Framework model, the Lake District advocacy coalition failed to meet a number of the criteria for significant policy change. While it clearly represented some strong sociocultural values, these were insufficient to overcome the materialistic and technocratic imperative established after the First World War. There was therefore insufficient consensus for major policy change. Constitutional power had switched to the foresters and their new institution. While some change of public opinion is evident in the scale of the petition and impact on at least some elected representatives, the political system was not open to change.

Two features seem to have most explanatory power. Firstly, the productivist strategic objective was accepted very widely in society, simply not in the Lakes. That said, MPs and others raised landscape concerns in Thetford and in Northumberland and more generally. Some of the arguments could have been heard in similar terms in the early 1980s. The second feature was the relative intransigence and institutional and bureaucratic power of the Forestry Commission to even the most modest changes to their plans for the Lake District. The key new feature is the clearly expressed alternative views held by new and developing coalitions and institutions around scenic values.

15.8.1. Uncertainty, time and foresight

Uncertainty was raised intelligently by one MP in a debate in 1938. The Forest of Dean MP, Mr Morgan Philips Price, (see Section 12.5) queried the value of the softwood effort:

English oak, ash and sycamore all have a ready market, but the market for soft woods for the pit timber trade is uncertain because we do not know what the future of the coal trade is in this country. There have already been considerable changes in the last 20 to 30 years. Coal is not required in the same quantity as it used to be because of oil and fuel saving devices of various kinds.

I often tremble to think what may happen when all these hundreds of thousands of acres of soft woods which have been planted in recent years become ready for the market as thinnings or in the final stages. Will the market be able to absorb the colossal amount of wood? ... the policy of planting large quantities of soft wood is fraught with danger. (HC Deb 01 July 1938 vol 337 c2322)

The likelihood of mining timber being required long in the future was also questioned by Captain Aland Gandar Dower:

Captain DOWER: asked the hon. and gallant Member for Rye, as representing the Forestry Commissioners, by what date will the spruces which have been planted and which are now being planted by the Forestry Commissioners in the Lake district be ripe for felling; and what other commercial use than for pit props has the spruce which the Forestry Commissioners plant?

Colonel Sir GEORGE COURTHOPE (for the Forestry Commissioners): The spruces will arrive at maturity for felling in 60–70 years. Thinnings commence at about the twentieth year and are repeated periodically thereafter. Spruce timber is used for numerous commercial purposes, for example, scaffold and other poles, dockyard shorings, bond shooks, saw timber and wood pulp.

Captain DOWER: Will the hon. and gallant Member bear in mind that pit props, which is one of the principal uses for this timber, will be no longer required by the time these trees are ready to be used?

Sir G. COURTHOPE: It is only the thinnings which are used for pit props, not the final crop. (HC Deb 05 May 1936 vol 311 c1519)

This exchange is notable for its logic: both Dower and Courthope make legitimate points based on different timescales. We can now (2013) reflect, with hindsight, that oil and gas *have* replaced British underground coal production and softwood prices have fallen considerably.

A number of speakers, including Henry Strauss, commented on the deleterious landscape effect of the balance of conifers and broadleaves:

Professor Trevelyan points out that as a result of the fact that hardwoods are not being planted and conifers are being planted, the beauty of Britain will be halved in the next 100 years. (HC Deb 08 December 1937 vol 330 c490)

The means for measuring the “beauty of Britain” is not stated. The prediction has a further twenty-five years to run. There is some time for remedial action.

There is evidence of policy entrepreneurs and of some aspects of veto power in the case of the Lake District. Politics and external shocks and crises appear to be less significant. Institutional relations were confused, and the Forestry Commission’s institutional learning was limited. The policy entrepreneurs formed part of a lobby and policy network and coalition, which was surprisingly unsuccessful given its apparent substance. Productivist attitudes dominated the Forestry Commission. While there was clear development of aesthetic and recreational values, the overall national productivist imperative was essentially unchallenged.

Chapter 16.

Policy decision process - more of the same - adoption of Post-War Forest Policy 1943

16.1. Introduction

The arrival of the Second World War fitted exactly the expectations of the Acland Committee policy-makers, confirming the need for a reserve of standing timber in time of blockade. Their predictions were confirmed and they immediately sought to review, hone and develop the same policy solution. This had a momentum which took it well beyond the redundancy of the strategic objective with the advent of the atom bomb. It was not significantly questioned until 1957.

16.2. Planning for a third war becomes an issue

In 1938, the year before the outbreak of the Second World War, Troup⁶² published a book entitled *Forestry and State Control* (1938),⁶³ which demonstrated the continued vigour of the afforestation argument:

- ‘world’s diminishing timber supplies’
- ‘a measure of national defence’
- ‘derelict’ land which could be utilised.
- ‘providing employment’
- ‘part time employment’ for agricultural workers.

The Commissioners seized the initiative. As an institution they mobilised support and expectation and gained a mandate for a major expansion of single-purpose industrial scientific forestry.

The progress of afforestation to 1939 was below the Acland Committee’s aspirations (Tsouvalis, 2001), the plantations were too young to provide timber in the new war, so the “devastation” of the existing woodlands began again.

Recommended – post-war forest policy

The report is dominated by a rehearsal of the strategic argument, to the extent of incorporating the Acland Committee’s summary. The scale of planting proposed was a considerable increase upon the Acland Committee’s planting targets, which had included the island of Ireland (Ryle, 1969, p.28). The report contains numerous rational comments on the uncertainties of the future.

⁶² Professor of Forestry at Oxford and first Director of the Imperial Forestry Institute (Stebbing, 1940)

⁶³ With an insert noting that in the months since publication Austria and parts of Czechoslovakia had been incorporated into the German Reich.

The scale of forest area recommended was five million acres (about two million hectares) of effective forest. Two million acres were in existing forest area and a further three million acres (about 1.2 million hectares) of afforestation to be spread over five decades for which targets were set out. It was estimated that when completed this would produce about 35% of current needs.

Table 16-1 Area of afforestation proposed in Post-war Forest Policy (1943)

Decade	Acres	Hectares
First	500,000	202,000
Second	750,000	304,000
Third	750,000	304,000
Fourth	600,000	243,000
Fifth	400,000	162,000
Total	3,000,000	1,215,000

Three rates of afforestation were rather confusingly presented in a combination of periods and mixes of new forest and replanted forest, to be created in the first ten years:

“Pre-war Basis” of a total of 350,000 acres (142,000 hectares), costing £18.1m;

“Intermediate Programme” of 375,000 acres (927,000 ha) of afforestation with replanting of 500,000 (1,235,00 ha), costing £37.3m, and;

“Desirable Programme”, of 500,000 acres (1,235,000 ha) of new planting with 600,000 acres (1,482,000 ha) of replanting, costing £47.1m.

The “Pre-War Basis” was simply dismissed as “so manifestly inadequate now that we need not discuss it further”. It was assumed that nearly all of the afforestation would be done by the state.

The report was published in June 1943. The Commissioners did not recommend any change to the constitutional status of the Forestry Commission due to the “obvious danger that a change of Minister might entail a change of Policy.” Should Ministerial control be insisted upon; the Commissioners suggested the Lord President of the Council.

The balance of objectives identified by text analysis shows timber objectives predominating, but employment, recreation and landscape related text was present. Recreation made an appearance in this series of statistics in the Post-War Forest Policy. No vocabulary related to “wildlife” was detected.

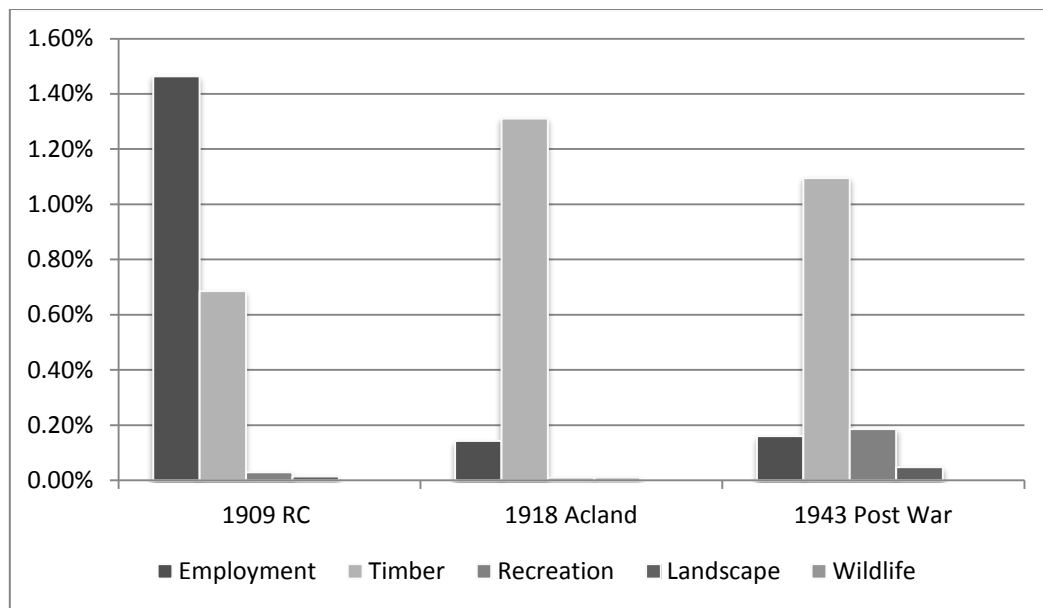


Figure 16-1 Frequency of vocabulary related to “objectives” in key reports to 1943⁶⁴

16.3. Policy decision – Forestry Acts 1945 and 1951

The government reluctantly published the report, giving little commitment to acting upon it. It was decided that the Forestry Commission needed to be brought under Ministerial control: shared between the Minister of Agriculture and the Secretary of State for Scotland. This was enacted by the Forestry Act of 1945. Later in 1945 a policy statement was made effectively, but not completely, endorsing the Commissioners' programme. In 1951, further legislation provided for private woodland measures and stated the Forestry Commission's objective of maintaining a reserve of timber, partly by means of felling regulation.

16.3.1. The development of the policy recommendations

The alacrity with which the Forestry Commission started decadal planning for a future war is startling. Meeting on the 7th of December 1939 (F18/235), a mere three months into the war, it identified three objectives. The first two were to maximise timber supply, and to care for existing plantations, but the third was “to prepare to advise Government in due course as to future Forest Policy.” This final objective was singled out for “active steps” at the suggestion of Sir George Courthope and William Ling Taylor. Sir George Courthope was in favour of obtaining seed and preparing to increase planting. Commissioners Ropner and Smith sought to plan post-war employment. Robinson appears from the minutes to have played a reasonable and restraining role upon his colleagues, doubting that:

...the situation had disclosed itself from every point of view sufficiently to enable the Commission to plan. A detailed scheme prepared now might not fit into the frame work of future

⁶⁴ A chi-square test (excluding wildlife) showed a relationship between the values and the different reports ($\chi^2 = 943.0$, df-6, $p > 0.01$).

national general land policy; two years hence social and economic conditions might be entirely changed. (TNA: F1, 1918-1969)

Robinson's position seems reasonable. With hindsight we know that the Second World War had barely started to unfold. Two years hence was the 7 December 1941. The Japanese attacked Pearl Harbour at dawn. France had fallen. A German army had reached the suburbs of Moscow. Ryle (1969, p.98) valued the fact that the policy was drawn up entirely within the Forestry Commission. Writing in 1965, his enthusiasm is striking:

...without doubt the greatest and most constructive work the Forestry Commissioners have ever undertaken either before or since.

Tsouvalis comments on the way the policy emerged from a group within the Forestry Commission's modes of thinking, people operating as social beings to make sense of and value their environments.

The way in which the process deviated from a conventional stagist or policy cycle approach is thrown into relief by Oosthoek's (2013, p.71) assumption:

In response, the Government asked the Forestry Commission to produce a review of forestry policy and to advise...

Examination of minutes of the Commissioners meetings and archive material shows this to be an erroneous description of the interaction.

There was outside support, by February 1940, questions were being asked in the House.

Captain Medlicott asked the right hon. and gallant Member for Rye, as representing the Forestry Commissioners, whether he is prepared to initiate a long-term policy of afforestation upon a larger scale than obtains at present, with a view to lessening in due course our dependence upon imported supplies of timber?

Sir G. Courthope: The Forestry Commissioners are keeping this matter continuously under review. It is premature at this stage to attempt to formulate any definite plans. (HC Deb 07 February 1940 vol 357 c245W)

It is important to understand the potential dynamics and mechanisms. No evidence has been found, but it could be that Courthope mentioned to his colleague Medlicott that he could do with a friendly "planted" question on this subject. Medlicott was also an "inveterate" and "catholic" poser of questions (Dutton, 2006).

By November 1940, the Forestry Commission activity was ruffling feathers in Whitehall. A minute to Robinson from an (indecipherable) official in the Ministry of Agriculture complained that:

I have received a copy of your memorandum (Land Policy with Special reference to forestry) which I understand has been sent to the minister of Agriculture. I did not know that it had been decided that any memorandum should be sent to the minister of Agriculture and, there are certain paragraphs with which I disagree in the memorandum which you have sent. (TNA: F18/235, 1940)

This is actually rather strong and infuriated wording by Whitehall standards (from personal experience), and provides evidence of the confident institutional behaviour of the semi-independent

Forestry Commission. By 1941 the Forestry Commission was engaged in serious debate with the Treasury. Foresight was being attempted:

...it is a comfortable but large assumption that we shall always be able to draw from abroad the timber supplies and wood products which are essential to our national economy. The broad facts of the situation are clear though they cannot be reduced to statistical form. World reserves diminish steadily while uses extend. It is a situation in which foresight should be well rewarded. (TNA: T161/1195, 1942-1945)

The Forestry Commission also claimed that their emphasis on softwoods had been justified by events:

The Need for Softwoods. The Commissioners have received much criticism for their action in planting so great a proportion of softwoods, which are held to be less beautiful than hardwood trees or even downright ugly. This war has justified their policy and pointed the way for even more softwoods. (TNA: T161/1195, 1942-1945)

Treasury files (TNA: T161/1195, Dec. 29, 1942) record two officials discussing whether the scale of proposals the Forestry Commission had in mind were not “over-insurance” for a possible war some 60 years hence.

Treasury officials (TNA: T161/1195, 1943c) later set out their calculations showing a rate of return “considerably less than 3%” but noting the Forestry Commission stress on the value of the “insurance” angle, “the necessity for growing as many trees as possible in the national interest” (TNA: T161/1195, 1942-1945a; TNA: T161/1195, 1943b. Offering loans to private woodland owners, was rejected as the Treasury and Forestry Commission could not agree on an appropriate rate.

In January 1943 the Treasury indicated that the Chancellor had no objection to the Forestry Commission making proposals, but with no commitment on acceptance of their scale. On 8 February 1943 Robinson sent the report to the Treasury “as agreed on the telephone this morning” (TNA: T161/1195, 1943c), describing it as approved by the Commissioners, and seeking agreement to publish without delay. Robinson wrote that he was aware of an imminent parliamentary question and had drafted a reply:

The Forestry Commissioners have completed within the last few days their report on Post-War Forestry, and it is hoped that printed copies will shortly be available to Members.

Robinson asked of the Treasury that:

If the Parliamentary Reply is to be amended I must know to-day so that I can get hold of Sir George Courthope ~~first thing~~ tomorrow.

The process for answering this PQ has not been found in the files, but this case provides an effective test for observers over seventy years later. How did the eventual answer in the House differ from the Forestry Commission draft? There was a presumptuous tone to Robinson’s note: he clearly felt that it was a matter for him and the Forestry Commission. It appears to indicate that unless the Forestry Commission heard from ministers, it was going ahead. The deletion of “first thing” presumably meant the letter was delayed, and even Robinson concluded that he was in danger of assuming that the

Treasury and its ministers could or should be expected to respond instantly. The evidence of Hansard suggests that Robinson may have been somewhat put in his place over the next day or so:

Sir G. Courthope: The Forestry Commissioners have recently completed for submission to the Government a comprehensive report on post-war forestry. The report covers the question of replanting woodland felled during the war. (HC Deb 10 February 1943 vol 386 c1332W)

The Treasury must have been unhappy with this attempt to bounce it.⁶⁵ Robinson had sought to strengthen the case for immediate publication by noting that the Commissioners expected immediate publication, and that he had led the Royal Scottish Forestry Society to believe that they might have copies of the report in advance of his addressing them on 24 February, a mere two weeks later. The meeting in Edinburgh was referred to in a ministerial meeting (undated) (TNA: T161/1195, 1943a), which comprised no fewer than five ministers, with Robinson, and Sir Alan Barlow,⁶⁶ a Treasury Second Secretary. The Secretary of State for Scotland was also “strongly opposed” to publication: “It would arouse nationalist sentiment” and “controversy.” Going further, he said that:

A recent address by Sir Roy Robinson to the Scottish Forestry Association... had evoked protest among all sections of political opinion. He thought that the wording of the Report, even if that were not its intention, suggested that the Forestry Commission proposed to go ahead on their own without much regard to the responsibilities of other departments. (TNA: T161/1195, 1943a)

The coverage of the address in the *Glasgow Herald* made clear that the report had been submitted to the government, but took a tone implying that the contents would take place, including for instance loans to private owners. There was considerable debate in the pages of the *Scotsman* following its full coverage of the proposals (Scotsman, 1943). This was probably the forum for the protest alluded to by the Secretary of State for Scotland.

The Minister of Agriculture was “strongly opposed to publication at the present moment,” and thought dealing with private woodland was more important than an ambitious programme of state forests. Jowitt, the Minister without Portfolio, thought publication inevitable since the report's existence was widely known. The Chancellor (Sir Kingsley Wood) thought publication sooner or later inevitable, but that the Government should form its views. It was agreed that the constitutional responsibility of the Forestry Commission be referred to the Machinery of Government Committee, and that the rest of the report be considered, and that publication be delayed.

⁶⁵ Personal recollection: As a Whitehall policy officer I recall the Forestry Commission proposing a major programme, with expenditure, to include in a strategy document at a late stage of drafting. The Whitehall response had to be a phone call (from me) to say “you can’t it’s not approved.” My erstwhile FC colleagues had come up with a rough and ready estimate of a resource, and said “we could *do* that”. When I phoned the coordinator of the glossy document and asked how many actual commitments to “*do anything*” rather than “*explore*,” the draft contained. She said very few, and that it had been worrying her too.

⁶⁶ Sir Alan Barlow was involved in the question of “machinery of government” during the war. Barlow was thought of as reformer, but keen to keep expenditure in check, he operated well in London “clubland”. He had worked successfully for Addison and less so for the Prime Minister Ramsay MacDonald. (Rodney Lowe, 2004).

To summarise; the Forestry Commission drafted a report at its own initiative, gained agreement in principle to make proposals, let it be known it was in preparation and sought to get it published with a rubber stamp from the Government. Two Ministers were opposed to key elements of it.

In early 1943 Sir Kingsley Wood and the Minister without Portfolio, Sir William Jowitt (who was, or became, according to Ryle, something of an afforestation enthusiast), toured Scotland looking at both Forestry Commission and private woodlands. Ryle describes Robinson taking Jowitt on various other tours, and making him a “keen protagonist for a really bold forestry policy.” Ryle suggests that Jowitt in turn may have made Hugh Dalton, a future Chancellor, a “zealous pro-forestry politician” (Ryle, 1969, p.84). At the end of the tour they issued a press statement (TNA: T161/1195, 1943c) which lauded both Sir Roy Robinson and his staff:

...a man of world wide reputation and great skill and energy’, assisted by a “fine body of men” who “impressed me with their single purpose and zeal.

Jowitt maintained his interest and was photographed on a forest tour with Robinson several years later (Figure 16-2) when, as Lord Chancellor, he would have had no responsibility for forestry matters. The links with Dalton as Chancellor were clearly beneficial to the Forestry Commission, for he invited Robinson to visit, and offered money:

I have got more satisfaction from agreeing... £20 millions over five years for forestry ...than from any other expenditure since I got to the Treasury.

He reports (in his diary) receiving a Forestry Commission tie, and apparently enjoyed visiting forests with Robinson while on holiday: “This had been a very good holiday. Robinson had been a first class companion.” (Dalton, 1962, p.59).

There was certainly evidence of effective networking and coalition-building by Robinson. There is evidence that the Forestry Commission as an institution was successfully “bouncing” the government. “Commissioners” is used in these papers and reports, but this may underestimate the role of Robinson, who was clearly a key individual both as an expert policy entrepreneur and the powerful leader of an expert single purpose institution.

His institutional power was noted rather clearly by Earl Winterton in 1951 in the House of Commons:

...contrary to every canon of administrative propriety that a man should [not] be a public official of civil servant status,...for years longer than is customary in an ordinary Government Department and then for a further term of years be made the chairman of the organisation. That is not in accord with the ordinary practice in the administration of this country. (HC Deb 06 July 1951 vol 489 c2729)

He went on to say:

...that Lord Robinson has tended to feel, Le Commission c'est moi. I have heard people say outside this House that the Forestry Commission and Lord Robinson have always been one and the same thing.

I hope it will also be made quite clear that the Forestry Commission under the law as it stands is subject to the directions of the Minister of Agriculture, because it has not always been quite

so clear in the past. The matter was discussed in this House at considerable length before, and that is the position. (HC Deb 06 July 1951 vol 489 c2730)



Figure 16-2 Lord Robinson, Lady and Lord Jowitt and Mr Popert.⁶⁷ Easter Tour 1951 (Forestry Commission Picture Library)

This intervention sheds light upon the role of an individual and also upon the nature of the Forestry Commission as an institution. It may also be worth noting that Robinson was able to contribute to parliamentary debates in the House of Lords. Following his ennoblement, he made a number of interventions on forestry matters. Long, (1953) noted that:

The power which came to him with his honours of knighthood in 1932 and a peerage in 1947 was devoted to its advancement and forestry has lost its most important advocate.

Long also alluded to a practical and precise mindset, opposed to “frills”. Ryle (1969, p.118) suggests that his force of character meant the Commissioners “very, very seldom said him nay”.

There was in fact evidence of something of personality cult within the Forestry Commission. Standard issue portraits of Robinson, wearing a Forestry Commission tie and looking paternally benign, were still in evidence in corrugated iron Forestry Commission offices in the mid 1980s.⁶⁸

⁶⁷ Conservator South West England.

⁶⁸ Corris Forest District office circa 1988, (personal observation).

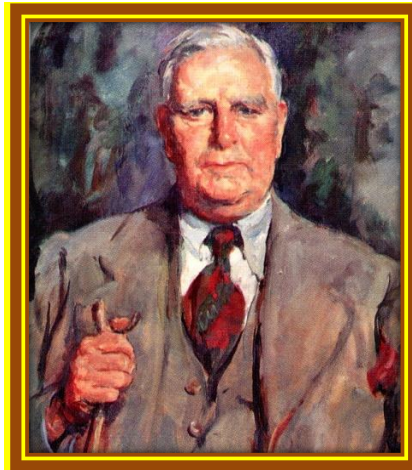


Figure 16-3 Lord Robinson of Kielder and Adelaide (Forestry Commission)

Later in 1943, another note of ministers' views provides further evidence of the institutional relations. It reviewed the debate about publication:

While all Ministers agreed that the Report would have to be published sooner or later, the Minister of Agriculture thought he would be embarrassed if a specific programme of Forestry were announced before an agricultural programme had been announced and that the publication of the Forestry Commission's grandiose scheme for five million acres of afforestation, which would involve acute competition with hill sheep, would arouse unnecessary controversy. (Fo

The Treasury reviewer agreed with the risk of controversy, adding a typical Treasury point; "No government could or would try to commit itself now to a 50 years programme." The paper notes that the Minister without Portfolio (Jowitt) was pressing for the even faster "Desirable" programme of 500,000 acres of afforestation in the first decade after the war. It seems possible this was a strategic alliance, Robinson and the Forestry Commission taking the traditional civil service line of the supposed intermediate of three options, with Jowitt advocating the "Desirable" programme. In March 1943 the Reconstruction Secretariat were circulating a paper comparing the Forestry Commission and Jowitt proposals, preparatory to a meeting with the Chancellor. Overall, the Treasury officials agreed that while forecasting was difficult, they saw no reason to disagree with the Forestry Commission conclusion that "supplies are bound to be short" and that home supply was "common prudence".

Both the "Intermediate" and "Desirable" programmes intended a target of 5,000,000 acres; the only difference lay in the expenditure required in the first decade. Perhaps this was an example of the (fictional) "Yes Minister" tactic, on the part of the Forestry Commission:

Bernard Woolley: What if he demands options?

Sir Humphrey Appleby: Well, it's obvious, Bernard. The Foreign Office will happily present him with three options, two of which are, on close inspection, exactly the same. (Lynn and Jay, 1989)

This point is supported by the notes of an interdepartmental meeting in preparation for the government statement of November 1945. The Ministry of Agriculture officials advocated the “Intermediate Programme” in place of the “Desirable”; Robinson “compared the two in detail for the first five years and pointed out that the difference was only “12,000 acres.”

On the question of timescales, a Treasury official (“D.H.R.”) opined (in manuscript) that economists would be unlikely to disagree with the comment that “where turnover is necessarily so long” then a “national industry” can be dismissed if it “doesn’t cover its costs or even yield a gross return at all, for a generation.” The lack of a hypothesis on future timber prices was regretted. The writer links the issue to “Article VII discussions” on free trade with the United States.

16.3.2. The recommendations – parliamentary reception

In July 1943, the House of Commons debated the report. Sir George Courthope underlined the case:

...based on experience of another great war and presented by a Commission which was appointed as a result of the first Report of 25 years ago. The Report we have before us to-day brings the picture up to date... (HC Deb 06 July 1943 vol 390 c1965)

The case for further afforestation effort did logically look “irresistible” and Sir George went on to address foresight issues:

...we must not run the risk of this happening again. We must provide, and provide as quickly as possible, for at least a substantial part of our own requirements for timber.

The experience of the last 20 years suggests that the use of other materials like concrete will not in the long run reduce the requirements of wood. Probably the same thing could be said of plastics.

At all events, that is a speculation which it would waste the time of the Committee to go into now.

All we are certain of is that large volumes of timber will be wanted both for peaceful commercial purposes and for war, if war comes again.

Therefore, we are confident that we are right in recommending that there should be provision as rapidly as possible for the future. (HC Deb 06 July 1943 vol 390 c1972)

“If war comes again”: in hindsight we know that it would not.

Perhaps this narrative should pause, to consider what was in the mind of Sir George Courthope. He had been part of pioneering the building of a strategic forest reserve of timber. He was standing in the House of Commons (the Lords chamber, the Commons had been bombed), on Tuesday 6 July 1943. It was the second day of the Battle of Kursk. On the Saturday after his speech, an allied army landed in Sicily (Churchill, 1951). He was oblivious to the possibility of the atom bomb.

Sir George claimed a degree of “learning” on the part of the organisation:

We have also been paying a good deal of attention to another side of our duties as a Forestry Commission—the questions of amenity and recreation. At first, rather naturally I think, we were anxious to put the whole of our knowledge into producing the maximum number of trees, and

we did not perhaps pay enough attention to what they were going to look like and a good many people were rather horrified by hard rectangular blocks of little regimented trees on hillsides. But we are changing all that. We have learnt a great deal more than we knew at first about how to make forestry please as well as pay. In order to help us in that purpose, we have established a most cordial and useful relationship with the Council for the Preservation of Rural England and similar councils in Scotland and Wales, and we get very good advice from them, and they are helping us to give pleasure to the public eye.

This amounts to a claim of institutional learning on the part of the Forestry Commission. Further research might explore whether the Council for the Protection of Rural England agreed with this description of the relationship. It is hard to see the Lake District case in 1936 as an example of “cordiality”. It is also important that this argument was almost explicitly countervailed by the conclusion that timber production for war was crucial and more softwoods were required, not less. There is very scant physical evidence that the forests established in the 1950s showed any institutional learning in the sense of “we are changing all that.”

A couple of speakers welcomed the “amenity” comments, but without criticising the massive increase in afforestation, provided only that the importance of sheep production was not ignored.

The report was debated in the House of Lords on the 29th of July 1943, where “amenity” was alluded to:

Radnor⁶⁹: ...amenity... has been a bone of contention between the Forestry Commission and a great number of people at different times. Perhaps I can say as a Forestry Commissioner of not very long standing⁷⁰ that I know there have been difficulties in the past which might possibly have been avoided, but to-day our relations with the forestry organizations, with the Council for the Preservation of Rural England, the National Trust and local bodies are very satisfactory. (HL Deb 29 July 1943 vol 128 c896)

In the whole of these two debates totalling over 40,000 words, not one phrase relating to wildlife or nature can be identified, nor any speaker questioning the cost- effectiveness of the proposals.

16.3.3. The media reception

Nature had simple positive words for the policy as published in 1943:

...the proposals constitute an interesting example of the development of an industry directed and to a considerable extent financed by the State, but making provision for private enterprise. Moreover, the White Paper gives a summary of the work of the Forestry Commission since it was set up in 1919. It is clear that, within the limitations of policy and finance imposed on it, it has done good work and deserves appreciation from the public. (Nature, 1943)

While *Nature* had accepted the productivist project and the Forestry Commission as an institution, a *Guardian* editorial, agreed with the government refusal to endorse planting targets given lack of coherent aims:

⁶⁹ The Earl of Radnor Forestry Commission Chairman 1952 to 1963. (1968)

⁷⁰ He was to be the next Chair of the Commissioners.

The Government has declined to pronounce upon the proposals of the Forestry Commission beyond under taking to provide for financial continuity in the execution of whatever policy it finally adopts and promising that its policy will be really vigorous and bold, Such a circumspect approach is on this occasion to be commended, for the essentially long-term character of the problem, which makes continuity of policy so necessary, also enjoins far-sighted deliberation in deciding what that policy shall be.

Sir George Courthope, speaking as a Forestry Commissioner harped on our need for timber for post-war reconstruction; but, in fact, we have yet to reap the first benefit of the afforestation stimulated by the last war's shortage, and present policy must be determined in the light of our probable needs fifty years hence. In that perspective the Commission's scheme, though unquestionably bold in scale, seems deficient alike in vigour and in clarity of purpose. ... Moreover, its aim is confused. To ensure a strategic reserve of timber for the next war, to provide ample timber for peace-time use at an economic price, and to restore the sylvan beauties of our countryside, these are ends that can only be attained by distinct (and in essential respects conflicting) policies. Let us be clear which we prefer. (Guardian, 1943)

The final section represents an important and relatively rare media call for landscape values. It presages the duty of “balance” or “multi-purpose” forestry which were decades off, and to be neglected in 1950s and 1960s. The *Guardian* was seeking forethought.

An editorial in *Nature* in September (1943) provided support for the work of the Forestry Commission before the war and suggested that “air power” added to the strategic case. *Nature* also thought that full use of land was important for prosperity. Finally, echoing Sir William Schlich, *Nature* suggested that Britain, at the “heart and centre” of the Commonwealth; “should give a lead in the proper organization and use of forest resources, both actual and potential.”

In early 1944, Dunnett of MAF wrote to McKenzie in the Ministry of Supply doubting the justification for afforestation as a subsidy to the domestic timber industry, but left the decision to the Ministry of Supply and the Forestry Commission.

16.3.4. Foresight in the report

The Commissioners were quite reasonably able to claim with hindsight that the Acland Committee had shown demonstrable foresight.

We feel that we are justified in saying that, even if the Commission had advocated measures which we now see would have been very fruitful, they would certainly not have received approval in the then-existing political-social environment. Now (1942) the forestry position is much worse than in 1918 and a re-orientation of thought is necessary. Our woods and forests must be made adequate for our national requirements, and to that end they must be increased in area, replanted where necessary, conserved; developed and utilised. (H. M. Forestry Commissioners, 1943, p.12)

This call for a “re-orientation of thought” can be seen as an appeal for others to accept the Forestry Commission’s internally constructed and reinforced knowledge-culture, which Tsouvalis’s (2001, p.43) links to Bourdieu’s “habitus”.

The final report sought to take account of uncertainties in warfare but reached conclusions which seem eminently reasonable *in the ignorance of the Manhattan Project*: “It seems a fair assumption

that with the development of aerial warfare it will become increasingly inconvenient in future emergencies to have to transport timber by sea.”

The report clearly and specifically address the problem of the future. Indeed, it differentiates between the near future and the “distant future”:

The Distant Future.—Looking to the more distant and speculative future it seems reasonably certain that, as industrially backward countries develop, the world will collectively consume much more wood and timber. ... The fact that wood, unlike so many other raw materials, is a crop has great significance in the future of the human race. (H. M. Forestry Commissioners, 1943, p.31)

The final point recognises wood as a “renewable” material. The next part of the report poses more questions than it attempts to answer.

How will the inhabitants of Britain fare in that somewhat distant and uncertain time for which we must begin to make provision now? The pessimistic prophet will say that the forests of the world will prove inadequate and Britain will suffer unless full provision is made at home; the optimist will say that there will be plenty and, if not, human ingenuity will find substitutes.

Conclusion.—We take the middle course in believing that it is only common prudence to make certain of producing at home a reasonable proportion (about one-third) of the probable peace-time needs. The area required is also that which should provide reasonable security in a national emergency.

In the early twenty-first century increasing forest area is still seen by some as simply prudent. The report makes a modest attempt at applying interest rates to time preference. The conclusions were vague:

It seems to us a fair statement that, regarded purely as a business proposition, a large-scale undertaking should yield 3 per cent., and, further, that for a very long-term investment that rate of interest is satisfactory.

Then there is a misuse of interest rates by simple addition:

The difficulty remains of assessing the value of indirect returns such as added security in emergency. Savings in shipping, effected in the last and the present wars by the use of home-grown timber, demonstrate that afforestation would be justifiable even if no direct financial return were obtained. If the value of this service were placed even as low as 1 per cent, the total anticipated yield would then become 4 per cent., which would make it a first-class investment. (H. M. Forestry Commissioners, 1943, p.45)

Price uncertainty

The report included three almost contradictory statements. Low prices and volatility were noted:

...prices of home-grown timber are greatly influenced by the prices of imported timber. During the inter-war period the effect at times was to depress the former to very unsatisfactory levels.

On the other hand, good ⁷¹ prices, rightly or wrongly, encourage hopes for the future.

Then confidence about increasing prices:

⁷¹ Good means “high” . This is of course bad for humanity in general; a plentiful supply of cheap wood is the ideal.

We hold the view that there will be a steady rise in prices as the more accessible virgin forests are worked out and as competition for world supplies increases. It is not a subject for detailed prophecy, but we expect prices quickly to reach and remain at remunerative levels.

With hindsight we know that timber prices fell. In 1946 prices were equivalent to about £48 per m³ at 2012 values (Forestry Commission Annual Report (1946, p.9) “largely standing” and including some hardwoods). Standing timber prices for conifers in 2013 were about £14 per m³.⁷²

Intergenerational equity was vaguely considered:

In afforestation it is inevitable that the cash outlay is incurred mainly by one generation while the cash receipts are taken by succeeding generations. ... we think it should be possible to make a reasonable allocation, as between present and future generations, of the burden of current expenditure.

Quantitative analysis of the frequency of vocabulary related to “future” does not suggest that Post-War Forest Policy contained a greater proportion than other government forestry reports (Figure 13-3 Frequency of vocabulary related to “future” in the Acland Report and three corpora).

16.3.5. Policy decision – “machinery of government” - the Forestry Act 1945

The Machinery of Government committee reported to the War Cabinet on the delivery of the afforestation programme on 31 July 1944 (TNA: CAB 66/53/20, 1944). Placing the Forestry Commission under the jurisdiction of the Secretaries of State for Scotland and for Agriculture was justified on two grounds. Firstly, while noting that the Forestry Commission’s work had so far encountered little controversy (minimising the Lake District arguments), it was anticipated that increased activity might result in more controversy, requiring more robust political control. Secondly, the clear involvement of the Secretary of State for Scotland was a response to recent parliamentary and press pressure for a separate Forestry authority in Scotland. The paper reveals a glimpse of Forestry Commission institutional behaviour: “the Forestry Commission itself pleads earnestly against a change”.

The National Archives reveal a memorandum from two past and the then current Forestry Commission Chairmen, (Clinton, Stirling Maxwell and Robinson). They hoped that the government would not divide the Commission, since “there lies ahead a very heavy task which is technical in character and best left to an organisation ... [that has] shown itself fitted for the purpose”.

The case for a technocratic expert forestry organisation was also made in the Machinery of Government paper, potential Forestry Commission obstruction had been considered: “the Forestry Commission themselves did not recommend any change Informal consultation with the Chairman, however, indicates that if the War Cabinet decided in principle in favour of the change ... there would

⁷² This may not be an entirely fair comparison since some hardwoods and some higher priced produce may be included. The same report however records total wartime sale of 49.5 million cu. ft. valued at £2,088,000. This would average £34.00 at today’s prices (£s2012) (Bank of England online inflation calculator).

be no insuperable difficulties... and the co-operation of the Chairman and his colleagues could be relied on.”

The War Cabinet agreed to present a forestry bill at its meeting of 3rd of March 1945 (TNA: CAB 65/49/29, 1945). The proposal was effectively administrative. The minutes record that the Forestry Commission would be “reconstituted as an expert body responsible to... Ministers”.

16.3.6. Ignoring the “bomb”

This thesis proposes that the underlying reason for the genesis of the afforestation project resulted from the productivist mindset of its progenitors who could not attract political support until the shock of the First World War and the submarine blockade. It was also in tune with a general productivist attitude in society which emphasised utilisation of “waste” land and a need for employment. The advent of another war with very similar strategic timber requirements had a reinforcing effect and the strategic argument was redeployed, whether or not it was actually the most important driver in the minds of those now involved in the project and the Forestry Commission as the institution built around it. Those who drafted Post-War forestry policy and even ministers, who approved it and led the debate in parliament early in 1945, were in ignorance of the atom bomb.

Even the first coverage of the bombing of Hiroshima makes it clear that it was obvious that any future war would be very unlikely to follow the previous pattern (Times, 1945). In terms of forestry policy there are very few signs of any significant reconsideration of geopolitical reality. The clearest (perhaps only) media questioning comes from the *Economist*:

The forestry programme undertaken as a result of the last war has been of little or no use in fighting this one—in fact, has been an actual disadvantage, since the area of agricultural land has been proportionally diminished. Speculation about the dates of future wars is a futile occupation; but at least it can be said that if war comes within the next thirty or so years, afforestation now can do little to help fight it. It can in fact be argued with force that if war can be staved off until new trees mature, then it will not come at all; and there are of course other possibilities, such as that atomic bombs will render any timber reserve superfluous. In any case, a substantial reserve of imported timber could be assembled. (The Economist, 1945)

The archives provide very little evidence of a rethink inside the government machine. The focus is productivist, best land use, and the balance between trees and sheep. Mather (2001) pithily observes that the argument:

...persisted in the era of nuclear warfare, when it might have seemed that a strategic reserve would have been irrelevant.

The bomb and the strategic argument

In late 1945, Treasury officials (MAF230/4) queried a minute from Robinson:

With the advent of the atomic bomb it is at least doubtful whether any future war would be as long drawn-out as the two last wars have been. Moreover, a standing reserve of timber would not become available for production use for at least twenty years and it might be longer. On strategic grounds, therefore it is doubtful whether there is a strong case for a considerable increase in afforestation.

Treasury internal discussions even in December 1942 (TNA: T161/1195, 1943c) had accepted the cost of the strategic insurance, but one official calculated that the Forestry Commission aim of producing 9 million tons per annum was over-insurance, given real wartime consumption. He later noted the arrival of the atom bomb, but gave his personal view that the aim should be the: "...effective utilisation of land, etc. ... rather than on a calculation (necessarily very hypothetical) of its value as future war potential." However, despite the external shock of the atom bomb, there was no review of the forestry policy in government, or the Forestry Commission. Three months later a statement was made which continued to rely largely upon the strategic argument.

16.3.7. Policy decision – parliamentary statement 1945

The Forestry Act 1945 was about administration, a statement of direction in response to Post-War Forest Policy emerged from an interdepartmental committee chaired by Robinson. Notes of a meeting on 2nd November 1945 provide evidence of the institutional relations. There were disagreements on points of principle: Ministry of Agriculture representatives were arguing that food production was an immediate "desperate" need. They thought that the Forestry "Commission should postpone for a few years embarking on a long-term policy, and should confine their efforts to the replanting of felled areas." Robinson said that that would repeat the short term policy mistake made after the First World War. The final statement reiterated the strategic priority; ministers were:

...impressed with the necessity, as a safety measure, of rebuilding as quickly as possible our reserves of standing timber.

Productivist mindset and "employment" followed in quick succession:

...and also with the possibilities which systematic forestry and afforestation hold out for the better utilisation of large areas of poorly productive land and for increased rural employment in healthy surroundings.

The men from the Ministry of Agriculture persisted that the Minister should not be committed to the objective of five million acres over fifty years because it would "encroach" on agriculture. The final public statement made this clear:

The Forestry Commissioners proposed in their Report on Post-War Forest Policy (Cmd. 6447) that the country should aim at having in all 5 million acres of well-managed forests in 50 years, and towards that end they allocated to the first postwar decade a programme of replanting and afforestation amounting to 1,100,000 acres. ... These are large proposals which, however desirable for the purpose of timber supply, will need careful consideration from the point of view of their possible effect on agriculture. (Forestry Commission, 1947)

A further note in the Ministry of Agriculture files contains strong language; "still not at all happy about the drafting, ... it should be made abundantly clear that the Government are in no way committed to the programme suggested by the Forestry Commission" (TNA: MAF 230/4, 1945-6). The final formulation was:

...the Government cannot, at this stage, be finally committed to the acceptance of these programmes in full... the Chancellor of the Exchequer, is proposing to ask Parliament to replenish the Forestry Fund during the five financial years 1946–50 by a total sum of

£20,000,000. ... This should provide for the afforestation and replanting of 365,000 acres (which is the first five-year quota of the Forestry Commissioners' 10-year plan).

The files (TNA: MAF 141/105 B, 1947) show this paragraph passing through various drafts; on the question of funding of the programme, “this will enable” proposed by the Forestry Commission was replaced by “this should provide for”, for instance. The reference to the “Forestry Commissioners’ plan” being a compromise which allowed the minister to avoid committing to the long-term programme, described as an “aim” earlier in the statement, is also attributed to the Commissioners rather than the government. The institutional dynamics are important. The Act passed a few months before had placed the Forestry Commission under the control of Ministers for the first time. In this statement, the Minister is distancing himself from the Commissioners’ plans. This, on the one hand meant that they remained the Commissioners’ plans. It would be interesting to know whether Robinson and his colleagues saw this implied continuation of their semi-detached status as a “victory,” or would have preferred a formulation more like “the Government has decided to instruct the Forestry Commission to carry out a programme of...”

Forest parks

While not directly relevant to the afforestation programme, further institutional priorities are revealed in the Treasury changes to the final words of the statement (TNA: T161/1195, 1942-1945):

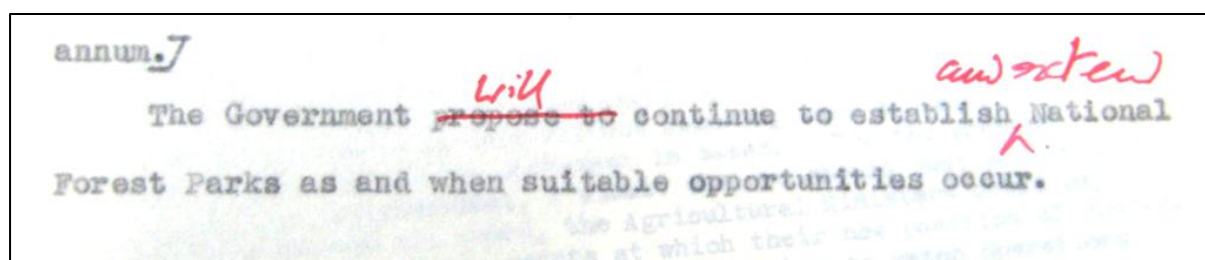


Figure 16-4 Treasury changes to FC draft of parliamentary statement 1945

This could be seen as evidence that the Treasury was more committed to recreation than was the Forestry Commission, and that rather than the Forestry Commission being the learning organisation as suggested by Pringle and Tsouvalis it was, in fact, HM Treasury which was pushing the boundaries of multi-purpose forestry.

16.3.8. Policy decisions and discussions leading to the Forestry Act (1951)

In debating the Forestry Act of 1947 (which provided for a subsidy scheme for private woodland owners), the Minister of Agriculture (Mr. Thomas Williams) set out the position starkly:

It is not generally appreciated, even yet, that approximately 50 per cent. of the country's standing timber has been felled since 1939. Even by that time we had scarcely started to make up the leeway we lost between 1914–18. It is, therefore, of the utmost importance that we should reconstitute our forests at the earliest moment, and this small Measure will, I believe, be a definite step in that direction. (HC Deb 19 February 1947 vol 433 c1196)

Col. Ropner, a Forestry Commissioner, was prepared to recognise uncertainty and consider the need for foresight:

We cannot anticipate the unexpected, and the future is unknown. The hon. Member for the Forest of Dean (Mr. M. Philips Price) knows better than I do of some of the changes in the past. Take the oaks in the Forest of Dean and in many other places. They were widely spaced to provide crooked timber—the knees and elbows—needed for the construction of our battleships. Those oaks were planted when no one knew that iron would float. ... I can imagine the Minister of Agriculture in those days—after it had been found that iron would float and after gunpowder had been invented—saying to himself, Well, you never know. It is my job to provide wood for battleships and yew for longbows. Iron may rust, the powder may kill the chap who is trying to let off the gun and I think that some day we may go back to wooden battleships or longbows. That is the attitude which I think the Minister of Agriculture of those days would have taken. It should not have been for him to decide whether, in the circumstances, there should be a complete change over. That would have been more the task of the Minister of Defence, had he existed. (HC Deb 19 February 1947 vol 433 c1205)

By 1950, the *Economist* was again counselling caution and government oversight:

The Government has the duty of moderating the ambitions of the Forestry Commission and of ensuring that public subsidies are applied to afforestation on the most suitable land. The Commission in its turn has responsibilities to a wide public. It must exercise them with due attention to the possibilities of private woodlands and with more care for the effect of forest expansion on farming and landscape. What is needed is not an over-ambitious attempt to expand Britain's forest resources without regard to other economic and agricultural policies, but a programme sufficiently modest and realistic which can withstand drastic alteration in the years to come.

The tenor of this argument is significant, a call for a moderating role for ministers is strange when they were ostensibly in *control*. There is little discussion of the relevance of the whole strategic effort in the light of nuclear weapons, but, had the *Economist's* advice been taken, forestry in Britain might have been more “balanced” earlier.

The Forestry Act 1951

The Act of 1951 gave the Forestry Commission “the general duty of promoting the establishment and maintenance in Great Britain of adequate reserves of growing trees” (Richards, 2003). There was more discussion of environmental issues than in previous debates. There is evidence of modest interest in biodiversity values. In the House of Lords the Bishop of Truro expressed the hope that the new Director General of the Forestry Commission, A. H. Gosling, would:

...pay due attention to questions of landscape and ecology. A great plantation of conifers looks well and in place where there is plenty of room, on a high moorland or on the side of a mountain in Scotland, but it will not fit easily into many of the landscapes of our English counties. (HL Deb 13 July 1949 vol 163 c1226)

The Bishop went on to analyse an emerging controversy in the Quantocks, asking:

...that the Director-General and his colleagues should be free, and indeed should regard it as their duty, to give due weight to considerations of appropriateness and beauty of landscape before coming to a final decision.

The Bishop was supported by the Earl of Haddington:

...they help to conserve wild life—a most important point. They also conserve our water supplies. ... they make no small contribution to the quality of our landscape.

The Earl of Selborne raised some institutional issues to do with the role of experts in bureaucracy and of the intimacy of the Forestry Commission and government in formulating policy (HL Deb 20 March 1951 vol 170 cc1177-240):

On the Second Reading of the Bill I said that it was impossible to open a newspaper without seeing some complaint at the vandalism of the Forestry Commission. ...

When you get such consensus of criticism from all over the country about the actions of the Forestry Commission, it would seem that there is something wrong somewhere. I believe that what is wrong is that the Forestry Commission are a body of experts. It is natural that that body, erected to create State forests, should be experts in forestry; but in my experience experts are very good servants and very bad masters. It has been a principle that we have always maintained in our public life: that whereas experts should be called upon to advise, they should not be put in controlling power. We do not often give the position of First Lord of the Admiralty to a sailor, or the position of Secretary of State for War to a soldier. There have been occasions when it has been done, but the results have usually not been encouraging. In all these important questions there is the expert view, which of course must receive the greatest weight, but there are generally other considerations which are best judged and appraised by laymen.

...the whole approach of the Forestry Commission to their responsibilities is that of experts. They think of nothing but the latest teachings of forestry. May I give your Lordships a simple example of what I mean? Your Lordships will see from the Reports of the Forestry Commission that 94 per cent. of their plantings has been conifers. Everybody, of course, knows that if you require a volume of timber quickly, you will get it much more quickly by planting conifers than by planting hardwood. ... It is one of the problems of forestry that you do not know exactly what type of timber will be most in demand at the time when the crop matures. I am not criticising the fact that the great bulk of plantings have been conifers.

He called for some institutional learning:

...if they had planted only 10 or 15 per cent. more hardwoods, and had had broader fringes of hardwoods, so that the ordinary appearance of the countryside was not revolutionised in the way that their great conifer forests have revolutionised it, I believe that they would have encountered far less local opposition and criticism than they have done.

Selborne also makes some interesting points on the institutional links between the Forestry Commission the civil service and the government:

What the Government have done is to take a Bill, quite clearly drafted in the Forestry Commission, and hitch it on to their policy.

This drew a riposte from Robinson's friend (Figure 16-2), the Lord Chancellor (Viscount Jowitt):

This Bill was not drafted by the Forestry Commission; it was drafted in the ordinary way. The Forestry Commission is now the servant of the Minister of Agriculture and the Secretary of State for Scotland, and is particularly under their control. Of course, the Commission can make suggestions in the course of their duty, but, as the noble Earl knows well, it is for the Ministers to decide what is to be submitted in the Bill.

In the House of Commons, some critical allusions to opposition were made for instance by Edward Turnour (Conservative):

I must make an attack on the people whom I regard, although they are quite unconscious that they are in that category, as being very unpatriotic. Certainly rural preservation societies and similar bodies have unfortunately allowed themselves to be ruled to far too great an extent by the type of person who looks at the country from what I would call a pretty pretty point of view.



Figure 16-5 Ploughing, Sutherland, Scotland. 1964 (Forestry Commission / Tony Anderson)

To the pretty pretties an empty and barren moor growing worthless heather and bracken on a bare hillside is a delight, a joyful thing to their aesthetic souls. (HC Deb 06 July 1951 vol 489 c2730)

This intervention provides more evidence that opposition on the grounds outlined was increasing outside the House of Commons. The call to patriotism is also evidence of the strength of the ongoing sense that the afforestation and other productivist efforts were part of a national struggle.

16.4. Rational stages approach

Individuals: policy entrepreneurs and issue experts

It seems clear that Sir Roy Robinson had a crucial role as issue expert, but the archival evidence suggests that at some stages he was exerting a restraining influence upon his colleagues and advocating what might be called a more “rational” stagist approach. The minutes of Commissioners’ meetings in 1939 and 1940 suggest that some of the non-expert members were the most enthusiastic. Lord Jowitt was influential, cultivated by Robinson, at one ministerial meeting he was the sole clear supporter of the large-scale afforestation programme and appears to have pressed for more than Robinson did. There seems to be enough evidence to suggest that policy entrepreneurs continued to have a crucial role in initiating the 1943 report.

External shocks and crises

The outbreak of war was a clear and shock and crisis. To this must be added the personal shocks which must have been suffered by various individuals including Robinson himself, whose son was killed.⁷³ The crisis of the war reinforced the afforestation case.

The shock which might have been expected to cause change, but did not, was the innovation of nuclear weapons. It might have been expected, with hindsight, that the use of two such weapons would have caused some rethinking of the strategic timber reserve argument. Very little such thinking took place, beyond an indecisive note between officials, and the vaguest of references in the House of Commons. If learning is evident, it takes the form of a determination to carry out an even larger afforestation programme, using more conifers than before.

Political parties

The war was a time of cross party co-operation. There is no evidence of party or ideological differences, except for some attitudes to the continuation of control of felling in private woodland such as the reservation of Col. Ropner to the 1943 report (H. M. Forestry Commissioners, 1943, p.92).

The views of Dalton are interesting: he clearly enjoyed *ideologically* supporting forestry, noting in his diary, at the time:

This is a Socialist investment, in land and young trees, of great long-term value. Real practical Socialism! (Dalton, 1962, p.59)

Veto power

No formal veto power is evident in the post-war decision event. Clearly some Ministers were unhappy to commit to the large programme which the Forestry Commission sought. They were able to bring it under Ministerial control for the future. This power, weaker than “veto” though it was, was exercised through ministerial meetings and correspondence and the actions of Whitehall civil servants restraining the actions of the Forestry Commission.

16.5. Institutions and bureaucracies

The Forestry Commission dominated, producing a coherent and well rehearsed report. Perhaps this was the peak of its power over its own destiny (Ryle, 1969). The nature of the Forestry Commission staff is described, even in a press notice by the Chancellor of the Exchequer, as single minded and zealous.

The interaction with Whitehall ministries appears to have been “correct” but somewhat abrasive, or at least challenging. The Forestry Commission appears to have sought to “bounce” the other institutions into action. It felt justified by events, effectively saying, “we told you so”:

⁷³ The Commonwealth War Graves Commission record the death in action in North West Europe, of Wing Commander Robinson, (Michael Lister) DSO DFC, age 25, on 10 April 1942, Son of Roy Lister Robinson, 1st Baron Robinson of Kielder Forest and of Adelaide, and Lady Robinson, of Mayfair, London. No known grave.

Every acre planted with the quick-growing conifers in the years immediately following the last war might have been expected to yield 50-60 tons of pitwood if clear-felled in the present emergency. (H. M. Forestry Commissioners, 1943, p.12)

In some respects it succeeded by taking early action to prepare a report in late 1939. There is little evidence in this episode of institutional change. If anything, there is evidence of forestry policy reverting to a more productivist form. There are references to the appropriateness of using *more* conifers than before. There is clear evidence that the Treasury (again?) pressed for greater commitment to the establishment of Forest Parks. The report's authors claimed with some justice that they had not "overlooked the importance of the amenity values of forests and woodlands". The procedures for establishing further Forest Parks were set out. The words "landscape" and "scenery" did not appear in the document, but there are references to the word "amenity".

The report was clear that the Forestry Commission should continue as a "single Forest Service" of staff "highly qualified in the professional sense and imbued with a keen esprit de corps".

16.6. Policy network analysis

Policy networks and subsystems

The Forestry Commission clearly sought, mainly through its chair, Robinson, to maintain effective networks and systematic relations. The examples of Jowitt and Dalton are significant evidence of such a network. There is evidence from archival research that other parts of Whitehall and the political establishment were resistant. The networks themselves do not seem to account for the success of the Forestry Commission as an institution intent on survival and the extension of its activities.

Internationalisation, policy diffusion and multi-level governance

The main international pressure was the war itself. There is some evidence that free trade issues were starting to be relevant. The Forestry Commission became involved in the work of the FAO Forestry Division and the World Forestry Congress in 1949 (Richards, 2003, p.23).

There was concern about multi-level governance in the sense of devolution, the clear role for the Secretary of State for Scotland, and the controversy caused by Robinson's speech in Edinburgh, demonstrate a certain tension about governance structures, which affected the legislative decision, if not the afforestation programme.

16.7. Critical policy analysis

Ideas, narratives, frames and discourses

The productivist technocratic belief system is dominant. This is true even where scepticism is detected, since this is mostly focused on the need to take an imperialistic and productivist approach to the production of food. There is scant evidence until 1951 of biodiversity or landscape having any importance. There is no evidence of a paradigm shift.

Gender

The place of women in forestry was raised in the House of Commons in 1946:

Mrs. Leah Manning (Epping): Are we to have no women for forestry work? During the war they did it, and liked it. ... whether we are going to ... encourage them to take higher education at the university with regard to forestry. (HC Deb 24 October 1946 vol 428 c100)

Manning did not receive a reply to her question in the minister's response.

16.8. Advocacy Coalitions

Modest policy change took place: an *increased* and reinvigorated afforestation programme with greater focus on softwoods was generally endorsed by government. (The Advocacy Coalition Framework is shown diagrammatically in Figure 10-3.) The dominant agent was a powerful semi-independent institution which responded to an external shock with effectiveness. It was led by expert policy entrepreneurs motivated by a strong productivist belief system. They were able to build coalitions with some politicians and to overcome what resistance there was from Whitehall, which shared productivist concerns, but for food production, and a less powerful and unorganised coalition in Parliament and outside, which raised more “environmental” objections. The Forestry Commission as an institution clearly had considerable resources to devote to the preparation of its report.

The policy decision relating to Post-War Forest Policy appears to be based upon very stable parameters. The nature of the policy problem was completely in line with the expectations and predictions of the First World War, and no constitutional or other changes were in operation before the proposals were made. There was a considerable degree of consensus which, as at the time of the Acland Committee, overlapped social and ideological cleavages. Where there were ideological or class differences, these manifested themselves in the modest sub-policy of control of felling of privately owned trees, rather than the scale of state controlled land purchase and afforestation. The political system was relatively open to the change in favour of greater afforestation; while some Ministers resisted, there was considerable support in Parliament.

Chapter 17.

Policy decision process - the end of the strategic argument

17.1. Introduction

During the 1950s, the Forestry Commission steadily increased the afforestation rate, encountering tension with agricultural interests including the Ministry of Agriculture, its own “sponsor” department in England and Wales. Various planning processes were attempted. In 1957, the use of the uplands was reviewed. The Acland report recommended that the afforestation project be reviewed after forty years, when two thirds of the intended area should have been planted.

At the end of this period a revised judgment can be formed of the dependence of this country upon timber, of the probability and conditions of future periods of emergency, and of the special demands that they may make upon our supplies. After this period, also, it will be possible to state with greater certainty the probable yield of timber from the land then afforested, and still to be afforested. (Ministry of Reconstruction, 1917, p.34)

A review in 1957 therefore fits the review stage of the rational “Policy Cycle” approach (Cabinet Office, 1999; Howlett and Ramesh, 1995). The Acland Committee had speculated about “revolutions in industrial processes” and whether “wars or trade boycotts between nations will become inconceivable” (Ministry of Reconstruction, 1917, p.34). While they considered “these possibilities as very unlikely to happen in forty years”, the forty years had passed by 1958.

17.2. Nuclear weapons and agricultural production

The development of nuclear weapons in 1945 made the likelihood of submarine siege almost inconceivable. The objective of planting two-thirds of the target area of 716,000⁷⁴ ha within the first forty years was met almost exactly. Planting against the higher 1943 targets was proving more problematic. The agricultural civil servants had more power and were pushing forestry up the hill onto poorer land (Oosthoek, 2013). Sir Solly Zuckerman, chair of the Natural Resources (Technical) Committee was asked to consider the use of “marginal land”.

The committee noted that the Forestry Commission reported difficulty in planting at intended levels. However:

...the Government acknowledged that creating a strategic reserve of timber was no longer the central plank of forestry policy. (Davison and Galbraith, 2006)

The Zuckerman Committee reflected on the context of Post-War Forest Policy, noting that it was “the end of that desperate period of the war when our sea-borne supplies were under constant attack by the enemy,” and that the focus on the “military argument” was not surprising (Zuckerman, 1957, p.6). However:

⁷⁴ The Acland target was expressed in acres, 1,770,000.

If a future war were to be fought with nuclear weapons—the destructive power of a single one of which could be immeasurably greater than that of the 80 000 tons of conventional high explosives which were dropped on this country up to 1943—it is very doubtful whether the time factor would permit reserves of standing timber to aid us in the prosecution of hostilities. Our forests would, however, be an important asset when the time came to repair the devastation of large urban centres and thousands of acres of dwellings. But it is, of course, possible that major nuclear weapons will never be used.

The report makes the case for looking at forestry in an “economic and social light” (Zuckerman, 1957, p.44):

Strategic considerations have changed since then, but on the other hand, there is a greater-economic reason now, than before, for investment in the planting of trees.

Text analysis identifies greater predominance of timber vocabulary in relation to other objectives, and, oddly, to the distribution in 1943. Despite the emphasis on social value of afforestation, clearly employment-related vocabulary was not strongly present. Recreation fell back in frequency compared to Post-War Forest Policy.

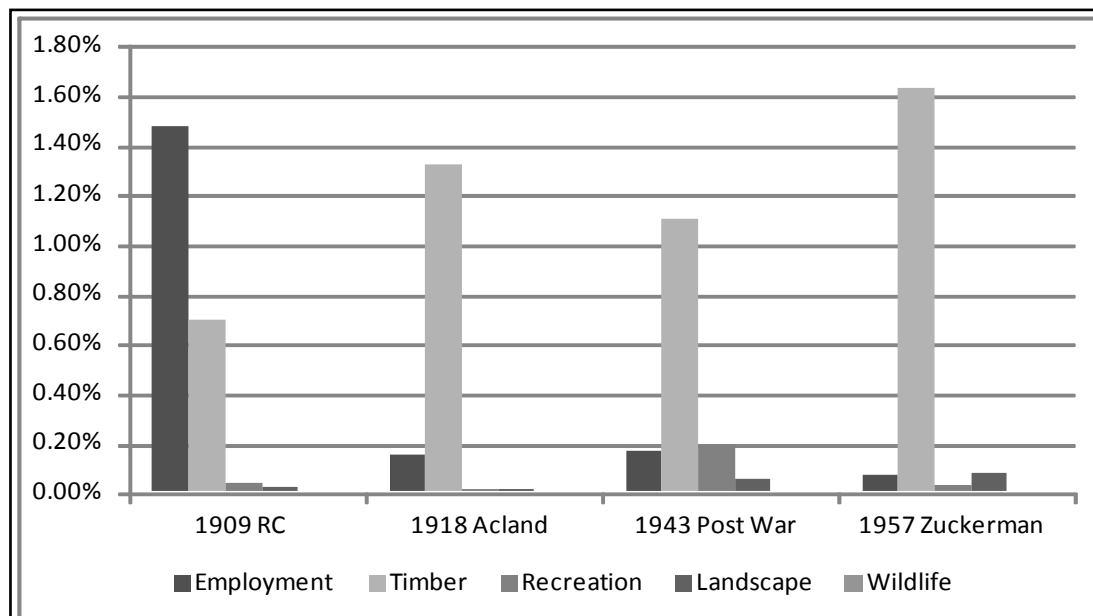


Figure 17-1 Frequency of vocabulary related to “objectives” in key reports to 1957⁷⁵

17.2.1. The demise of the strategic argument and competition with agriculture

The strategic argument for afforestation was not complicated only by the Bomb, but also by the competing semi-strategic argument for food production. Foot (2010) notes a change in “contemporary thinking about upland land use” emphasising self-sufficiency. A comment in the House of Commons in 1956 sets out both points:

⁷⁵ A chi-square test (excluding wildlife) showed a relationship between the values and the different reports ($X^2 = 1112.9$, df-9, $p > 0.01$).

Rupert Speir: Any more afforestation now will mean we shall not reduce the need for importing timber for at least twenty years. I suggest that in this atomic age when strategic considerations are utterly different from what they were ten years ago, we ought to have a further look at our afforestation policy and consider whether, in the national interest, it would not be better to concentrate more on producing mutton, wool and livestock. (HC Deb 20 July 1956 vol 556 c1625)

This productivist attitude to agriculture is in tune with the attitude in the immediate post-war period and in this evidence, seen independently of the strategic era.

Agricultural interests were active both as lobbyists and in the institutional power of the agriculture departments with which the Forestry Commission shared ministers. At the beginning of the 1950s, Robinson had made strenuous efforts to develop links with them; he invited Ministry of Agriculture and Scottish Office officials to the Forestry Commission's stately home in the New Forest, Notherwood House. Evidence of the tenor of this weekend conference on the subject of "land utilisation". can be seen in a note from the Ministry of Agriculture Permanent Secretary Sir Donald Vandeppeer: "I shall wish to add the words 'and for producing more food' to item 1, although I do not propose to circulate a memorandum about it!" (TNA: MAF 141/105 D, 1947, October 29 1947).

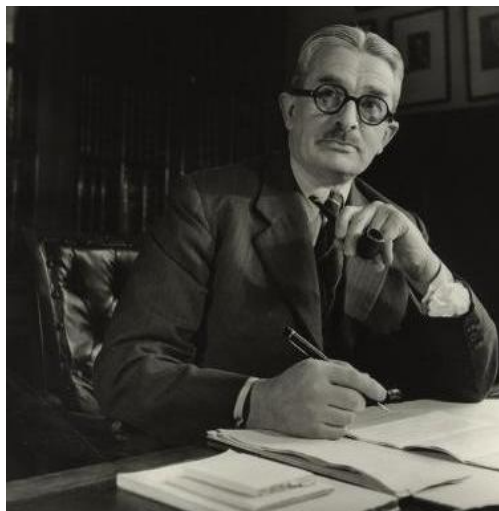


Figure 17-2 Sir Donald Vandeppeer Permanent Secretary Ministry of Agriculture (by John Gay © National Portrait Gallery, London)

Rackham (2010) describes the period as one in which:

...the idea got about that Britain was an overpopulated land: every acre ought to look as if it was doing something useful – even acres that the country had managed without in the dark and hungry years of war.

Notherwood House was gifted to the Forestry Commission in 1945. Ryle (1969, p.107) describes its use by Robinson at weekends, and his specification of a 100-foot flagpole on which the Forestry Commission house flag was to be flown when he was in residence. Sceptical MPs questioned both the pole and the flag (HC Deb 21 March 1949 vol 463 cc36-7).

Inter-departmental working party

The land-use issue was considered by an inter-Departmental Working Party which was reluctant to subsidise “production of raw materials” at uncompetitive prices when the government favoured “increasing liberalisation of trade” Oosthoek (2013, p.76). It was recognised that social reasons might justify a “measure” of subsidy; the government test discount rate was 6.25% and the working party had concluded that 3%-2.5% could be expected from forestry.

Cabinet consideration

The Minister of Agriculture and the Secretary of State for Scotland prepared a memorandum to the Cabinet (TNA: CAB 129/93/50, 1958), distancing the government from long-term programmes (5 million acres by 2000): “We think that the setting of targets of this kind so far ahead is of little value. ... the Government should neither repeat this target nor disown it.” This tension occurs at various points in this narrative, the forestry interests and Forestry Commission advocating clear long term targets and governments and Whitehall (especially Treasury) seeking to avoid commitment.

The policy was agreed at a cabinet meeting on 17 July 1958 (TNA: PRO CAB/128/32) (TNA: CAB 128/32/60). The Chancellor suggested that the “the current strategic and economic requirements pointed towards *a deliberate reversal of the previous policy of fostering an increasing forest estate*” (author’s italics); the draft statement from the two other ministers was contradictory, and advocated a reassessment of “national needs” in 1963. The discussion concluded that there was a need to concentrate afforestation in Scotland and Wales where it met a “social need”.

17.3. Policy decision – government statement

The Government announced the continuation of afforestation but without long-term targets and with future review:

The planting programmes of the Forestry Commission should be fixed for periods of ten years at a time.

The size of the subsequent programmes should be reviewed in five years' time in the light of the national needs. In deciding where planting shall take place, special attention will be paid to the upland areas, particularly in Scotland and Wales, where expansion of forestry would provide needed diversification of employment and important social benefits. (HC Deb 24 July 1958 vol 592 c684)

Parliamentary debate

In Parliament there was little mention of environmental issues, but concern that afforestation programmes might be falling behind, there were questions about co-ordination between forestry and agriculture. The government’s vagueness on overall programmes did not escape notice:

LORD DYNEVOR: is it envisaged in this new programme to reach the figure of 5 million acres contemplated as being under forestry by the end of this century? That has been the target of Her Majesty's Government...

LORD STRATHCLYDE: My Lords, in reply to the first question of the noble Lord, I think that to try to set targets so far ahead as 2000 A.D. is not realistic.

LORD DYNEVOR: My Lords, it is only about forty years ahead.

LORD STRATHCLYDE: It is much more sensible, I should have thought, to review the whole position, as now proposed, at ten-yearly intervals.

The late 1950s were to be a brief pause before a significant and sustained increase in annual area afforested (Figure 11-1). Richards (2003, p.40) comments on the Forestry Commission's understatement in saying that "the strategic value of forestry is no longer so strongly emphasised", but then notes that the rate of planting was more constrained by land acquisition than policy.

17.4. Rational stages approach

Individuals: policy entrepreneurs and issue experts

Zuckerman was a scientific policy thinker who later became Chief Scientific Adviser to the government (Anon, 2013). The committee included a range of expertise, though none directly in forestry. Professor Ellison was a professor of crop husbandry at Aberystwyth University. The committee invited papers and evidence at its meetings. These deliberations appear to have been conducted in a classic stagist and rational way.

External shocks and crises

The delayed shock of the geostrategic reality of nuclear weapons had changed the thinking of agents. There was however, no policy change. This was despite the Zuckerman conclusions on the strategic argument, and those of the inter-departmental committee on trade liberalisation, and poor returns.

Political parties

The policy statement conformed to a Conservative 1955 manifesto promise to increase the extent and pace of afforestation in Wales. It was not clear why Wales was singled out for this. The other manifestos were silent on forestry.

17.5. Institutions and bureaucracies

The role of the Forestry Commission does not appear to have been as significant as in previous policy decision processes, on the available evidence of deliberations or interactions. The Zuckerman committee and the cabinet discussions (and others in the Home Affairs Committee of the House of Commons) appear stagist rather than institutional.

The Forestry Commission had lost the charismatic figure of Robinson and his Northerwood house style of influence. The use of the word "Commission" had started to supplant "Commissioners" in its own annual reports (Figure 17-3). A regression of the use of the word "Commission" shows a statistically significant upward trend.

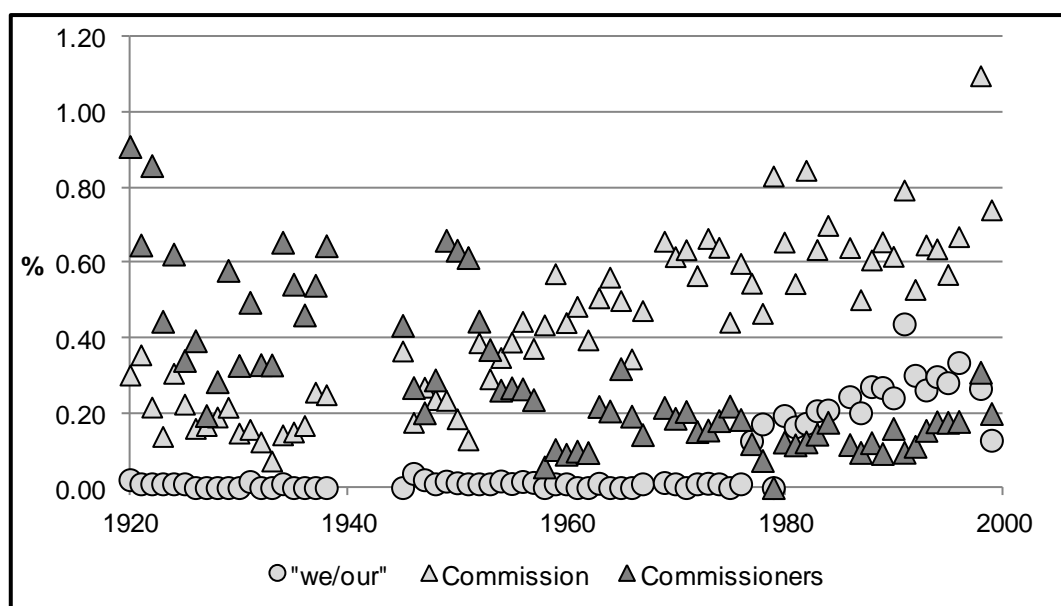


Figure 17-3 Frequency of vocabulary related to “self identification” in Forestry Commission annual reports⁷⁶

Forestry Commission – institutional response

The Forestry Commission annual report of 1957 “welcomed” the Zuckerman report. Recognising their institutional position they commented that “It is not appropriate to comment in detail on the Report but the Commissioners would wish to say that they are in full agreement with it.” Having outlined three points in some detail, they covered themselves with:

...the Government have decided to carry out a thorough review of the bases and objectives of forestry policy ... Some at least of the views expressed in the preceding paragraph may therefore need reconsideration in the light of this review.”

This appears to be a slightly less confident Forestry Commission than heretofore. Interestingly, one of the points highlighted by the Forestry Commission included “due regard being given to the effect of forestry on wild life and on the beauty of the countryside.” Tsouvalis (2001, p.118) describes this as the Forestry Commission “being put under a duty”. This seems too strong, but it was institutional learning, in this case ahead of policy, no reference to wildlife appeared in the government statement. The Zuckerman Report was not very clear on a need for better aesthetics, which it debated, and did not mention wildlife. The Forestry Commission reference is interesting, it is only the second time that the word “wildlife” (or “wild life”) appears in a Forestry Commission annual report.

17.6. Policy network analysis

Tompkins (1989, p.11) suggests that the “committee did not delve too deeply into the rationale underlying afforestation”; he ascribed this to the development of the “forestry lobby” and the fact that it

⁷⁶ The term “commission” increased with time (R^2 0.75 $p < 0.001$). The term “commissioners” decreased with time (R^2 0.32 $p < 0.001$). Use of “we/our” increased with time (R^2 0.54 $p < 0.001$).

had become “powerful enough to ensure that afforestation would continue as before”. This seems reasonable but this research has not uncovered clear evidence of lobbying.

Internationalisation, policy diffusion and multi-level governance

There is some evidence of internationalisation in this decision event. The Zuckerman Report notes that “Food supplies entering world trade have been unexpectedly plentiful”, and that national import control policy was changing. The Ministers’ memorandum referred to above (TNA: PRO CAB/129/93) (TNA: CAB 129/93/50, 1958), refers to desirability of trade liberalisation.

17.7. Critical policy analysis

Ideas, narratives, frames and discourses

The Zuckerman attitude to the land is utilitarian, a simple modernist, even imperialistic productivism:

...we cannot view with equanimity the under-use, amounting in places to abandonment, of much marginal land made up of rough grazings and waste lands.

This is a value judgment, Zuckerman and colleagues, with memories of shortages and rationing, probably had difficulty conceiving that some land should be abandoned rather than having resources wasted on squeezing production from it. The assumption that all land must be used does not mean for forestry, in this Zuckerman and Price (1971) are in approximate agreement:

If it is merely a matter of keeping the land in some use, it may be cheaper to maintain a totally subsidized sheep farm, since a small rate of return does not imply a large negative net discounted revenue per acre compared with forestry which gives a modest rate of return but is more capital intensive.

Perhaps the case for abandonment of land in Britain is ideologically and emotionally hard to make.

Social and employment issues

Nail (2008, p.58) saw the arrival of stricter financial considerations after Zuckerman. Tsouvalis (2001) describes the provision of rural employment as having been introduced by the Zuckerman Report, then formalised in 1963. Nail points out that Ryle made clear that it was not evident in practice. Forestry Commission annual reports of the late 1950s show a relatively low incidence of vocabulary related to “employment”, and employment had been an objective in the 1920s. Regression analysis shows a decline of employment-related vocabulary in both Forestry Commission annual reports and parliamentary debate over the whole period studied.

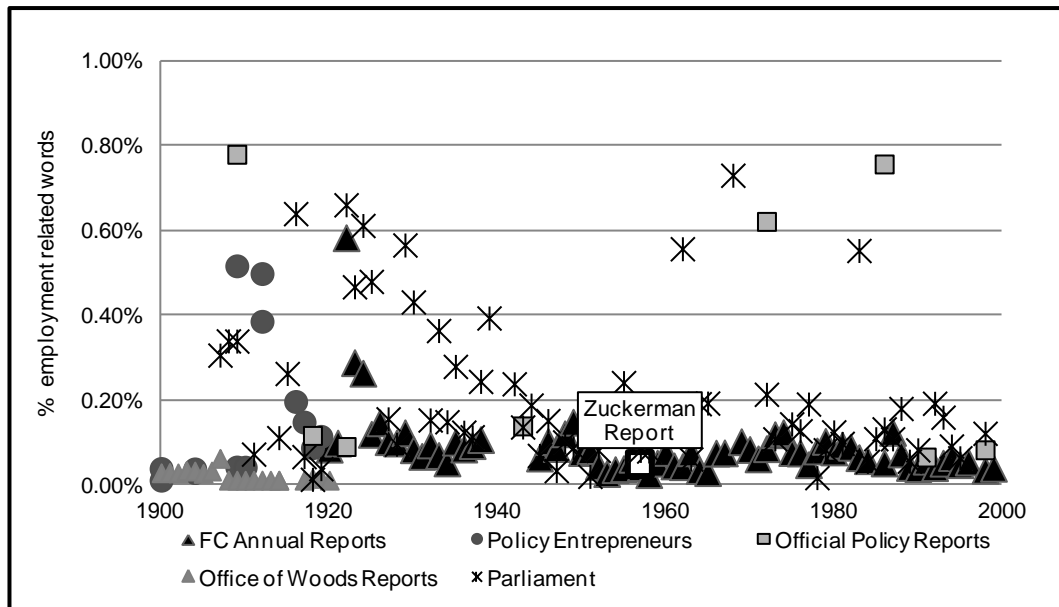


Figure 17-4 Frequency of vocabulary related to “employment” in the Zuckerman Report and other corpora⁷⁷

The Zuckerman Report attempted some brave futurology:

In the long run the value of this land to the nation is bound to appreciate, rather than decrease, as the demand for food and timber increases in the world. (Zuckerman, 1957, p.44)

The value of land in Britain has appreciated, but perhaps due to a combination of agricultural subsidies and social change rather than food and timber prices.

The social and rural employment arguments were as stable, as discourse, as they were in 1909. The strategic argument had disappeared, but the overall productivist, modernist and scientific paradigm remained. Productivity appeared to be an end in itself; the atom bomb made almost no dent in the policy. This would be highly surprising if the Acland Committee proposals had really been a rationalist stagist evidence-based policy reaction to the strategic supply issues of the First World War. The evidence of this policy decision process is to support the thesis that the underlying rationale was fully formed before the First World War: the strategic argument was merely a trigger or tipping point. Once this was initiated, a path dependency was created, and coalitions and an institution were in place. Political players were reluctant to take radical measures to curtail or manage the policy.

17.8. Advocacy coalitions

On previous occasions there was evidence of a coalition operating to maintain the policy inertia. Less evidence has been identified for that coalition power in this event. There was no countervailing advocacy coalition seeking to overturn the policy. The clearest questioning came from the Treasury.

⁷⁷ Employment related word frequency declined with time: Forestry Commission annual reports ($R^2 = 0.18$, $P < 0.001$); Parliamentary debates ($R^2 = 0.10$, $P = 0.01$).

Text analysis was carried out using Loughran and MacDonald's (2011) "uncertainty" word list (see Appendix). It appears to suggest that the Zuckerman report was less "certain" than others analysed in this research.

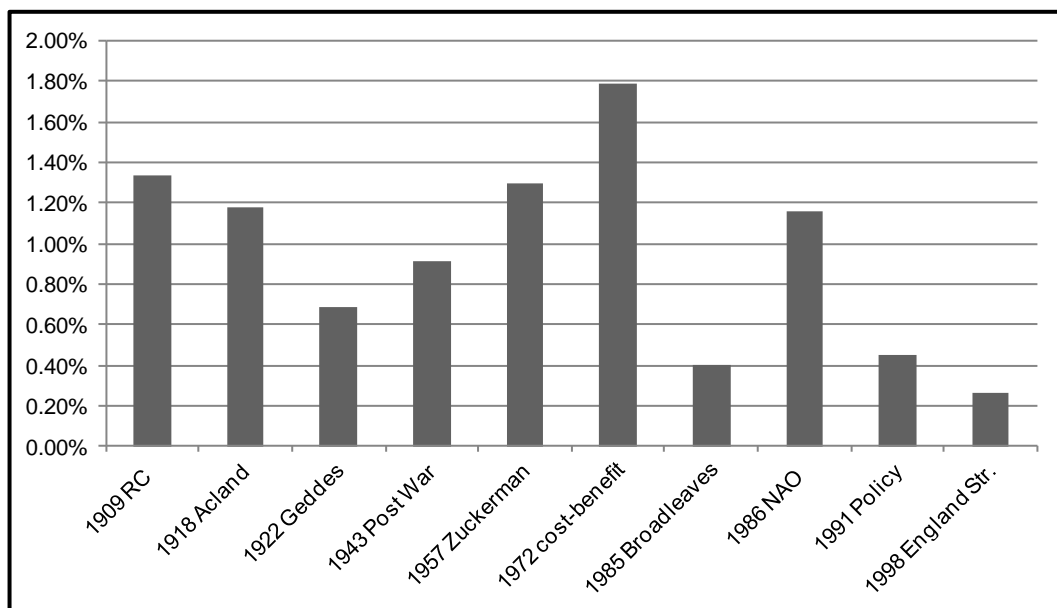


Figure 17-5 Frequency of vocabulary related to "uncertainty" (word list from Loughran and MacDonald (2011))

The Zuckerman Committee in fact shared the productivist attitudes of the original policy entrepreneurs; it simply included agricultural production in the same mindset, and sought to referee between forestry production and food production.

The programme was actually increased following the promised review, in 1963. This directed planting of 182,000 ha between 1964 and 1973. For the first time, in addition to a "Zuckerman" emphasis on the uplands for employment and socio-economic reasons, there was recognition of:

...the need, wherever possible, to provide public access and recreation, and ... will devote more attention to increasing the beauty of the landscape. (HC Deb 24 July 1963 vol c1468)

Wildlife was not mentioned in 1963.

Chapter 18.

Policy decision process - costs and benefits of forestry - 1972

18.1. Introduction

The newly elected Conservative Government initiated a review of forestry policy in 1970, focussing on value for money, in terms of rate of return. Their manifesto had been positive about forestry as a way to “reduce dependence upon costly imported timber,” and “particularly in Scotland, make good use of difficult land and provide a comparatively high level of employment.” Controversy had arisen about private afforestation in the Yorkshire Dales.

The government initiated a cost-benefit analysis. The publication of this (HM Treasury, 1972) 1972 was accompanied by a fifteen-page document entitled *Forestry Policy* (Ministry of Agriculture Fisheries and Food, 1972). This reviewed the situation and indicated that views could be submitted, mainly on the delivery of the policy. Despite challenging conclusions from the cost-benefit analysis about the lack of return on investment, the result was, again, policy stability. A less significant policy decision process took place later in the 1970s when private sector afforestation fell dramatically in annual area terms. Throughout the period the commercial viability of forestry was questioned: the strategic and balance of payments arguments faded; and employment arguments were complicated by labour shortages and technical advances. Environmental issues gradually grew in importance, and a modest coalition developed around them. There was no overall change in afforestation policy.

18.2. Value of forestry questioned - cost-benefit analysis

Strategic supply and import saving

The cost-benefit analysis noted: “A certain unreality enters into any discussion of the impact of unforeseen interruptions in the supply of timber and food.” The value of a forest reserve in the context of limited nuclear war was considered, as was a potential constraint of, or change in, the pattern of trade. The cost-benefit analysis concluded that it “does not represent a valid ground for attributing additional value to domestic timber supplies”. The value of import saving was evaluated in the context of Britain’s imminent entry into the European Economic Community.

Silviculture and employment

There is a ruthless clarity to the options considered: restoration to agriculture; or abandonment of existing forest after clearfelling – “allow the land to go out of use altogether.” This would “imply a run-down of the Commission estate”. The study devotes considerable space to the question of employment almost to the extent of the 1909 Royal Commission report (see Figure 18-3).

New afforestation and landscape and amenity

The report concluded that if new forests did not repeat the angularity of the past, and avoided the open hills favoured by walkers, then they would have no negative effect on amenity value, and the recreation facilities in more attractive forests would have a positive value. However, the:

“Recreational Value of New Planting...can be estimated only on the most heroic assumptions.”

The report pointed out that the marginal future (1996) recreational value of a new hectare of plantation would be less, since large areas of earlier forest would by then be available for recreation perhaps on more convenient sites:

...this programme could not possibly be expected to match the local recreational requirements of the large cities and conurbations.

Climate

Early scientific reports on climate change reached the US government in 1965 (Washington Post, 2007). Paul Ehrlich (1971, p.38) also discussed the effect of carbon dioxide on the atmosphere, interestingly he made other predictions which *did not* come to pass. Frank Fraser Darling (1970, p.51), said, “The forested wilderness removes a great deal of the carbon dioxide” However the 1972 study concluded:

“To sum up, the climatological effects of forests, though clearly detectable in the immediate vicinity, do not warrant any attempt at valuation.” (HM Treasury, 1972, p.33)

Biodiversity

The study considered “wild-life” (HM Treasury, 1972, p.35) and water:

There is no reason why afforestation should damage fishing, and indeed planting, and the protection offered by shrubby growth beside streams and pools will tend to improve fishing.

If there was a negative wildlife impact expected:

...arrangements may be made by local managers either through designation of a 'site of special scientific interest' or as some form of nature reserve.

It was concluded that:

Conifers generally do not provide a suitable habitat for as many species as do broadleaved trees, but nevertheless afforestation of open woodland by conifers widens the range of habitats for many species...

There appears to be no case for attempting to place a monetary value on this benefit. (HM Treasury, 1972, p.35)

This was to be well tested in the next decade, in the Flow Country of northern Scotland.

Future timber prices

The cost-benefit analysis set out futurological aspirations:

...to look 40-60 years ahead, on current forestry technology, and not less than 30 years ahead on the most extreme technological assumptions.

Prices of standing timber were estimated at 8.5p per hoppus foot (£2.30 per m³) overbark standing (HM Treasury, 1972, p.37). This is equivalent to £25.70/m³ in 2012 prices, when an actual price might be £14.00. The paper suggested that global timber prices had risen, citing Potter and Christie (1962). Rising prices of between 1% and 4% were predicted. Projections to 1990 were based upon FAO forecasts of a 3% annual increase between 1965 and 1985. Television was expected to reduce paper consumption, and building substitutes to compete with timber. In the more distant future, beyond “currently unforeseen technologies”, it was concluded that forests were “naturally renewable” resources and use of some sort was likely to continue. Biomass energy was not predicted, but conversion of lignin to food was suggested. Predictions of these sorts over the years deserve further research and systematic evaluation. The full cost-benefit analysis stretching to nearly 100 pages was published in June 1972.

18.2.1. 1972 forestry policy – “consultation”

The concise paper, *Forestry Policy* (Ministry of Agriculture Fisheries and Food, 1972) published at the same time as the cost-benefit analysis, made clear the need for accompanying “broad political and economic judgement”. The paper included thought-provoking statements:

...the current forestry estate is now worth much less, even with the effect of inflation of values, than the net cost (including interest charges) of creating it.

...forestry planning operations fail by a substantial margin to meet the minimum standard set for public sector investment in general, which is to say that they involve a resource cost to the economy...

...for the years 1967 to 1969 sale prices did not recover the accumulated costs of growing the timber then sold, even before debiting interest on costs.

Employment and preventing rural depopulation were seen as an “important benefit”. While recognising that the cost per job in forestry exceeded that in agriculture, employment:

...should be the principal objective of future policy for new planting by the Commission, though not one to be pursued irrespective of cost...

The government concluded that existing planting targets were “too high” and discussed combined figures with restocking, the implied afforestation target was thus a little vague, about 45,000 acres, (18,000 ha).

Environmental objectives were set out:

...greater attention must be given to the part which woodlands play in the landscape...right for the Commission to seek to enhance the appearance and attraction of its woodlands despite some resulting reduction in profitability.

...more emphasis should be given to realising the recreational potential of State forests, and to the interests of amenity.

Analysis of the text reveals a much more balanced content on timber, employment, recreation and landscape than any previous document. No nature conservation was recorded by the sampling

method, although the word “conservation” in relation to nature does appear. (“Conservation” as a lone word was excluded since it returned a distorting figure based on the incidence of “timber conservation”).)

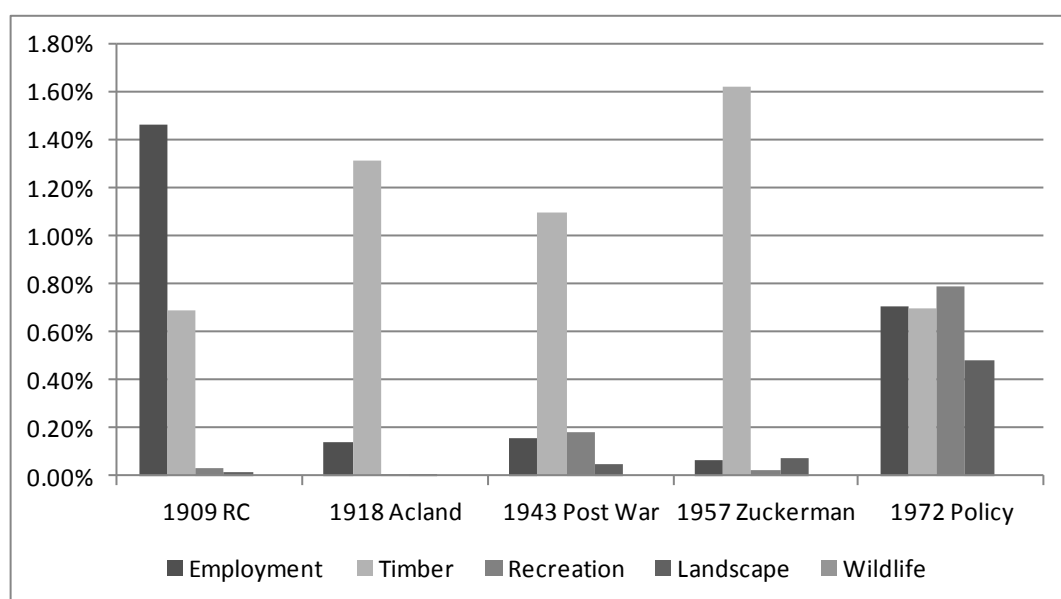


Figure 18-1 Frequency of vocabulary related to “objectives” in key reports to 1972⁷⁸

18.3. Policy decision

A statement in House of Commons on 24 October 1973 (Forestry Commission, 1974c), dealt largely with changes to the dedication schemes rather than rates of afforestation desired:

...the Forestry Commission will model its own planting and management policies upon the principles I have described, will give still further emphasis to providing recreational facilities and will develop a planting and replanting programme on the lines and at the level set out in the consultative document and with special regard paid to the contribution which the Commission's operations can make towards stemming depopulation in rural areas.

In a fuller debate, the following month, the Minister was similarly vague on the scale of afforestation (HC Deb 16 November 1973 vol 864 cc911-8).

18.3.1. Development of afforestation controversy - Langstrothdale

The policy review in December 1970 may have had some of its origins in a controversy which had arisen in the Northern Pennines regarding private afforestation in the Yorkshire Dales National Park. This project had been raised in the House of Commons as early as 1965 (HC Deb 08 March 1965 vol 708 cc1-2). By 1970 planting had been approved by the Northern Pennines Rural Development Board, and accepted by the Countryside Commission, but was opposed by the Yorkshire Dales

⁷⁸ A chi-square test (excluding wildlife) showed a relationship between the values and the different reports ($X^2 = 1386.9$, $df=12$, $p > 0.001$).

Planning Committee (HC Deb 10 March 1970 vol 797 c276W). Seven articles appeared in the *Guardian* in 1970 and 1971 covering the arguments. The Council for the Protection of Rural England, passed a resolution demanding planning controls on afforestation in National Parks. The issue was raised by the Standing Committee on National Parks. The argument revolved partly around a "Voluntary Agreement on Afforestation in National Parks", which had been negotiated in 1961, involving stakeholders: the Timber Growers' Organisation; the Country Landowners' Association; the Forestry Commission and the National Parks Commission. This had arisen from the report of the National Parks Commission (1960) that it was:

...wrong in principle that it should be possible to change substantially the character of a landscape in a National Park without affording those to whom statutory responsibility of preserving the landscape has been entrusted any opportunity of considering the proposals.

Ministers found themselves refereeing the government institutions involved. The Council for the Protection of Rural England wrote to the Ministry of Housing and Local Government in March 1970 asking that all afforestation in National Parks come under planning control. In October 1970, ministers wrote to the Forestry Commission and the Countryside Commission:

I hope that the Countryside Commission will consider it appropriate to approach the national park authorities. The Forestry Commission are being asked to make a similar approach to the Timber Growers Organisation and the Country Landowners Association. Ministers hope that all the interests concerned will be able to agree in putting these arrangements into effect.

This is tame language for the government, clearly keen for resolution without recourse to ministers.

The Standing Committee on Afforestation in National Parks (co-ordinated by Council for the Protection of Rural England) set out its concerns to the Minister of Agriculture (TNA: AT25/109, 1970-1974, 26 Oct 1970):

...afforestation can and usually does alter the landscape extensively and adversely from the point of view of its enjoyment by the public, by:

- (1) Reducing the variety of the landscape in form and colour and in flora and fauna.*
- (2) Creating disagreeable contrasts between densely planted trees and the natural cover and form of the land.*
- (3) Restricting access on foot.*
- (4) Introducing harshly aligned and constructed roads and rides which conflict with the natural formation of the land and its composure, especially in hilly areas.*
- (5) Perpetuating these disturbing effects by short term felling which prevents any ecological balance supervening.*

Price (1971) used Langstrothdale as a case study to explore the balance between current tax subsidies and the social benefits (or not) of afforestation. Private sector afforestation was growing during this period, rising from about 12,000 hectares in 1966 to nearly 20,000 hectares per year in 1973. Price explored the effect of tax relief in conjunction with high marginal tax rates, which were unrelated to the benefits of any particular project, and concluded that the benefits of that case were

unlikely to justify the financial and social costs, and that the uncertainty brought into question the blanket support for afforestation, particularly in National Parks.

18.3.2. Development of wider attitudes

Parliament

The initial announcement by the minister, Anthony Stodart (*HC Deb 08 December 1970 vol 808 cc230-1*) referred to “return on the public money invested”. However, MPs focused on the UK's lack of timber, worldwide demand, import saving, and employment. A notable exception was Marcus Kimball, a fellow Conservative, who remarked on the demise of the strategic argument, and, in the EEC context, import saving. He analysed the recreation argument ruthlessly:

The Chairman of the Forestry Commission in another place may well argue how well used his present recreational facilities are. I would suggest that the reason why they are well used at the moment is quite simply that there are no other facilities as yet in this country... If a parking place is made in a shelter belt of spruce trees or even on the edge of a sewage farm people will still go there since that will be one of the few places where they can go to make a picnic. It is for that reason that the Chairman of the Forestry Commission is able to claim that his recreational facilities make a valuable contribution at the moment. (HC Deb 05 November 1971 vol 825 c543)

Price (1971), pointed out similarly that the recreational benefits might come from “quite small areas of trees.” The *Economist* (1971) wanted more trees but asked “how many”? It uncritically accepted that demand for timber was “going to grow rapidly” and that even the EEC was a net importer (fleetinglly, until Sweden and Finland's joined). Plastics were dismissed, and the need for “steady expansion ... beyond dispute’. There was attempted foresight, on the part of some academic foresters. Dawkins (1969) suggested that “large-scale industrial uses of wood will be taken over by synthetic plastics and derivatives of the AlFeSiCa minerals within the next half-century”. Richardson (1970) suggested a separation of production forestry from environmental forestry, or “resort management”.

Tompkins (1989, p.92) described the cost-benefit analysis as a shock to the “cosy world of forestry” which led to the setting up of the Forestry Committee of Great Britain (FCGB) and “intensive lobbying”. As in the case of Zuckerman, Tompkins saw the situation as one of interest groups and advocacy coalitions. He cites the reports and counter analyses commissioned by industry groups with the explicit purpose of contradicting the Treasury work. Price (Price, C. 2013. *Pers.Comm. Email*, 6 August; 1997) recollects discussion of the same biased objective. Nail (2008, p.59) describes this period under the headings, “waking up” and “acknowledging failure” and points out that the cost-benefit analysis study was the first to seek to integrate market and non-market values. She suggests that from 1972 onwards there were “endless debates” sometimes arcane and without “irrefutable conclusions.” Oosthoek (2013, p.90) describes the review as putting a sense of optimism “under pressure”; he noted that the Commissioners' report of 1975 “left out mention that the government's cost-benefit analysis had concluded that the creation of state forests was simply uneconomic”. Oosthoek was straightforward in analysing the Forestry Commission attitude:

The Forestry Commission paid lip service to broadleaves and environmental issues in general, but little value was assigned to the concept in practice.... What was not specified in the 1971 Annual Report or in reports of the following years was the area of "other conifers" planted and their geographical distribution. We can only speculate as to why the Commission ceased to publish such details, but it was probably because the proportion of Sitka spruce was embarrassingly high in comparison with other species, especially broadleaves.

...a schizophrenic forest policy and practice in which forest expansion led to the rise of commercial monoculture plantations, or forests of production, alongside forests of leisure and sites of conservation, which can be described as forests of consumption. (Oosthoek, 2013, p.94)

Oosthoek's description of these developments is insightful and probably still relevant even in the supposed age of integrated sustainable forest management.

Forestry lobby

The Forestry Committee of Great Britain commissioned an "independent appraisal" of the cost-benefit study (Wolfe and Caborn, 1973). This suggested that a higher value should be attached to job creation. The study also advocated a different discount rate for land-based activities like forestry. Slightly bizarrely, the study suggested a "strategic consideration" based upon interruption of pulp and paper supplies from Canada, Scandinavia and the Soviet Union in case of international conflict. The paper drew attention to FAO concern about a future world timber shortage. It argued for greater weight to be attached to employment arguments, and that the test discount rate should be lower.

'Nature' proposes policy

Nature (1973), saw the Policy Statement as a "warning shot across the Commission's bows". The leading article went on to question the Commission's existence, given the lack of justification for a major afforestation programme since 1958. It highlighted the £130 million cost of the plantations to date and their value estimated at "merely" £88 million, which *Nature* felt was wildly optimistic:

...it should be openly acknowledged that the sum involved is a measure of past errors of judgment and in particular of the Forestry Commission's pigheadedly bullish view of the scale of operations which would be justified.

Nature was sceptical about the £10,000 price estimated for each job created, noted the declining workforce, and that recreational values had been destroyed by planting forests "where people used to walk". The editorial then set out potential changes in policy which were not adopted, some of which were still being proposed in 2011:

No more land should be acquired unless employment benefits were very clear.

Sale of forests "whenever there is a chance of recovering the public money now locked up in nationalized trees".

Only replant the most productive areas leaving the rest to natural seeding.

Recreation should be more imaginative, perhaps by turning the land over to organizations, public or private, which would manage them as recreational parks.

Research should be transferred from the Forestry Commission to research councils.

This striking proposal drew a reply from Professor Wareing (1973), Professor of Botany at the University College of Wales, Aberystwyth, a member of the Forestry Commission's research liaison committee. Wareing took issue with "pigheaded", pointing out that the Forestry Commission was "simply an instrument of government policy". He omitted to say that it was also the source of advice to ministers. Wareing suggested that "some authorities believe that the real price of wood will continue to rise following the historical trend". The Editor counter-responded that the rate expected from other investment was higher and that the Commission's operations were "unequivocally unprofitable".

The economist proposes policy

The *Economist* (1971) noted that productivity increases meant employment had halved; it gave credence to import saving, but not to subsidies to sheep farming. The *Economist* had its own policy suggestions:

A ban on conifers in high population areas and perhaps National Parks.

Other areas to be mixed with specified proportions of hardwoods.

Integration with agricultural land.

Access to the public.

The *Economist* looked forward to the Forestry Commission "breaking even" (without interest charges) by 1985.

Forestry Commission reactions

Pringle (1994), an insider at the time, highlights the "welcome" of the cost-benefit analysis in the Commissioners' Annual Report (Forestry Commission, 1971). They hoped for "clarification" of their terms of reference and the role of private forestry. The annual report contained complex contradictions: employment benefits from forestry; increased labour productivity; mechanisation; labour shortages; and competition for mobile labour including the expanding North Sea oil industry.

Change of government 1974

The victory of Labour in the general elections of 1974 did not result in forestry policy change. The new Minister of Agriculture, Fred Peart, confirmed the essential components of the previous government's proposals. The forestry scene was surveyed by *Nature* at the time (Gribbin, 1974):

Conifers continue to dominate planting by the Forestry Commission, but that pattern is likely to be changed when details of the new government policy are announced.

Nature commented on the institutional interactions and effectiveness of the forestry lobby, providing some evidence of at least two sides of an "iron triangle", between industry lobby groups and a government agency:

The Forestry Committee of Great Britain, which represents private forestry in discussions with the government, generally sees eye to eye with the Forestry Commission, although it is in a better position to speak out against government proposals even to the extent of commissioning its own investigation of the accuracy of government studies relating to forestry.

Overall however, despite noting this probable source of institutional inertia. *Nature* suggested that with a “general restructuring of the Commission’s activities the future of forestry in Britain is clearly going to be markedly different from its immediate past.” This was premature, policy stability was to continue. However a new internal shock was provided by the Labour government’s changes to inheritance and capital transfer taxation, which at least partly resulted in a fall in private-sector afforestation.

The planting “crash” 1976

Private sector planting fell steeply in 1976 and the forestry industry made representations about changes to taxation and grants. This resulted in a Working group on Forestry Taxation and Grants which reported to ministers in February 1977.

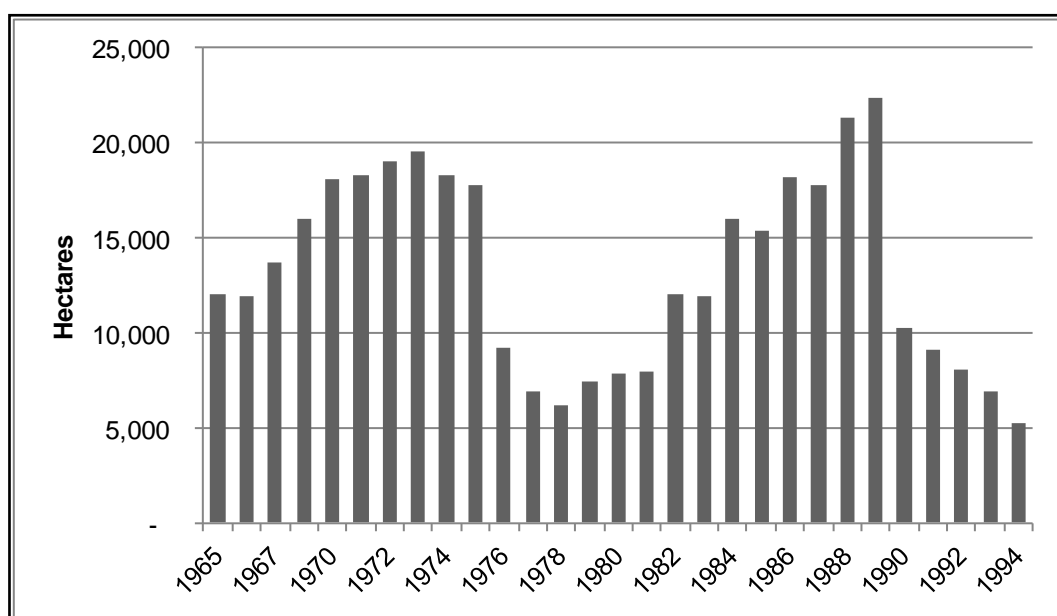


Figure 18-2 Private sector coniferous afforestation 1965-1994⁷⁹

The fall in planting was explored in a confidential *Report of the Interdepartmental Group on Forestry Taxation and Grants* (TNA: T366/115, 1977), which sought to identify a solution which would give confidence to the private sector such as to achieve about 15,000 hectares per annum. These levels were reached again in 1984.

The covering memorandum to the Minister of State at the Treasury (Denzil Davies MP) reveals the institutional relations between the Forestry Commission and the government: “The terms of reference were carefully drawn to exclude the fundamental question of the long-term value to the UK economy, and hence what the Government’s overall objectives should be”. This was slightly disingenuous, the memo considered the desirable planting rates on the basis that it was “neither necessary or desirable” to return to the overall rates of 1972 (when total private and Forestry Commission planting peaked at 40,000 ha per annum). The Treasury memo is clear that “the forestry interests” were lobbying in their

⁷⁹ Produced from Forestry Commission data in Excel file NPRS1920, obtained from Forestry Commission, Edinburgh.

own (taxation) interests as much as in “forestry” interests, since the “the Group thought that at least as much weight should be placed on the effects of the general economic recession”. The Department of Environment, Minister of State, Denis Howell, was anxious that he be alerted to any weakening of the commitment to grants for broadleaved planting. The Minister of Agriculture asked that the Treasury statement include a commitment to the role of forestry in “harmony with the needs of agriculture and the environment”.

Another institutional interaction is revealed: the Treasury had not shared the report with the Forestry Commission; because it could be sensitive in terms of the 1977 budget. The archive document suggests that the Forestry Commission had complained that “Forestry Ministers will wish to have the view of the Commissioners. Faced with this, the Treasury official, Sir Lawrence Airey, suggested that however irregular he:

...would agree with this, if only because it might damage the credibility of Ministers' decisions if it subsequently became known that Ministers reached conclusions without adequate – or indeed any – consultation with the Commissioners. (TNA: T366/115, 1977)

The group confronted distributional effects of the tax subsidy (valued at £8 million per annum) which meant that the “income tax reliefs on their present scale are in conflict with normal principles of fiscal equity” and:

In the case of forestry, the main benefit of the subsidy is going, on the whole, to wealthy individuals which is particularly difficult to justify at a time when redistribution of wealth is one of the aims of Government policy.

Nature conservancy meeting on lowland forestry and nature conservation

A symposium at the Nature Conservancy Council's Monks Wood research station considered nature values (Nature Conservancy, 1972). The role of Nature Conservancy Council was very much of protecting valuable sites as best they could:

Bray.⁸⁰ If we are talking about seventies and eighties generally ... there were two separate issues but involving the Forestry Commission generally - this is day-to-day ... casework ... things coming in, we had to form a view within the NCC policy, and then come up with some sort of response ... the sort of things which came in to us were either afforestation of bare land which was leading to loss of moor and heath open habitat mainly in the hills of mid Wales, and the replacement of deciduous woodland with conifers. ... we didn't call ancient woodlands then in the late 70s but we did later on. (Bray, R. 2013. Pers.Comm. Interview, 22 July.)

Despite this conflict, joint processes like the Monks Wood symposium provides evidence of a search for consensus and for institutional learning in the Nature Conservancy Council, the Forestry Commission and the Institute of Chartered Foresters.

⁸⁰ Nature Conservancy Council field officer in Mid Wales during the 1970s and 80s.

Institute of chartered foresters meeting 1977

In 1977, the Institute of Foresters held a conference on *The Formulation, Implementation, and Achievement of a National Forest Policy*. The proceedings reveal a lack of policy direction, John Workman, in summing up, said:

Two rather divergent views had emerged regarding the present situation—according to one view the present policy had broad objectives and was flexible; according to the other view the policy was hardly observable and able to be changed “at the drop of a hat”. (Dobson, 1977)

Richard Buchanan MP noted that there had not been, (in his view), a full-scale debate on substantive forestry policy since 1945. He proposed that “National Forest Policy should be implemented as part of a comprehensive and consistent land use policy, and once agreed the forester should be left to get on with it.” Some forecasting was attempted: “Prospects for mining timber are reasonably good with increased coal output”. Hindsight: pit closures were less than a decade ahead. Others were optimistic about demand and prices:

Mutch: cast doubt on the forecast that imports would be available ...the sensitivity of price to supply shortage both tended to show that timber would be marketed in future at a higher price.

Richards: Wood prices increased markedly between 1965 and 1974. For a 10 per cent increase in volume of imports, Britain had to pay a 300 per cent increase in price, and the shortfall by the year 2000 suggests prices will rise further relative to other commodities.

Bryan Sage, writing an opinion piece in the *New Scientist*, suggested that in the field there could a difference between fine words from Forestry Commission and action on the ground (Sage, 1979).

“Wood production outlook 2000”

This foresight exercise (Forestry Commission et al., 1977) concluded that the difficulties of predicting changes in society, or the value of renewable resources or substitution were such that “there is no basis for forecasting such change”. Projections of future population related demand were attempted, with some technological changes, for instance in paper pulping technology. The report concluded that there was “no obvious reason for wood product prices, taken by and large, to vary very much from the levels observed over the past quarter century.” The paper then surprisingly concluded that as long as the price of land did not rise, then:

...the reasonable and prudent course, satisfying the jobs and foreign exchange criteria as well, is to maintain and indeed increase the rate of planting.

By the end of the 1970s, the Great Spruce Project was still in place. Coniferous afforestation was increasing again, toward a peak of nearly 30,000 hectares per annum in the 1980s.

18.4. Rational stages approach

Individuals: policy entrepreneurs and issue experts

There is little evidence of specific policy entrepreneurs during this period. There were new lobbying efforts, but no high-profile experts or individual lobbyists. The chair of the Forestry Commission, Lord Taylor of Gryfe, was clearly active, David Clark (a past and future Labour MP) who was later to be a

long- serving Forestry Commission chair, wrote in the *Guardian* (Clark, 1975) on a demonstration in January 1975 at Parliament. This significant lobbying effort was noted by Sir Jasper More who later described himself as speaking on behalf of the “Forestry Committee of Great Britain, which represent the forestry owners”:

I have had letters from the Economic Forestry Group, the Woodland Management Association Limited, the Flintshire Woodlands Limited, and the Association of Professional Foresters. The Association of Professional Foresters, together with the British Foresters Action Group, represents about 10,000 workers employed in the forestry industry. (HC Deb 05 March 1975 vol 887 c1626)

Lobbyists were active, if policy entrepreneurs were less prominent.

External shocks and crises

The oil price crisis in October 1973 caused a more than doubling of timber prices (see Figure 19-10). This provided ammunition for the arguments of the timber lobby at the time, forming part of the justification for members of the Forestry Commission’s Home Grown Timber Advisory Committee to suggest that the 1972 Wolfe Report’s emphasis on the commercial value of timber should have been taken more seriously:

[We] felt that the weight had not been given to commercial planting which the Wolfe Report and the very sharp rise in timber prices during the year justified. (1974a, p.29)

Prices fell back as sharply a year later. The fact that a geopolitical global crisis had resulted in a sudden rise in the price of timber which went almost completely unremarked in the evidence is surprising, given the long history of timber famine arguments.

Political parties

The Labour manifestos of 1974 (Labour Party, 1974a; Labour Party, 1974b), were silent on forestry but included:

REDISTRIBUTE INCOME AND WEALTH. We shall introduce an annual Wealth Tax on the rich; bring in a new tax on major transfers of personal wealth; heavily tax speculation in property - including a new tax on property companies;

It is clear that the 1977 tax review considered this issue, as did Sir Laurence Airey in briefing his Treasury Minister. A junior minister in the Welsh office raised the issue of equity in this context (see Section 19.8).

18.5. Institutions and bureaucracies

The Forestry Commission appears to have been somewhat marginalised. The key issue had become private-sector afforestation, a shift in institutional roles. The Forestry Commission was given increased responsibilities for balancing nature and recreational values. Engagement with other institutions like the Nature Conservancy Council seems to represent gradual institutional learning. The policy documents and Forestry Commission annual reports noted the increasing importance of restocking for the Forestry Commission, while the private sector took on afforestation.

18.6. Policy network analysis

Policy networks and subsystems

In the 1972 policy discussions, the Forestry Commission chair was clearly significant, and he was alluded to by the minister, Stodart, in a debate in November 1973:

In particular, I want to pay tribute to the work done, the help given and the advice always so generously offered by the Chairman of the Forestry Commission, Lord Taylor of Gryfe.

The network involving the Forestry Commission and the core of government appears reduced since the time of Robinson, Lovat, and the powerful policy entrepreneurs with their special contacts in the cabinet of earlier decades.

Internationalisation, policy diffusion and multi-level governance

The United Kingdom joined the EEC in 1973. The 1972 policy paper noted that just over ten percent of the United Kingdom timber import bill was from member and candidate countries of the EEC. This represented a significant change in the logic of self-sufficiency which had permeated thinking since 1918.

18.7. Critical policy analysis

Ideas, narratives, frames and discourses

The focus of the cost-benefit report on employment is striking. This is combined with stronger nature and landscape values than in previous official reports.

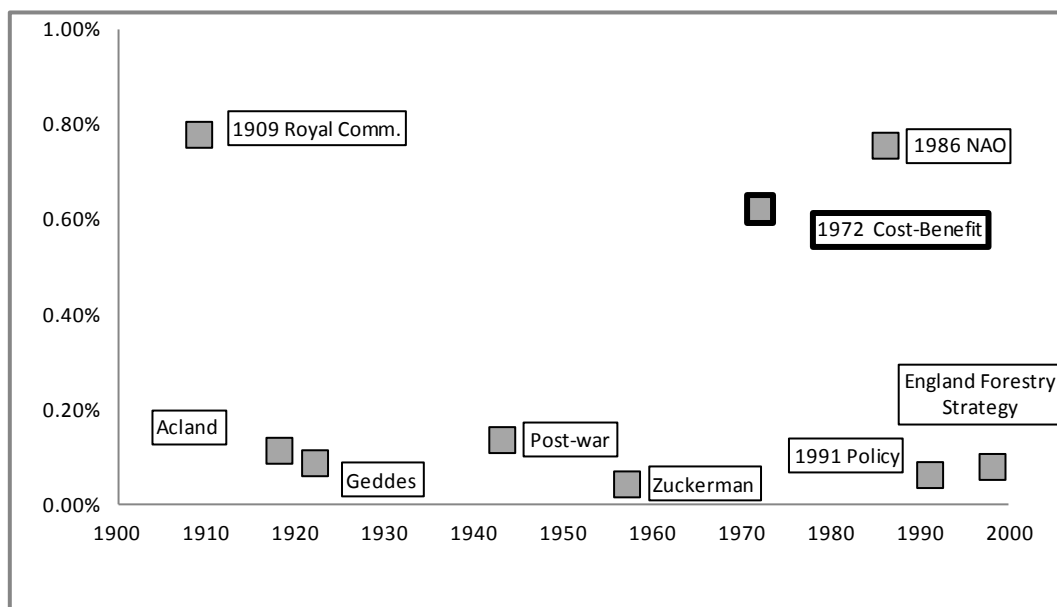


Figure 18-3 Frequency of vocabulary related to “employment” in official reports

Technological developments were significant: the number of employees was declining due to mechanisation of forestry. The 1971 Annual Report noted that:

The sheer physical effort required in forest work has been greatly reduced by mechanisation, notably the increased use of cranes for lorry loading, and above all by the introduction of light-weight chainsaws for felling, snedding and cross-cutting.

After the Ministerial statement of July 1974, the Annual Report noted that employment could not be “pursued regardless of cost. Labour productivity has risen quite substantially over the last decade due largely to improved working methods, improved tools and mechanisation.”

18.8. Advocacy coalitions

The fact that there was clear dissension and “representations” made by the private sector forestry lobby appears to indicate some breakdown of the forestry coalition. (The Advocacy Coalition Framework is shown diagrammatically in Figure 10-3.) There is little evidence in the correspondence between ministries and the Treasury of a so-called “Iron Triangle” between the interest groups, Whitehall and government.

The evidence for disquiet in the forestry lobby is evident in various lobbying activities and the preparation of an alternative economic study to challenge the Treasury cost-benefit analysis (Wolfe and Caborn, 1973), the purpose of which was pretty clearly to find any alternative result. The 1977 tax exercise is interesting in that the Forestry Commission, or at least the Commissioners, seem to have been kept partially out of the loop, as evidenced by their last-minute opportunity to see the report before budget consideration. That said, they were conferred this right partly based on the perceived institutional status of the Forestry Commission by the Treasury official who noted the political danger of appearing to ignore their advice.

The forestry lobby appeared to have access to centres of power but these seem to have been declining. There is little evidence of effective behind-the-scenes lobbying; indeed, there is some evidence of a casual attitude to the industrial lobbyists. Sir Lawrence Airey noted that “the main representative body of the forestry industry took so long in arranging a final meeting with the Inland Revenue that the timetable has slipped by about a month.” He did not display any particular concern for their interests, in terms of the Labour ministers he was advising:

If the industry's representatives cannot be persuaded of the folly of damaging confidence by creating a major row over tax, a delay of 2 or 3 weeks is not going to significantly affect the reception of the package.

The Inter-Departmental cost-benefit analysis, and the later discussions on taxation arrangements are the first time that the financial failure of the afforestation programme since 1919 had been clearly set out. That said, the rates of return were not significantly different from those used by some of the policy entrepreneurs of before the First World War. These policy entrepreneurs had of course assembled a range of additional arguments: firstly, employment provision in marginal rural areas, and then the apparently solid “strategic” argument of the submarine blockade. Timber “famine” and price rises had also been predicted. The interwar years reinforced the employment argument, and the Second World War confirmed the strategic argument, at least until the atom bomb. Employment arguments were still

well entrenched, but there were incremental increases in the importance of landscape, recreation and to a lesser degree, wildlife. The Forestry Commission was leaving the “sharp end” of new afforestation to the private sector. The Great Spruce Project looked solid and coniferous afforestation programmes were climbing. However the comments of *Nature* and *The Economist* provided clear outlines of a coherent alternative policy.

Chapter 19.

Policy decision process the end of the “Great Spruce Project”

19.1. Introduction

At the end of the 1980s, the coniferous afforestation programme initiated in the 1920s came to a relatively sudden halt after changes in taxation of forestry. This description contains a conundrum. It is not clear from “secret” budget files obtained for this research, that the Government actually *intended* the afforestation project to end. It is clear that it did not then choose to act when the decline in planting became evident.

Why did this happen in the 1980s, when it had survived the effective loss of its *raison d’être* in 1945, and concerted institutional and public attacks in 1922, 1936, 1957, 1971, and 1986?

19.2. Outline of period

The decade opened after the election of a Conservative government intent on a radical approach to public ownership and public services. Privatisation of some Forestry Commission forests was quickly initiated.

A major report authored by the great and the good of academic and professional forestry recommended that up to a *further* 2 million hectares be added to Britain’s forest area, with a very slightly greater proportion of broadleaves (Centre for Agricultural Strategy, 1980).⁸¹

A major conference on “Broadleaves in Britain,” in 1982, was followed by a significant change in policy in favour of native woodlands and broadleaves. Public and institutional opposition to the afforestation of the “Flow Country” in the north of Scotland developed, and political opinion turned against (already declining) afforestation in the English uplands.

Eventually, in 1988, the government changed the tax arrangements for forestry while reiterating targets for planting. However the great afforestation project started after the First World War had effectively ceased.

19.2.1. Afforestation statistics

Coniferous afforestation fell from above 20,000 hectares per annum to fewer than 10,000 hectares after 1993; by 2001 it would fall below 5,000 hectares.

⁸¹ Autoethnographic note: As a keen forestry student, I bought a copy and accepted the proposal with excitement. In a sort of “coup,” as student organiser of guest lecturers, I succeeded in getting the author to address Bangor students.

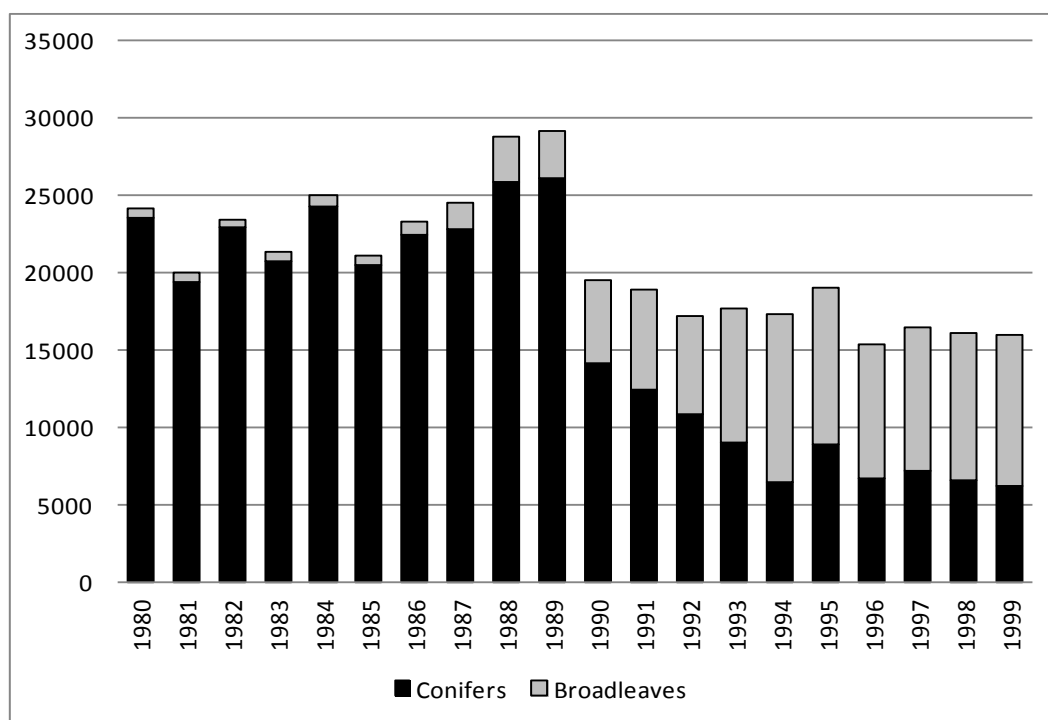


Figure 19-1 Coniferous Afforestation in Great Britain 1980 to 1997⁸²

Broadleaved afforestation increased, particularly in England. The relative timber and environmental values generally applied to broadleaves and conifers mean that planting statistics are a proxy quantitative indicator of a paradigm shift from the productivist coniferous project (Mather et al., 2006).

19.2.2. Turning point on tax concessions for afforestation – budget 1988

Chancellor of the Exchequer Nigel Lawson abolished tax-allowable afforestation in the Budget of 15 March 1988. The “lead forestry minister”, Malcolm Rifkind, then *reiterated* the existing 33,000 hectare per annum afforestation targets for Great Britain, and introduced higher grants, ostensibly intended to compensate for the tax changes (HC Deb 16 March 1988 vol 129 cc585-7W 585W).

Despite this, following the budget there was a significant and relatively rapid reduction in afforestation in Scotland, and thus effectively in Britain as a whole.

⁸² Produced from Forestry Commission data in Excel file NPRS1920, obtained from Forestry Commission, Edinburgh.

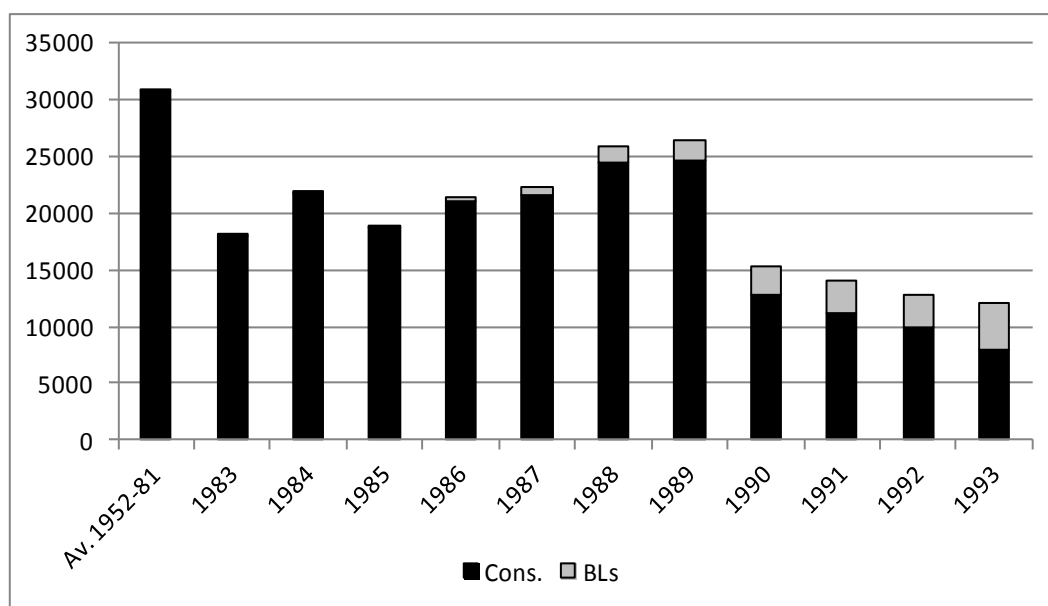


Figure 19-2 Total Afforestation in Scotland - Forestry Commission and private combined⁸³

19.2.3. Ending upland afforestation in England – the Ridley statement

Following the changes to the taxation arrangements, the Secretary of State with responsibility for the environment in England, Nicholas Ridley, announced a presumption against large-scale *upland afforestation in England* (HC Deb 16 March 1988 vol 129 cc595-6W 595W). Paradoxically, this had largely ceased *before the statement* (Figure 19-3).

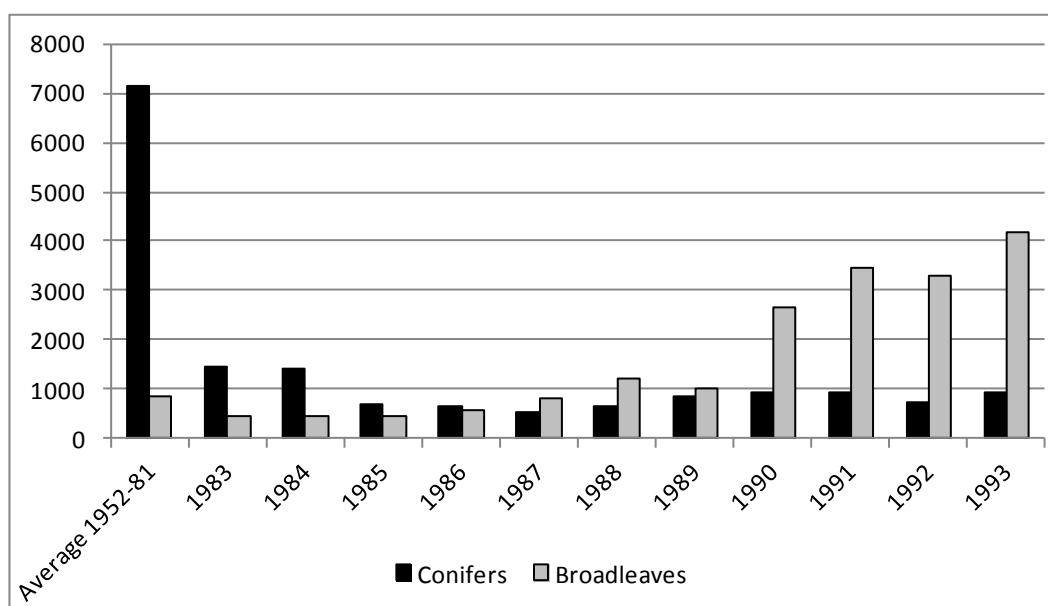


Figure 19-3 Total afforestation in England - Forestry Commission and private⁸⁴

⁸³ Produced from Forestry Commission data in Excel file NPRS1920, obtained from Forestry Commission, Edinburgh.

⁸⁴ Produced from Forestry Commission data in Excel file NPRS1920, obtained from Forestry Commission, Edinburgh.

If this was evident to him at the time, then the statement may have been political. By early 1988 the situation was confused. Afforestation in the uplands of England had largely ceased, but it continued apace in Scotland. The Government removed the main fiscal support for afforestation, and confirmed its end as a matter of policy in upland England. At the same time it restated its policy of meeting Great Britain's afforestation aims.

19.3. Afforestation policy unchanged – the Rifkind statement

Malcolm Rifkind, as the Secretary of State for Scotland and lead forestry minister for Great Britain, set out the forestry policy position in a written answer the day after the Chancellor's announcement of the tax changes. This took the form of a – carefully worded and planted – question from a fellow conservative MP, Sir Hector Monro. This was the product of a policy and governmental machine in action (this is clear from the “secret” Budget files). Sir Malcolm Rifkind reflected for this research that his “day to day involvement was very limited as most of the work was done by the junior ministers responsible for agriculture, fisheries and forestry during the relevant period from 1986-9” (Rifkind, Sir M. 2013. Pers.Comm. *Email*, 26 July). A later forestry minister interviewed for this research (Knight, Lord J. 2013. Pers.Comm. *Telephone*, 2 September) sheds light on a minister's role:

AD: So in some way, if only a Parliamentary question, that must have got asked and crossed your desk?

JK: Yes and I would probably have given that two or three minutes thought because that's what happens.

The exact text of Rifkind's statement (HC Deb 16 March 1988 vol 129 cc585-7W) is worth examining:

To ask the Secretary of State for Scotland whether any modifications to the Government's forestry policy are envisaged as a result of the changes to the forestry tax and grant arrangements announced by the Chancellor of the Exchequer in his Budget Statement.

This clearly sought to elicit a reply which would reassure the forestry industry that the government was not changing Great Britain's forestry policy:

The changes to the tax and grant arrangements announced by my right hon. Friend are designed to provide a simpler and more widely acceptable system of support for private forestry.

There has not however, been any fundamental change in the Government's policy for encouraging forestry, in an environmentally acceptable way. This is reflected in the Forestry Commission's statutory duty to endeavour to achieve a reasonable balance between forestry and environmental considerations.

In terms of actual programmes, he reiterated the increase in afforestation programmes announced the year before to 33,000 ha:

Last year in the context of new policies for alternative land use we announced an expansion of the forestry programme to 33,000 hectares of new planting a year, with particular emphasis on the private sector and with due regard to environmental considerations. The planting of a higher proportion of trees on low ground of better quality was also to be encouraged. These policies remain unchanged, and to this end planting grants will be substantially increased.

Using explicitly productivist rhetoric, Rifkind stressed the value of industry:

My right hon. Friends, the Minister of Agriculture, Fisheries and Food and the Secretary of State for Wales, and I remain of the view that a healthy forestry industry is in the national interest and that long term confidence in both forestry and wood processing industries in this country is fully justified.

The next section of the statement alluded to the employment argument, though he used the weak word “contributes”. This appears to take some account of scepticism about the cost per job, and the general value of forestry as an employment generator:

The expansion of planting in recent years has led to a significant and welcome growth in the United Kingdom of a modern wood processing industry through developments such as the Shotton Paper Company in Wales and Caledonian Paper in Scotland. The industry will in turn help to meet the growing demand for wood products and, together with the new planting programme, this will ensure that forestry contributes to employment in rural areas.

The clearest post-productivist rhetoric he used related to agricultural production:

Increased planting on better land will also provide an alternative to agricultural production and thereby assist in the reduction of agricultural surpluses.

The statement contained a significant section setting out environmental benefits:

The environmental effects of the changes will be positive for a number of reasons. First, the new arrangements for Government financial assistance for planting will strengthen the careful scrutiny and consultation procedures undertaken by the Forestry Commission, because it is very unlikely that any sizeable scheme will go ahead unless the Commission has approved it for grant purposes. In considering applications the Commission will continue to observe its published management guidelines relating to broadleaved woodland and will introduce similar guidelines for all types of woodland as part of the new scheme. Its procedures for dealing with applications for planting grants should thus gain in effectiveness as a means of controlling the environmental impact of forestry and ensure that the right trees are planted in the right places.

This section includes both consultation and *stronger control*. There had been contentious cases like Creag Meagaidh, an SSSI bought by Fountain Forestry for afforestation in 1983, where planting by tax benefiting owners *without grants* could damage nature conservation (Avery and Leslie, 2011, p.245). The policy provides evidence of the paradox noted by Mather (2001); increased regulation can be combined with increased consultation. This is in tune with Price’s (1971) proposals seventeen years earlier, that any “incentives should be designed to promote specific benefits”, and “made independent of the investor’s income level”. The next section of Rifkind’s statement provides evidence of post-productivism in its emphasis on broadleaves.

...the increased planting grants will incorporate a substantial differential in favour of broadleaved planting, so that the share of broadleaves in total planting can be expected to continue to increase.

...there will be a new supplement for planting on arable or improved grassland. Full details of a new Forestry Commission grant scheme reflecting these new arrangements will be announced next week.

In considering applications for replanting grants the Forestry Commission will follow policies which are designed to convert forests of an even age into attractive and more varied landscapes with a mixture of types and ages of tree.

The last paragraph seems to presage a more fundamental change in approach. Progress towards forests of less even age has been achieved to a degree, but most forest *stands* remain even-aged even a quarter of a century later.

The final section was an agreed phrase, used by Ridley on the same day, with regard to England. It provided a vision for forestry into the future, but used the word “aims”. Treasury files released under a Freedom of Information Act (2000) request, for this research, show that this was carefully chosen, to “distance” government (or the Treasury at least) from “objectives” or “targets”. The measures were supposedly:

...designed to encourage the achievement of the Government's aims for forestry in a manner which is acceptable in environmental and land use terms and which appeals to a wider range of interests. Forestry has an important role to play in the well being of this country. The industry has the support of this Government and has an assured future.

19.3.1. Coniferous afforestation effectively ends – a conundrum

These statements provide a conundrum. The tax changes are usually seen as a *conscious decision* to end the afforestation programme. That interpretation does not conform with Rifkind’s explicit rejection of a policy change. There are three possibilities:

That the increased grants were a genuine attempt to balance the effect of the tax changes and maintain the afforestation rate, including in the Flow Country.

That the government meant to reduce the worst, unpopular excesses of afforestation, for instance in the Flow Country, while maintaining confidence elsewhere.

That the Government actually intended a paradigm shift, ending a sixty-year coniferous afforestation project, but chose not to be explicit about it.

Whichever of these best reflects the *intention*, there was a collapse in private sector coniferous afforestation. *If* this was unintended and unexpected, then there was a secondary “decision event” not to take any corrective action. Was it a conspiracy, or a failure?

19.4. Survey of the period - 1979 to 1998

Tsouvalis (2001, p.70) characterises the period as “Upheavals in the Scottish Uplands.” By the 1980s the afforestation effort had become heavily concentrated in Scotland. Relatively low Scottish land prices were relevant, as the only component of afforestation expenditure which was not tax rebateable. The land might be poor for growing trees, but could be modified by tax-allowable ploughing and draining.

Margaret Thatcher’s government treated public enterprises with scepticism, and many post-war consensuses were challenged. The Secretary of State for Scotland announced a programme of forest sales in December 1980, using ideological terms:

We propose therefore to provide opportunities for private investment in these assets, including the sale of a proportion of the Commission woodlands... (Pringle, 1994)

Pringle notes that by 1989 more than £123 million had been raised.

In 1981, the Institute of Economic Affairs published *State Forestry for the Axe* (Miller, 1981), which argued against the continuing afforestation programme, proposing that the Forestry Commission be denationalised. A *Daily Telegraph* editorial suggested: “the Government has told the Forestry Commission to sell off £82 million of its assets in three years, far better to sell the whole thing off” (Daily Telegraph, 1983). In 1990, the Adam Smith Institute entered the fray. Mason (1990) noted that: “curiously, the Commission is one of the few areas of the modern state to remain relatively unscathed through a decade of radical change.” Mason proposed privatisation and the removal of subsidy.

19.4.1. Broadleaves and “ancient woodland”

The management of existing woodlands is not the focus of this research, but the changed attitude to nature values in forestry is relevant to the changes in values which brought the exotic afforestation to an end. In 1982 the Forestry Commission and the Institute of Chartered Foresters jointly organised a conference on “Broadleaves in Britain” (Malcolm et al., 1982). A major shift in British forestry thinking and policy came with the acceptance of the concept of “ancient woodland”. Tsouvalis (2012; 2001) describes this as a process of creating the geographical and intellectual space for the idea. The new policy ended the conversion of ancient woodland to conifers, and increased grants for broadleaved afforestation above those for conifers (Richards, 2003). The planting of conifers fell dramatically and that of broadleaves increased significantly by the 1990s (Nail, 2008), but the reasons for the fall in coniferous afforestation lay elsewhere.

19.4.2. Forestry Commission given a duty of “balance”

The Wildlife and Countryside (Amendment) Act 1985 was the first concrete expression of a shift towards nature conservation:

Amendment of Forestry Act 1967 s. 1.⁸⁵ Forestry Act 1967 (general duties of Forestry Commissioners), after subsection (3) there shall be inserted—

(3A) In discharging their functions under the Forestry Acts 1967 to 1979 the Commissioners shall, so far as may be consistent with the proper discharge of those functions, endeavour to achieve a reasonable balance between—

(a) the development of afforestation, the management of forests and the production and supply of timber, and

(b) the conservation and enhancement of natural beauty and the conservation of flora, fauna and geological or physiographical features of special interest.

⁸⁵ “The original stated: (3) The Commissioners’ general duty includes that of promoting the establishment and maintenance of adequate reserves of growing trees.”

Tsouvalis (2001, p.122) describes the Forestry Commission's reaction to this as a mixture of welcome and defensiveness, it welcomed the obligation, but feared confrontation and failure of others to recognise its conservation work.

19.4.3. The flow country

In the mid-1980s the forestry management companies which made most of their income from the creation of new plantations turned to the peatlands of the far north of Scotland. In addition to low price, approval by the Department of Agriculture for Scotland was more likely to be forthcoming in the far north, than in the Southern Uplands, the area of activity in the 1970s (Francis, G. 2013. Pers.Comm. *Upland Afforestation 1960 to 1990*. 27 November.). Fountain Forestry took the lead, Tsouvalis (2001, p.79) describes the genesis of this company in terms of its founders' astonishment at the tax benefits available in the early 1950s. The concept was to create a large new forest area which would eventually support a local forest-using industrial base. Initially this attracted local political and institutional support. While much of the area had environmental interest, the Nature Conservancy Council, responsible for "notifying" SSSI, had not made this a priority, seeing no imminent risk of damage from development. As a Forestry Commission Director General at the time commented for this research:

*Initially no environmental concerns were raised. This was soon to change as the RSPB began to draw attention to the importance of the area as an invaluable nesting habitat for a number of less common and threatened bird species. The NCC became involved and exercised their role as Government advisors to urge against such large scale planting in the Flow Country. (Francis, G. 2013. Pers.Comm. *Upland Afforestation 1960 to 1990*. 27 November.)*

Tsouvalis (2001, p.89) describes this period as one of "reconfiguring power relations". The afforestation effectively ended with the tax concessions in 1988, but the final policy on the Flow Country was what Oosthoek calls a "Solomonic judgment"; seeking a halving of the area, between nature conservation, and further afforestation.

19.4.4. Scrutiny – the National Audit Office

In the mid 1980s the National Audit Office initiated a review of Forestry Commission objectives, and commissioned consultants to assist, noting that this was the first such outside appraisal since the 1972 cost–benefit analysis.

The consultants reported with striking conclusions (Pieda, 1986); firstly criticising the inadequacy of the Forestry Commission annual reports in showing true costs, rates of return or valuations of the forest asset. They then considered the justification for the "forestry subsidy" established after 1972:

The employment argument was "weak".

Recreational value related to specific forests rather than the whole afforestation programme.

Forestry Commission models suggested that the weighted mean rate of return for afforestation was 2.25%.

There were no “important environmental, balance of payments or strategic considerations” which would justify accepting of a low rate of return for afforestation.

The fiscal regime was “highly favourable” for private afforestation.

“...non-financial considerations advanced to justify new planting do not appear to be persuasive.”

The National Audit Office report (1986), drawing on the Pinda research, noted the difficulties caused by the long time-scales and the need for foresight. It set out a stark assessment of timber prices:

It is conceivable that there could be substantial price rises in real terms over the next 50 years, and timber prices did rise by over 90 per cent in real terms during the first half of this century. Almost all of this rise took place over the period of the Second World War and since then there has been no marked trend upwards.

The future event which would have most effect in raising returns, would be an increase in the real price of timber. However, even very large increases in the real price of timber would not raise the expected return on most new planting to the test discount rate. Moreover, large increases in real timber prices appear unlikely.

The balance of payments was dismissed as a rational reason for afforestation at a poor rate of return:

...given the 40 - 50 year period of rotation of forestry, any investment decision taken now on grounds of import saving must be based on the balance of payments position in the year 2025 and beyond, and this clearly cannot be assessed with any certainty. There is no basis for a view that chronic and persistent balance of payments deficits will exist at that time. Even if such a situation could be predicted it would be better dealt with by measures planned and adopted nearer the time.

Intergenerational arguments were similarly dispatched by National Audit Office on materialistic grounds:

The Commission considers that there may be additional attractions to investment in forestry because it is a renewable resource. In its opinion even low economic rates of return may be acceptable if it is wished to provide for the resource needs of future generations. But NAO is not convinced that there is any intrinsic merit in investment in renewable resources which justifies the acceptance of low rates of return. Directing resources towards low yielding investments just because they reflect renewable assets may only result in lowering the growth rate of the economy.

In 1987 the Public Accounts Committee of the House of Commons considered the National Audit Office report. The Director General at the time, Gwyn Francis, and David Grundy, the head of economics, were questioned by the Committee. The difficulty of predicting future prices was explored by Robert MacLennan MP, who represented the Flow Country and tended to support afforestation:

MacLennan: Increase in real terms of imported timber?

(Mr Francis) Of timber prices generally; the raw material.

What is the basis for that?

(Mr Francis) There are many studies on this subject and you are essentially trying to predict a situation extending many decades ahead. There are studies which show that there have been increases in real terms in the price of timber. There are studies which come to the conclusion

that that has not happened and that prices have remained stable. Our view is based on the assumption that they do not change in real terms but there are others who take a different view.

I hate to say this but it does seem to me that you have just argued circularly.

(Mr Francis) Yes, I am sorry, I have.⁸⁶

Whether MacLennan's comment was fair, "inconclusively", might have been a better comment – David Grundy came to his superior's aid, and simply set out the views on one side or the other:

(Mr Grundy) The proposition that there will be long-run increases in the real price of timber arises out of a theory which is that when people start first to exploit a natural forest they naturally exploit the nearest and easiest bits of wood and therefore the price of timber is very low. Eventually they are pushed further and further away, their costs increase and they get to a point where it becomes profitable to grow timber like one grows in agriculture. During that long time prices rise and if you look at the United States of America which had this situation prices have risen steadily now for 200 years. If you look at Britain they have risen unsteadily for 100 years. If you look over the last 30 years, they have not risen in this country. If asked to advise an investor, I would say Be careful. It is pretty sure they won't fall but do your calculations on the assumption that they won't rise and you will probably be all right.

A further test of foresight was put to Mr Francis, with a direct connection to the Flow Country. His answer is interesting, partly for his clear acceptance of scientific opinion on the conservation value of the Flow Country, but is balanced by his view on the viability of a large scale new "forestry region" with sawmills and industry:

...do you feel justified in continuing your planting programme in my constituency?

(Mr Francis) In terms of the potential to establish a forestry source, it is justified. If one is looking to the very long term and the possibility of future industrial development there is every case for continuing with it.

If a very large forest area had been planted in Caithness and Sutherland then it is possible that a significant forest industry would eventually have been established. Francis went on to suggest that:

It has a valuable contribution to make in rural communities; they are often small and the contribution of forestry to them is often significant. At the same time, there is a widespread recognition of the conservation interests which are really quite extensive. The International Mires Group conference towards the end of last year in Edinburgh spoke about the whole of Caithness and Sutherland as being of outstanding international importance. What we have to do, within those two objectives, is the best we can to get a balance between the two so that the needs of people on the one hand and the needs of conservation on the other hand are met in the best possible way.

Following this evidence session and the receipt of written submissions including from nature conservation agencies and NGOs, the committee issued its report (House of Commons, 1987). This noted the strength of some of the opposition on environmental grounds:

⁸⁶ Autoethnographic comment: As a young Forest Officer interested in the policy issues in 1987, reading this made a strong impression: it seemed extraordinary to my younger self that the Director General himself could be challenged in argument in this way, and have to concede a point!

We received a considerable volume of evidence from bodies with strong conservation interests and a recognised pedigree in such matters, and they expressed widespread and varying degrees of concern about the effects of blanket afforestation of conifers on the environment and on recreation. They argued not only the adverse environmental effects of some Forestry Commission planting but also that it had a number of negative economic effects.

The use of the word “economic” is often irritatingly imprecise: it is not clear from the report what these negative effects were. Overall, the paragraph reproduced is very far from a clear endorsement of the continued afforestation programme. The mood in some parts of the Conservative government machine was “frustrated”. A Conservative adviser to Nicholas Ridley, the Secretary of State for the Environment, notes:

The blunt fact is the UK has no comparative advantage in growing timber so the entire life of the FC is merely an exercise in mercantilism [sic]. As we all love trees in the abstract the FC can hide behind this green fog. (Clarke, P. 2013. Pers.Comm. Email, 11 December.)

19.4.5. “Secret” – the budget papers 1988

The private forestry investment community was aware of the possibility that the government intended significant tax changes. Treasury records reveal a letter, probably from Fountain Forestry (both addressee and origin are redacted under Section 40 of the Freedom of Information Act (2000)), which was clearly concerned about “rumours that the Chancellor will introduce measures which will be disadvantageous to forestry in the budget”. A manuscript “P.S.” notes that the writer’s concern had been followed up by a telephone conversation, presumably with Robert MacLennan, the MP for the area most affected. There is little evidence from Hansard that he was very active on forestry matters, although in a written question in January 1988 he asked the Secretary of State for Scotland whether he would be responding to the RSPB report on “Birds, Bogs and Forestry.” The fact that the only evidence of forestry lobbying before the budget is in a letter from a single company, to a backbench opposition MP, forwarded to the Chancellor, suggests that the links between the companies and the Conservative government were not intimate. There are no freely available archives (due to the thirty/twenty year rule), so the documents released are those which have been selected by the Treasury Information Rights Unit under an Freedom of Information Act (2000) request. Wilson⁸⁷ recalls:

...the strength of the so-called “forestry lobby” was absurdly overstated by the likes of Tompkins. It certainly didn’t feel very strong from within, a tiny number of employees and very limited funds. (Wilson, P. 2013. Pers.Comm. Email, 19 December, pers.comm.)

There is relatively little record of concern shown on the part of officials briefing the Chancellor to assuage worries expressed by him which might have arisen from lobbying. Lack of consensus within the government was important. The Fountain letter criticised the environmental campaign against afforestation and its “impact in political circles ... I am led to believe that the Cabinet is divided on this issue.” Some Treasury papers deal with the awkward circumstance of the Secretary of State for

⁸⁷ Policy officer at Timber Growers Organisation from 1988, CEO 1993-1999, then Director of Forestry Industry Committee of Great Britain.

Wales (Peter Walker) speaking at an Economic Forestry Group lunch on the Thursday after the Budget. Treasury officials suggested that he focus on “conservation and enhancement of natural beauty and the conservation of flora, fauna...”. They pointed out that he was both an environmental and forestry minister. No record of whether Walker was brave enough to do this has been found.

The preparation for the budget statement on forestry involved at least four ministers: for Scotland, England, Agriculture, and Environment. There is evidence of division, and at least one meeting took place at 10 Downing Street. Grayson (1993) makes clear that the tax changes resulted from “intervention at the very highest level of government”. Grayson was a Forestry Commissioner at the time and this could imply Prime Ministerial interest in the subject.

Nicholas Ridley, the Secretary of State for the Environment, wrote to the Chancellor in advance of a ministerial meeting, making clear his opposition to “excessively generous” proposed planting grants for conifers. He suggested that they should be increased by only £230 per hectare to £470. The Treasury proposal at that time appears to have been £590. This suggests that both Ridley and the Chancellor had to concede on this point since the final result implemented was higher than either, at £615. Another briefing states the latter as the figure for the Chancellor to agree “if pressed”, clearly, he was.

Following Ridley’s letter, Treasury officials surmised that the Chancellor would want to “go hard” in support of Ridley’s suggestion that conifer grants should not rise (they estimated a saving of £3 million a year), but predicted opposition from Scottish and Welsh ministers. Ridley also suggested increased broadleaved grants, which concentrated negative conclusions from the officials on grounds of cost. This is interesting in itself: Ridley was famous for seeking reductions in public expenditure (even in areas he cared about like the “arts”, a portfolio he refused, despite a personal interest). His appointment to environment “raised many eyebrows, for it was thought that Ridley’s advocacy of free-market economics did not sit well with modern concerns for nature conservation” (Cosgrave, 1993). It seems that he felt particularly strongly about gaining more broadleaved woodland, and was prepared to spend public money on it. His role was interesting: while not a “forestry minister”, his locus was clearly powerful, if confused. An inveterate parliamentary questioner on forestry matters, Ron Davies MP, sought to establish the situation by asking the Prime Minister to:

...set the precise responsibility, which the Secretary of State for the Environment has in relation to forestry.

Mrs Thatcher: The Secretary of State for the Environment is responsible for environmental matters in England, and has an overall responsibility for nature conservation in the United Kingdom. He is therefore consulted by the Ministers with direct responsibility for forestry about the environmental implications of forestry policies. (HC Deb 28 March 1988 vol 130 c278W)

This was a rather searching question, since, the week before, Ridley had made a significant forestry policy statement, for England.

Reflecting later, for this research, Ron Davies pointed out that:

Our approach to forestry was very much part of the wider “greener” agenda for the countryside (embracing EU intensification, industrialisation, organics, countryside, animal welfare, bio diversity) I was keen to develop. I think that link was probably instinctive however and don’t think we ever articulated it as starkly as that. These issues seem conventional wisdom now, but at the time there was strong opposition from within industry and landed interests and there was not the strong political and public resonance which came later... (Davies, R. 2014. Pers.Comm. Email, 6 January)

Forestry Commission involvement is not clearly evident in the Treasury files. It appears to have been mostly exerted through the Secretary of State for Scotland. An attempt, again by Ron Davies, to reveal Forestry Commission influence at the time in the House of Commons failed:

Mr. Ron Davies: To ask the Secretary of State for Scotland what consultations he has had with the Forestry Commission concerning the new forestry grant arrangements; and if he will make a statement.

Lord James Douglas-Hamilton: Advice given to Ministers by their departments is confidential. HC Deb 23 March 1988 vol 130 cc137-9W 137W)

Documents released for this research under the Freedom of Information Act (2000), (HM Treasury, 1988) reveal that the Forestry Commission proposed to issue a briefing which the Treasury toned down, in particular by deleting references to afforestation “targets” and replacing them with “aim”. The Treasury (not the Department of Environment or the Forestry Commission), again proposed stronger environmental messages. Wilson contributes two insights into this from the industry perspective:

Having a dedicated forestry department was helpful in one way as the civil servants actually understood the subject but whether it simply provided an illusion of influence is an open question. How effective was FC at promoting a view to Ministers? Anyway, it was not clear that the FC view would have been the same as the industry view. (Wilson, P. 2013. Pers.Comm. Email, 19 December)

The likely effect upon afforestation programmes was discussed at various stages in the Treasury documents. The clearest forethought is in a briefing from an official to the Chancellor in preparation for a meeting with fellow (“forestry”) ministers:

£350 will damage planting aim

I doubt it very much. The real rate of return is only 0.2 per cent less than with a £500 grant increase. ... Costs are on a downward trend. Planting under the present regime was rising fast and expected to hit the aim in 1988/89.

No date attached to the planting aim. May well be a dip after change of regime, as with the Forestry Commission’s own projection even with a £500/hectare increase.

This is an important quote which sheds new light on this policy decision process. The Chancellor’s Treasury advisers saw no likelihood of anything other than a “dip” in planting, believing that the proposed grant increases would compensate for the tax changes. In hindsight, they would be proved wrong. A further briefing, from an official to the Chancellor, makes clear that both the Forestry Commission and:

...officials from the forestry departments consider that a grant level of £350 would make it difficult to meet the planting aim.

The result is expected to increase the broadleaved percentage in new planting from 13 per cent to 20 percent.

These officials would be proved right. In fact, despite higher eventual conifer grants, planting fell to a much lower level, and by 1993 broadleaves were about 50% of the total. The Director General at the time Francis recalls that better foresight had been developed by the Forestry Commission:

There was never any doubt that the change would cause a major reduction in new planting in the uplands.

The rate of new planting declined dramatically. This was a clear indication that the rapid expansion of afforestation since 1960 was due in the main to the tax provisions withdrawn by the budget of 1988. (Francis, G. 2013. Pers.Comm. Upland Afforestation 1960 to 1990. 27 November., pers.comm.)

The (English) Minister of Agriculture, John MacGregor, broadly supported Ridley in a letter to the Chancellor of 3 March, but defended some level of coniferous planting.

The development of the final budget statements reveals a few more subtleties of the interaction between departments. A Treasury official unsuccessfully proposed that the phrase “maintain its forestry policies” be substituted for “secure its forestry objectives”, on the grounds that this would distance the Treasury from the planting “aim”. An early Treasury draft was toned down. Reporting back to the Chancellor, an official (HM Treasury, 1988) noted that the forestry departments had disliked:

...the sneering tone ... unnecessarily antagonises people such as the forestry management companies whose help will be needed in keeping up planting under the new grant regime and indeed in containing reactions from the forestry lobby.

The Treasury official also reported on other revealing deletions which included:

It has been said that it encourages the wrong people to plant the wrong trees in the wrong places.

Indeed a whole industry has grown up to promote this particular form of tax avoidance.

The strength of these original negative phrases is a striking revelation of the Treasury mood. The fact that they did not become part of the parliamentary record is important, but the fact they were proposed at all is also significant to an understanding of the situation. Further changes in phraseology reveal the strength of the Treasury view:

...to end an increasingly blatant form of tax avoidance

This was changed presumably due to pressure from forestry ministers, to;

...end an unacceptable form of tax shelter

The role of the Forestry Commission is also revealed, in that the Treasury was awaiting a chance to see a draft statement for Rifkind to make “which the Forestry Commission have *offered* him” (author’s italics). The preparation of this statement shows some victories for the Treasury or the Secretary of State for the Environment. The Forestry Commission proposed:

The Government consider that a continuing expansion of forestry is in the national interest.

This was finally delivered as:

...that a healthy forestry industry is in the national interest.

Conversely, one of the more far-sighted phrases seems to have come from the Forestry Commission itself, and was in the final delivery:

...the Forestry Commission will follow policies which are designed to convert forests of an even age into attractive and more varied landscapes with a mixture of types and ages of tree.

The announcement by the Chancellor of the Exchequer, Nigel Lawson, on 15 March 1988 is a fundamental turning point in the history of coniferous afforestation in Britain. The final paragraph makes it clear that the political and policy intention was to change the direction of forestry policy using discourse which has a postproductivist flavour.

The net effect of these changes will be to end an unacceptable form of tax shelter; ... and to enable the Government to secure its forestry objectives with proper regard for the environment, including a better balance between broad-leaved trees and conifers. (HC Deb 15 March 1988 vol 129 cc1006-13)

It is important to note that the same budget statement removed all income tax rates above 40%, the highest having previously been 60%. This had the effect of significantly increasing the disposable income of many large landowners.⁸⁸

Subsequent announcements were made by John MacGregor, the Secretary of State for Agriculture, Fisheries and Food and effectively the forestry minister for England:

...the Chancellor announced in the Budget that the tax arrangements for forestry were to be changed. That brings to an end arrangements that were widely seen as unjustified, unacceptable and damaging in the long term to the forestry industry. In parallel with the tax changes, the Forestry Commission closed its existing planting grant schemes, and we have introduced a new one, called the woodland grant scheme. (HoC 5 May 1988)

There had been considerable debate on the balance of conifers and broadleaves in the debate earlier in the year, which indicated some shift in balance both on the part of the government and of members of the House of Commons. Members spoke in favour of the enhanced grants for broadleaves and some spoke against support for conifer planting. The warnings of the Forestry Commission and the private sector on the impact of the tax changes upon private sector investment in afforestation were proved correct, and those of the Treasury official quoted above, proved wrong. The same is therefore true of Tompkins' (1989) concern that the "forestry lobby" would succeed in maintaining the rate of planting by way of higher grants in compensation for the tax rate losses. Tompkins refers to the speech of Lord Rees in the House of Lords as evidence of the reactive lobbying of forestry interests.

⁸⁸ Personal recollection: Anecdotally, I remember a Private Woodlands Forester telling me that in conversation with the wife of a large landowner, he had expressed concern that their commitment to forestry might have been reduced. She replied that the other tax changes had increased their income to such an extent that any removal of forestry relief was minor.

Peter Rees was a former Chief Secretary to the Treasury between 1983 and 1986, who had been engaged specifically in tax matters and driving down public spending. By the time of this intervention he had taken a seat in the House of Lords, and in 1987 became the Chairman of the Economic Forestry Group which was one of the three main afforestation investment companies (though not the one, Fountain Forestry, most involved in the Flow Country) (Telegraph, 2008). Speaking in the House of Lords he said:

At the moment, we must suspend judgment on the proposals. The acid test will be whether the Government's planting targets are achieved. It may be that in the first year or two of the transitional period they will be. People already involved in a planting programme will continue for a while. After that, there must be considerable doubt. If the targets are not achieved, I hope that the Government will candidly recognise the flaws in their present measures and reconsider them—next time in consultation with those who have some experience of an important national activity. (HL Deb 13 April 1988 vol 495 c1114)

In terms of power relations and policy networks, this is a self-interested comment from an industry leader who had been given a platform through the patronage of elevation to the House of Lords. He failed to influence the Government. Wilson recalls that there was a significant effort to gain higher grants:

...yes there was a big push for enhanced grants. On paper the grants were meant to be the same value as the grant/tax regime but it took no account of the motivation factor which was about reducing income tax liabilities. Avoiding tax is a strong motivator, getting a grant isn't. Of course that was the watershed budget in which Lawson slashed the top tax rates which may have affected uptake of forestry even if the old tax regime had remained. (Wilson, P. 2013. Pers.Comm. Email, 19 December)

Three factors were at play: the different actors likely to be interested in afforestation for grants rather than tax breaks; the level of the grant; and a psychological loss of confidence.

The new grant rates *were* relatively generous but had a differential effect according to the wealth of investors. The impact of the combined tax and grant changes was evaluated by Crabtree and Macmillan (1989), who looked at the effect of the changes on a range of five site types in Scotland, and concluded that only better quality land could attract forestry investment. They (correctly) predicted a “major fall” in the new planting rate, and did not consider that grant rates would be sufficient to continue to incentivise afforestation of poor quality land in the North of Scotland. Separately, the budget had reduced the highest rate of income tax from 60% to 40%. This had the effect of making other, taxed, investments more attractive than they had been.

Crabtree and Macmillan also calculated the change in costs of forestry support to the Exchequer and concluded that the combined measures resulted in a reduction of public cost for the previously 60% tax payers of between about £100 and £200. The cost of broadleaved planting and thus the level of public support for planting on “better” land and for broadleaved planting increased by around £300, and was thus in tune with the Rifkind statement to encourage this. Crabtree and Macmillan's conclusions were clearly stated and borne out by events: the broad policy shift would be met, of more broadleaves on better land, but:

...the annual rate of new planting will fall.....a major shortfall in the target planting rate of 33,000 ha per year.

The best conclusion must be that, while government did not intend to end the Great Spruce Project, once a combination of market forces, lack of confidence and public opposition was ranged against it, the coalition which had supported it for many years was quite unable to extract the funds which would have been required to re-invigorate it. This research has uncovered new evidence on the dynamics of this, but some issues remain unclear: presumably the opposition of the Treasury, Ridley and, by 1989, the environmentally aware John Gummer, who was one of the “forestry ministers”.

Why did the afforestation rate collapse; was it “rational” or was it “morale” ?

Jon Terry was a forester working for one of the management companies in 1988. He reflects that:

The changes were alarming. I was in the office the day the budget was presented to Parliament and I remember my boss telling me about it. He was greatly concerned as I am sure most senior people in the management companies were.

Post change it was a very worrying time for the management companies. I believe that EFG⁸⁹ had been banking land for afforestation, if so, the value of that would have collapsed. Forestry nurseries resorted to burning Sitka spruce trees. I think 2 million were burnt in Tilhill's nursery. (Terry, J. 2013. Pers.Comm. Email, 27 November)

He saw the collapse as essentially the result of the financial calculations but notes an interesting explanation in the relationship between the Forestry Commission and the private sector:

No doubt this was finance driven, suddenly forestry looked more expensive.... Interestingly there probably were psychological reasons. The cosy relationship between FC and the management companies had suddenly changed and the senior people in the management companies had been promoted on their afforestation merits.

The calculations of Crabtree and Macmillan made clear that the financial case would not add up for individual private investors, but Kirby⁹⁰ also agrees with Wilson that:

The slump in afforestation was as much a psychological response I suspect as a logical economic one. If you are funding forestry from tax breaks I think most of the investors were focussed on the tax and not on whether the forestry was a good idea. Once you go to grants then a different mind-set and class of planter come in, and to them large scale conifers just did not look such a good thing. (Kirby, K. 2013. Pers.Comm. Email, 26 November)

These explanations are less persuasive when applied to the large-scale investment funds such as company pension funds which were not in a position to benefit from the individual taxation arguments. Firstly there were complex financial arrangements which used leases to maximise the combination of individual tax and corporate investment (Terry, J. 2013. Pers.Comm. Email, 27 November). Secondly, the value of maintaining strong links between the afforestation industry and finance (Tompkins, 1989) may have been weakened by the collapse of the tax avoidance business model. Thirdly,

⁸⁹ Economic Forestry Group.

⁹⁰ A forestry policy officer in the Nature Conservancy Council at the time.

psychological damage had been done to that part of the forestry sector as well as hard financial calculations.

The Forestry Commission in its Annual Report of 1989-90 was relaxed:

Much concern has been expressed throughout the forestry industry about the fall in planting and there are fears that, in the absence of fresh initiatives, this trend will continue.

We acknowledge these concerns, particularly in relation to the short term, but we do not share the worst fears about future planting. The Government is committed to an expansion of forestry, and the case for such an expansion becomes more compelling with the need to find alternative uses for agricultural land and with the recognition that trees lock up carbon from CO₂ in the atmosphere that would otherwise contribute to the greenhouse effect. ... We have no wish to appear over-sanguine, and we accept the possibility, given the long lead times in forestry, that the downturn in planting may not yet have bottomed-out. In the light of the factors we have described, however, we are hopeful that a steady rise in planting levels is in prospect, particularly once the general economic situation is more favourable. (Forestry Commission, 1990)

The explicit reference to CO₂ and climate change is thought-provoking in this context. The failure of climate change to have an effect on policy in this period is strange. In fact, the total planting in 1990 of 19,487 hectares has not been equalled in the succeeding twenty-two years.

19.4.6. Implicitly sealing the fate of the Great Spruce Project – 1991 statement

The fundamental change which had taken place was crystallised in the government's statement of 1991, which uses multipurpose post-industrial rhetoric. Expansion of forest area was included but diversity was explicit. The statement does not conjure up a picture of new monocultural spruce plantations:

...trees in forests and woodlands are also an effective means by which carbon dioxide can be absorbed from the atmosphere and stored over long periods of time.

The two main aims of the Government's forestry policy are thus:

The sustainable management of our existing woods and forests.

A steady expansion of tree cover to increase the many, diverse benefits that forests provide.

In both, we recognise the advantages of basing policy on the realisation of multiple objectives.

Multi-purpose use is an important aspect of present forestry policy. The emphasis has widened from encouraging timber production to the provision of social and environmental benefits arising from planting and managing attractive, as well as productive, woodlands.

This was the first time that forestry policy in Britain had not put timber production first. Grayson (1993) makes the point that even the presentation of the document "partly depends on photographs and captions to convey ... a markedly environmental emphasis." The development of the United Kingdom Forestry Standard and of "country strategies" would take this further. By this time the Forestry

Commission was considered to be changing, as a *Guardian* quote by the new Director General, Robin Cutler,⁹¹ in 1992 suggested:

We think our record is quite good now. I can't say it was good in the past, but I believe we have put in place the mechanisms to try and hold what we've got and to enhance it... (Edwards, 1992)

The *Guardian* journalist showed some scepticism, by subtitling the interview "Is the Forestry Commission turning green or simply repairing some of the damage it caused in the first place?" These are not incompatible. The article also noted the first appointment of an "environmental Commissioner." Cutler described a way forward:

Against the odds, Cutler is pushing for the development of a national forest strategy. He described the existing target of planting some 80,000 acres of new trees every year in addition to replacing those that are felled as crude. He is talking to the forestry industry and conservationists, who both support the need for a strategy, and hopes to present some more sophisticated ideas to ministers in the near future. (Edwards, 1992)

Development of this idea, which would become the United Kingdom Forestry Standard, would have to wait until the next Director General, who found a Labour government easier to deal with (Bills, D. 2013. Pers.Comm. *Email*, 29 November).

19.5. Rational policy analysis

Individuals: policy entrepreneurs and issue experts

There were a number of individuals who could be recognised as policy entrepreneurs. For the first time, they are equally evident on all sides of the argument.

Tsouvalis identifies Oliver Rackham (an academic naturalist) and George Peterken (a professional woodland ecologist) as having had a key role in the specific changes to management of ancient woodlands, including the origin of the term. Peterken confirms this:

I was calling them primary woodland as opposed to secondary woodland, but in 1970 I sent a draft document I'd written to Oliver for comments and one of the comments was I think it would be better to call them ancient woodlands. His reason for doing so was that you can't actually prove that a woodland was primary, you can't go back to the Mesolithic and prove it's been there ever since but you can go back to a fixed date in history – we chose 1600 - and prove it was there before that and that it almost certainly had been there continuously ever since, in other words ancient was provable. He picked on the word ancient because we needed a different word, but it rang a bell with people. If we'd been trying to promote the importance of primary woodland I don't suppose it would have generated anything like the response that the idea of ancient woodland received. The reason was technical, but we quickly realised that ancient was something which people responded to, but we have spent quite a lot of time since then refining the mental image of ancient woodland. (Peterken, G. 2013. Pers.Comm. Telephone, Email, 5 August)

It appears to have been an informal double act, Rackham in academic consensus; and Peterken bridging the divide between professional foresters and nature conservation interests (Tsouvalis-

⁹¹ Director General 1990 to 1995.

Gerber, 1998). In this sense they might be classified as “collective policy entrepreneurship.” Meijerink and Huitema (2010) set out the benefits:

Collective policy entrepreneurship holds two main advantages. First, people in different positions may draw on a different arsenal of strategies to influence a change trajectory. Where experts working at either governmental research institutes or universities have excellent possibilities to develop and test new ideas and approaches, senior policy advisors or politicians generally are in a better position to help achieve the adoption of new policies. Second, people may have different capacities and skills irrespective of their positions.

The Forestry Commission attitude to broadleaved woodland and its destruction by coniferisation was not changed by a barrage of heavyweight publications from the Nature Conservancy Council; nor by a campaign in the press involving the Ramblers or RSPB. The policy change was more quietly negotiated. Peterken describes a meeting with a senior Forestry Commission Conservator in a pub to discuss a way forward.

Tompkins set out to be a policy entrepreneur in the openly polemical *The Theft of the Hills: Afforestation in Scotland*, published as a campaigning document by the Ramblers' Association (1986), and his book *Forestry in Crisis* (1989).

Derek Ratcliffe, the Nature Conservancy Council Chief Scientist, had a significant role ready to confront the Forestry Commission. Peterken recalls being discouraged from presenting a paper (Peterken, 1987) at a conference on Sitka spruce, for fear of implying that there could be any environmental value in the results of decades of coniferous afforestation. Peterken provides further impressions which support Ratcliffe's role and mindset, firstly as a well respected expert:

...a very highly regarded ecologist and conservationist, with a long track record in several fields of research and survey. As Chief Scientist he was influential in determining the attitudes NCC took on afforestation, and he always took care to make his case in scientific terms, (i.e., the facts, derived from published research and thorough survey). (Peterken, G. 2013. Pers.Comm. Telephone, Email, 5 August.)

Peterken goes on to provide some insight into Ratcliffe's mindset:

His childhood experience of nature in Cumbria and Galloway gave him a love of wild places that was offended by the increasing tracts of ploughed ground, straight planting lines and sharp, fenced boundaries. ... His experiences led him to the view that forestry (and perhaps foresters) could do no good.

In character, I think it would be fair to call him dogged: always prepared to put in long hours of sustained effort for distant goals.

Pringle (1994) notes the conflict between interests, in a “conservation battle”. He characterises “attacks” around “causes célèbres” and almost seems to blame the government for the impact of the Wildlife and Countryside Act in having “stimulated the environmental debate and raised the expectation of environmentalists”.

At the same time, in the field, there was evidence of “street level” policy-making. Bray noted that:

I met some really nice people in the forestry world but they were employed to do a job and you were trying to get them to change their minds a bit.

There were always certain Mavericks in the forestry world...

I remember back in the 60s there was a chap in Grizedale Forest ... Bill Grant, and he was doing things in forests which nobody else seemed to be doing, but I don't think he was very high up the tree, he was a head Forester but he just went ahead and did things, ... I had a slight interest in wildfowl and he was blowing great holes in wet areas in the forest trying to make them wetter, whereas all his colleagues were trying to drain it to make the trees grow better ... He was interested in habitats and that sort of thing as well.

But there were also other people around ... Alistair Scott ... would often come up with something rather different, and he was generally rather more sympathetic to our point of view... I don't know how much clout he had.

Well we always found him approachable. Other people would say look we have got our remit I'm not thinking outside that box, whereas people like Alistair would happily engage and talk about things and sometimes accept that you've got a point there and maybe we should do something different, or modify something. (Bray, R. 2013. Pers.Comm. Interview, 22 July.)

Alistair Scott (and Bill Grant) appear to have been "individual policy entrepreneurs" working within a bureaucracy Meijerink and Huitema (2010):

...these entrepreneurs demonstrated considerable perseverance: they often worked on particular transitions during significant parts of their career or they had to make changes in their career to achieve the transitions they sought.

Alistair Scott had a typical early Forestry Commission career as a District Officer, although there is evidence of a conservation-minded and independent attitude in relation to a native pinewoods as far back as 1977:

The Aviemore symposium was organized by the Institute of Terrestrial Ecology and funded by the Natural Environmental Research Council. The Forestry Commission was a reluctant participant. Any FC staff who requested permission to attend the symposium were told to stay away. The only two who attended, went without asking. They were Alistair Scott, who was District Officer at Moray and Graham Tuley, his assistant at the time. Both will appear later in this story, which we suggest is more than co-incidental. (Ross and Taylor, 2008)

He then became one of the first Private Forestry and Environment Officers,⁹² a regional or "Conservancy" role created in the reorganisation of 1984. Having pioneered a number of initiatives, including the founding of Coed Cymru to further the management of broadleaved woodland in Wales in 1985, Scott was elevated rather startlingly⁹³ to become Head of Private Forestry and Services in the Forestry Commission HQ. There is some evidence that he assembled a team which acted to an extent as a group of internal policy entrepreneurs, contributing to institutional learning within the Forestry Commission. This included RB who saw it as a learning institution:

⁹² Autoethnographic note: At the time, some more traditional staff, myself included, saw these as "parks and gardens officers", implying that they were not really doing "proper" forestry.

⁹³ I was startled anyway, I remember thinking oh, something is changing...

I don't recall any rolling over in the face of NCC pressure. Rather, I recall how Alistair Scott was instrumental in driving policy change in the Forestry Commission by pushing the importance of ancient semi-natural woodland protection up the agenda and using opportunities like the design of a new grant scheme and new native woodland guides to forge stronger links to the ancient woodland inventory. (RB. 2013. Pers.Comm. Email, 26 November)

GG was part of the same team and saw general change in the Forestry Commission, essentially led by those at the top:

Alistair certainly did make a significant personal contribution to changing attitudes in FC and in relations with NCC. ... he wasn't alone: there were several other senior FC staff who were critical to the change process: George Holmes (hugely different to his predecessor John Dickson), Alastair Rowan, Roger Bradley, David Grundy (politically astute) as well as the foot soldiers like Tim Rollinson (Land Use Planning), Duncan Campbell, Rod Leslie, Simon Bell.

Alistair was instrumental in getting the influential Environment sub-committee of the HGTAC set up, and he forged a lot of links not only with NCC but also with the National Parks and the conservation NGOs. He was able to talk to them in their own language and on their wavelength. (GG, 2013. Pers.Comm. Email, 28 November.)

Tompkins (1989, p.80-95) did not consider, or realise that “learning” was taking place within the Forestry Commission, and included its staff in the “forestry lobby” which he suggested was composed of 150 people in interlocking groups:

The Forestry Commission as an institution

Forestry Commission Chairs

Forestry Commissioners

Forestry Commission Advisory Committees

Landowning interests

Private sector organisations (Timber Growers and Forestry Industry Committee of Great Britain)

“Forestry Lords”

Professional Foresters – the Institute of Chartered Foresters

Forestry academics

Politicians

Commenting directly on the “rationality” of the policy-making process, Morley considered that by 1998 values were related to the public good and rationality to the timber production:

The FC did, in my view, see itself as a body that provided benefits for the public good and as such was value based. It also had a rational approach in its dealing with the private sector, who I think privately valued the FC commercial management, particularly how it could have some control over timber supply on to the market in times of glut and shortage. (Morley, E. 2013. Pers.Comm. Forestry Notes for Alec Dauncey, 25 August, pers.comm.)

External shocks and crises - privatisation

The shift of afforestation to the private sector and the financial scrutiny of the public enterprise with a view to privatisation, exposed the failure of the idea to a radical government and at least part of the

press. The internal debates underlying these decisions appear to be so far undocumented, but the public debate was considerable, involving a number of actors. This opposition has been described as ideological, including from forestry professionals, as well as more general, in terms of potential loss of recreational public access. Alternative means of private involvement through different property mechanisms have also been considered (Hurditch, 1992). Access was not in fact maintained on “a large proportion of the areas sold” (Kissling-Näf and Bisang, 2001).

There were more radical voices, Linda Whetstone (1984), a former Forestry Commissioner and Conservative party supporter, advocated wholesale privatisation. After serving for three of four years as a Commissioner, she wrote to the Conservative agriculture minister asking whether privatisation was intended. When told that it was not, she resigned as a Commissioner. In this sense it must have been clear to the Forestry Commission and its supporters that unless it could adjust, it was in danger of such radicals’ winning the argument within the government. That said, those radicals were under no illusions:

The Commission was never rated as a top target for liberalisation as it is such a political hedgehog – as David Cameron found early in his initiative. (Clarke, P. 2013. Pers.Comm. Email, 11 December.)

Mather et al. (2006) use the term “crisis” in describing the joint changes in agriculture and forestry in the mid 1980s: food overproduction on one hand and low timber prices and “social justice” issues in forestry tax arrangements.

Political parties

The Thatcher government was radical and clearly possessed of a broad political direction and party political ideology and programme. This was essentially free-market and free-trade. However, there is clear evidence that some party activists and those linked with free market think tanks were frustrated by lack of radical vigour in the case of forestry (Clarke, P. 2013. Pers.Comm. Email, 11 December.; Miller, 1981; Whetstone, 1984; Whetstone, 1988). They had political support for a more radical approach from the *Daily Telegraph* (1983).

The Labour Party was electorally marginalised for much of this period: its policies were overtly socialist and favoured afforestation:

The Commission would cease to act as a spokesman for the private sector; and it will be expected to extend its activities to include the processing side of the industry. We will also seek to increase tree plantings. (Labour Party, 1983)

The role of ministers in this period appears to have been more assertive, but it is not clear that their role was dominant. John Gummer (Deben, Lord J. 2013. Pers.Comm. Email, 27 November) had a sceptical approach to the Forestry Commission:

In my forestry responsibilities I was biased against coniferous afforestation but not I think to the exclusion of it...

The Forestry Commission was significantly out of touch both with public opinion and with movements in the forestry world...

...a failure to understand and champion the needs of forestry stewardship. The generalist civil servants who dealt with it were also incapable of promoting proper commercial standards or even to foresee the determination of environmentalists to insist upon proper sustainability. I would certainly have wanted fundamentally to reform the Forestry Commission had I continued as Secretary of State.

From 1983, Ron Davies MP (Lab) showed a considerable interest in forestry matters, the word “forestry” appearing fifty-seven times in his speeches between 1983 and 2001. Another Labour MP, David Clark, later Lord Clark of Windermere and a Chair of the Forestry Commission, used the word forestry on ninety-six occasions between 1970 and 2011.

Morley, with experience of the succeeding Labour government, noted that the relationship between ministers and the Forestry Commission was balanced in that political direction alone might not be enough:

I have no illusions however in that if the FC were opposed to change it would have been difficult to implement. I was in the happy position of working with people who shared my views and had already come to see what was the best long term policy interest of forestry in the UK. (Morley, E. 2013. Pers.Comm. Forestry Notes for Alec Dauncey, 25 August),

Mather et al. (2006) suggest that “political, and not just technical” processes took place in this period. Morley’s comment suggests that more had changed within the institution than Mather thought, and that politics and “institution” were in tandem.

Another senior governmental source from the 1980s, considered that forestry was unsuitably organised, and run by Forestry Commission professionals rather than forestry professionals, who lacked learning ability and an understanding of forestry stewardship.

It is important to recognise the relatively apolitical nature of forestry as a priority for ministers. In a direct comment on this research, a former ministerial special adviser (Clarke, P. 2013. Pers.Comm. Email, 11 December.) from the 1980s counselled this researcher:

Forestry must loom large in your imagination. In the DoE and Min of Ag it was not a matter for First Division folk...

He also pointed out the art of the possible from a minister’s point of view:

I think most academics and all journalists fail to understand the degree to which policy is evolved within Departments of State and not by the politicians. Ministers can sometimes act, the civil servants are adept at giving them tiny choices to select. Also the sheer weight of work is too much for any person. The workaholic ministers may read lots of red boxes but they cannot be reflective. The power and humour of Yes Minister is its close proximity to the truth.

The comment in a previous chapter from a more contemporary former minister confirms the point (Knight, Lord J. 2013. Pers.Comm. Telephone, 2 September). The role of civil servants is usually to simplify and condense material for ministerial consideration. A minister might respond with irritation if provided by a policy team with voluminous reports, they might then enjoy telling the stakeholders’

meeting them the day after that they had read the said reports the night before.⁹⁴ One former minister explains that forestry was almost too “apolitical” to engage a professional politician:

...forestry, in common with a lot of the Defra stuff, felt like there was no politics of any substance in it, and as it turned out the first year of this [2010] administration discovered that there was some politics in forestry. ... At the time it felt like, in an unfair character picture of a lot of Defra, this is the department for all things bright and beautiful and much as I might have liked to create a political difference with the opposition, it was very hard to say that I like nature more than you do ... So in terms of any kind of long-term agenda if you think that this is politically uncontested then you just end up wanting to try and work out what the right thing to do is, regardless of the political cycle. It's not like hunting, which dominated Defra. there was no political disagreement over ... forests and there still isn't really, the disagreement in recent years was just about what is the right governance and ownership structure.

In terms of the various jobs that I did in government, I would say that it was a hugely enjoyable time but unfortunately there was no politics in it. So for me as a politician it was much more enjoyable to go to education where I had a big political job ... yes it was great, and great job at Defra, but it was more managerial than it was political. (Knight, Lord J. 2013. Pers.Comm. Telephone, 2 September).

There are opportunities for ministers to become more fully engaged. Elliot Morley was identified by the Director General in post during his ministerial tenure as an explicit exception to the tendency of ministers to see:

...forestry as a minor diversion in what they hoped would be an illustrious career. (Bills, D. 2013. Pers.Comm. Email, 29 November)

The limits to even an engaged minister's role was recognised by Morley himself:

Q.6. Did you have an impression that ministerially inspired change was easier or harder because of the Forestry Commission's character and status?

Elliot Morley: The FC status meant the outcome could have gone either way depending on the attitude of the FC executive.

Veto power

In previous attacks upon the afforestation project, the institution of the Forestry Commission appeared to prevail. For instance, the 1972 cost-benefit analysis stimulated the “counter” study produced by the Forestry Committee of Great Britain (Wolfe and Caborn, 1973). It is important to note that while the afforestation programme came to an end, representing a very significant change in British forestry policy, there were those like Whetstone who sought the abolition of the Forestry Commission. Whetstone suggested that a coalition of fellow Conservatives did in fact veto further change, with a particular focus on those in the House of Lords (Whetstone, 1984). Clarke, as a Conservative Special Adviser, reports a direct experience:

I recall once urging George Younger, then S of S for Scotland, to relax the subsidies and sell off much of the estate but he had a good chum, Montgomery,⁹⁵ head of the Commission who

⁹⁴ This is a personal recollection.

⁹⁵ Sir David Montgomery, Chair.

had him to supper and reassured him the squirrels could be distressed. Clarke, P. 2013. Pers.Comm. Email, 11 December)

The reference to grey squirrels is a joke. But it reflects something in the dynamics of the relationship between traditional forestry interests, Whitehall and ministers. Grey squirrels damage hardwood trees; there is no effective means of controlling them at more than local scale. This does not stop forestry interests from repeatedly raising the subject with ministers, who could only share a degree of bemusement with their officials.

In the case of the afforestation changes of 1988, the usual lobbyists appear to have lost their veto power. Tompkins's concern, that the forestry lobby would succeed in maintaining the rate of planting by demanding higher grants in compensation for the tax rate losses, is interesting, since the afforestation did not in fact continue, but crashed to historically low levels. There was very significant concern in the House of Lords at the time of the Budget announcement about this (and Tompkins identified the Lords, dominated at that time by landed interests as part of the lobby). By 1994, debates in the House of Lords had taken on a confused nature, with a mixture of concern and regret over the fall in softwood planting rates. A former Forestry Commission chairman drew attention to the conundrum of government forestry policy:

Lord Taylor of Gryfe: My Lords, although I welcome the Minister's support for what the Forestry Commission does, how is it consistent with the fact that in a matter of 15 years planting has been run down from 23,000 hectares per annum to 1,000 hectares per annum last year? Is that an indication of the Government's support for the Forestry Commission and the benefits that it provides in many ways to the nation? (HL Deb 19 October 1994 vol 558 c208)

The veto power of the House of Lords seems to have been considerably weakened by this stage, in that the expression of such concerns had no discernible effect upon the government. No measures were put in place to increase incentives or carry out planting by direct government action.

19.6. Institutional policy analysis

The Forestry Commission

Tsouvalis suggested a loss of confidence in the Forestry Commission in the mid 1980s, based on content of Forestry Commission annual reports. An analysis was carried out using Loughran and McDonald's "strong" modal words (2011):

Modal verbs are used to express possibility (weak) and necessity (strong). We extend this categorization to create our more general classification of modal words.... Examples of strong modal words ... are words such as always, highest, must, and will.

Using these as an indicator, there appears to be a roughly constant pattern of confidence in Forestry Commission annual reports, as shown in (Figure 19-4), there is no linear trend.

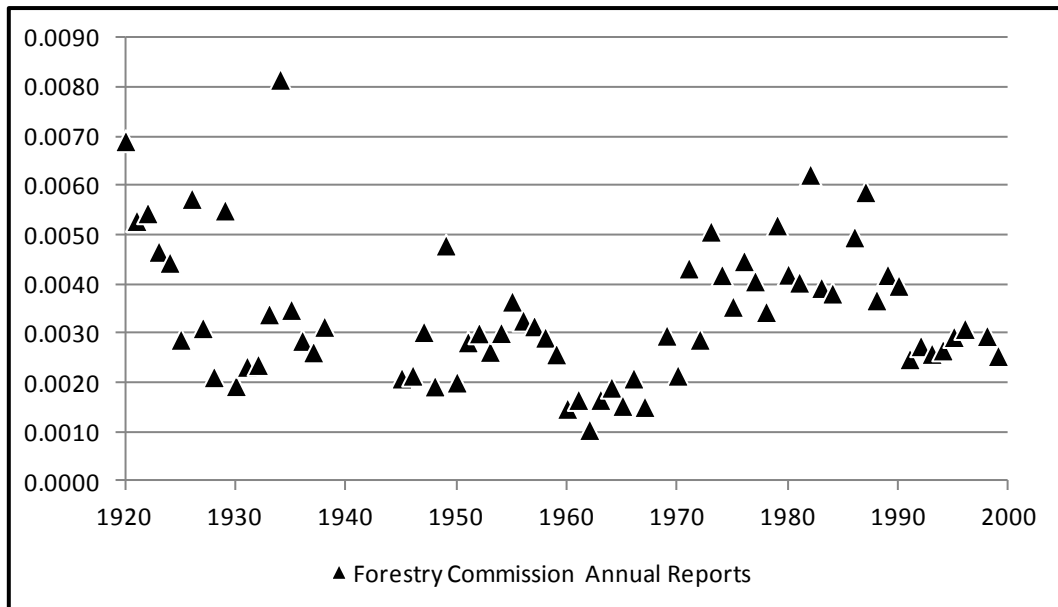


Figure 19-4 Frequency of vocabulary related to “uncertainty” in Forestry Commission annual reports (word list from Loughran and MacDonald (2011))⁹⁶

However, significant autoregression exists with uncertainty strongly dependent on that in the previous period.

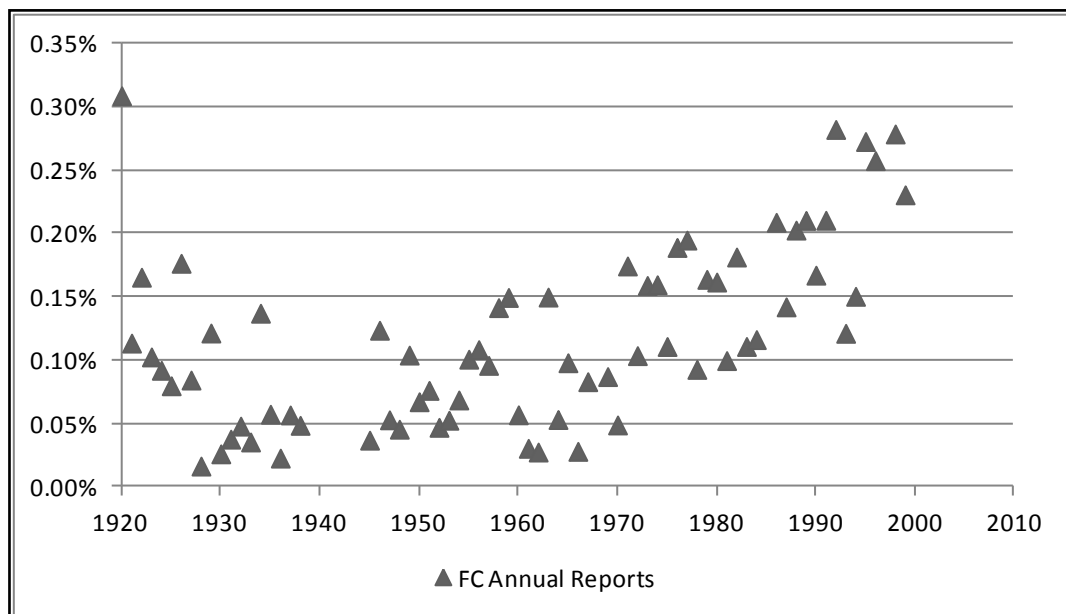


Figure 19-5 Frequency of strong modal words in FC annual reports (word list from Loughran and Macdonald (2011))⁹⁷

⁹⁶ There was no significant trend relationship between year and vocabulary related to “uncertainty” in Forestry Commission annual reports ($R^2 = 0.01$, $P = 0.40$). There was significant autoregression between years ($R^2 = 0.15$, $P > 0.05$).

⁹⁷ With passage of time there was an increase in the frequency of modal words in Forestry Commission annual reports ($R^2 = 0.70$, $P > 0.01$).

These may be revealing statistics: the changes which brought the large scale afforestation programme to an end actually affected the private sector and the management companies which were carrying out tax-led afforestation. It could be that the Forestry Commission was gradually more confident because it was learning a new direction, which separated it from this afforestation project and created more of an association with the management of existing forests. In this respect the government's decision that most afforestation should be done by the private sector, leaving the Forestry Commission to manage an existing estate, changed the nature of the advocacy coalition or policy subsystem. Two interest groups were thus disengaged from each other.

“Power” words reveal little variation in the period between the early 1970s and 1990s. However, words reflecting “cooperation” (General Inquirer, 2013) increased quite dramatically from 1990, but also throughout the 1970s (Figure 19-6).

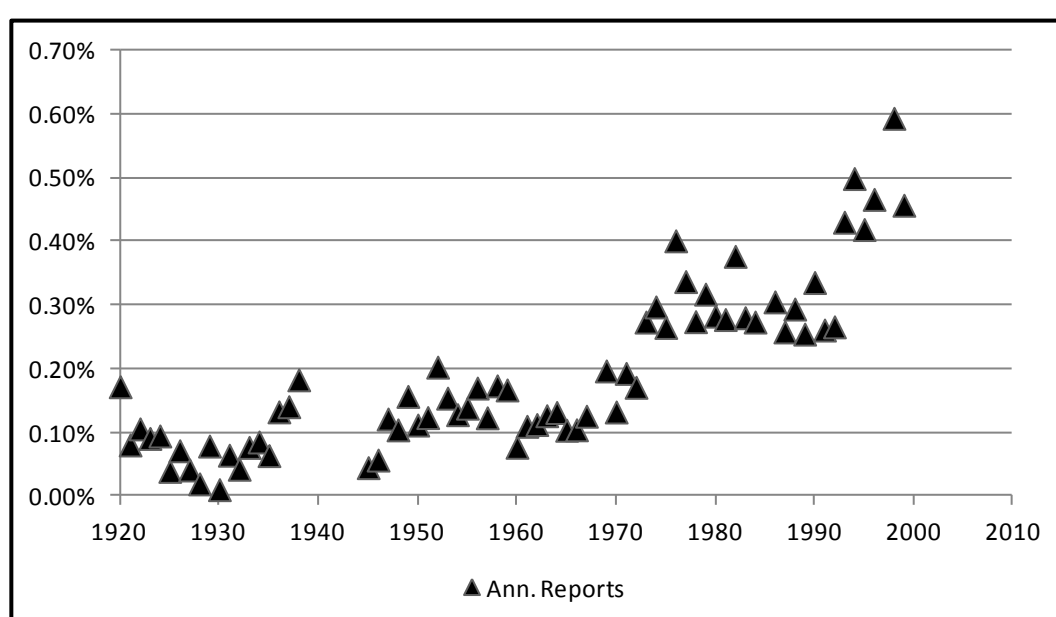


Figure 19-6 Frequency of vocabulary related to “power” and “cooperation” in Forestry Commission annual reports (word list from General Enquirer (2013))⁹⁸

The General Inquirer dictionary (General Inquirer, 2013; Stone et al., 1962), part of the Harvard Psychosociological Dictionary discussed in Chapter 7, includes a word list for “power cooperation” words (see Appendix for word list). Analysis of these suggests that cooperation discourse increased from the 1970s, with some high frequencies during the late 1980s, as the afforestation programme fell dramatically.

Vocabulary related to “future” from Tiainen (2010) were analysed and showed an increase in use in the late 1980s. However, this represented a simple continuation of a process taking place from the early 1960s and continuing throughout the remainder of the century (Figure 19-7).

⁹⁸ Cooperation words increase in frequency with year of Forestry Commission annual reports ($R^2 = 0.70$, $P > 0.01$).

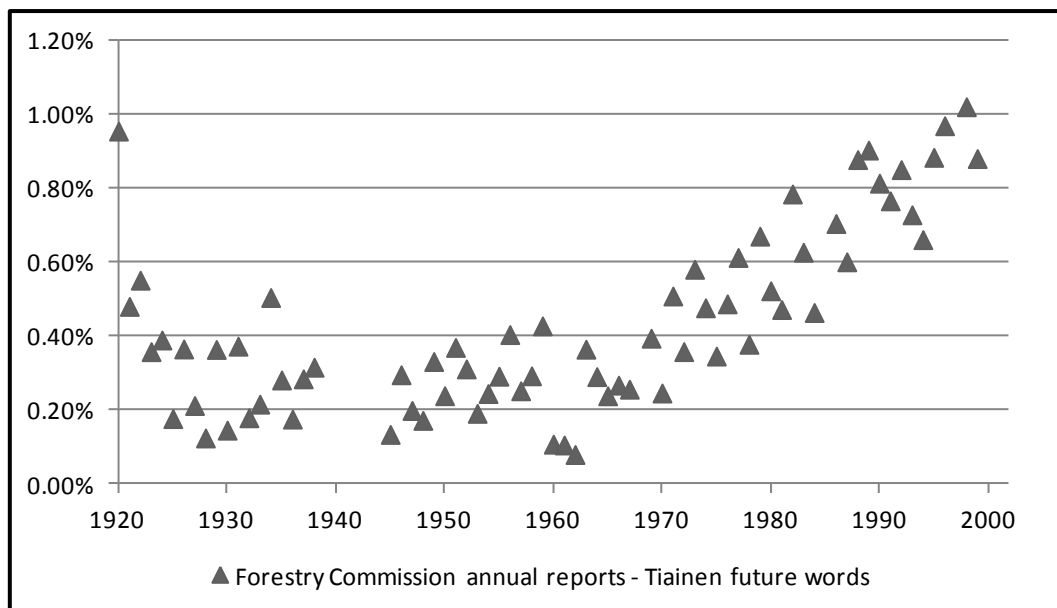


Figure 19-7 Frequency of vocabulary related to “future” in Forestry Commission annual reports (word list from Tiainen (2010))⁹⁹

This evidence deserves more thorough linguistic analysis than is possible in this research. Nevertheless, it appears to indicate a clear statistical trend. Discourse in Forestry Commission annual reports, which will tend by their nature to look backwards, was becoming more future-oriented. The question is, does this imply a greater likelihood that decisions were more likely to meet the needs of the future?

Figure 19-8 provides an indication of the thinking of the Forestry Commission as evidenced by the choices made by those drafting its annual reports. They are shown as percentages of the total words identified in each report that are accounted for by future-oriented, words. The importance of timber¹⁰⁰ appears to decline steadily from a high in the mid 1960s, with first recreation, and then wildlife gaining steadily in importance. The importance of wildlife issues in the late 1980s appears to confirm that the values associated with broadleaves and the Flow Country were being internalised by the Forestry Commission as an institution. More generally, this appears to be evidence that the “duty of balance” gained real substance in terms of the way the Forestry Commission reflected upon itself; and what it projected to others at the end of each financial year.

⁹⁹ There is a statistically significant increase in the frequency of vocabulary related to the “future” over time in Forestry Commission annual reports ($R^2 = 0.38$, $P > 0.01$).

¹⁰⁰ There were no annual reports during the Second World War, timber has been given a 100% importance for 1939-44 inclusive, to complete the graph.

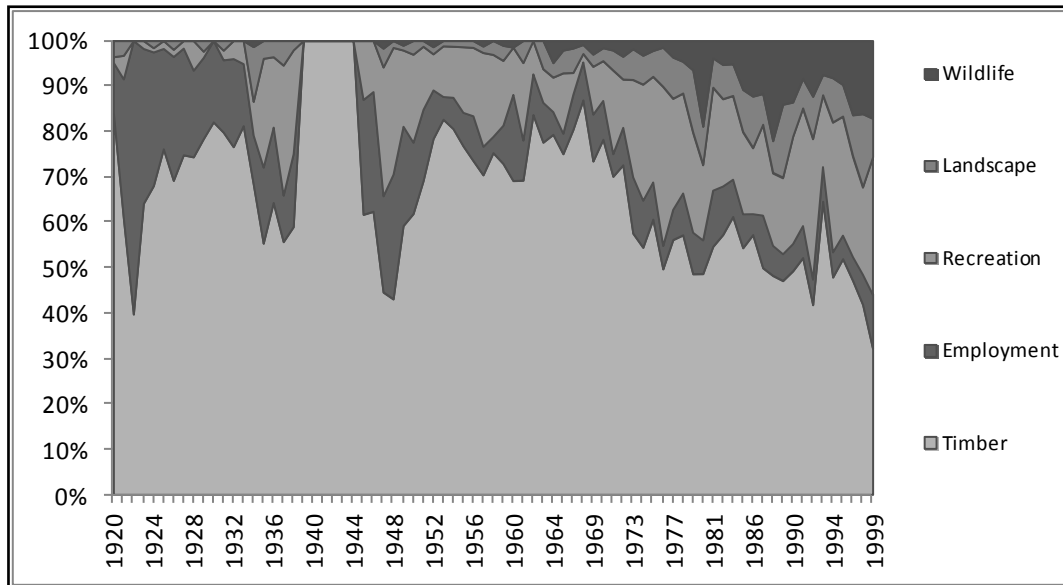


Figure 19-8 Balance - word frequencies for different words related to “objectives” in Forestry Commission annual reports

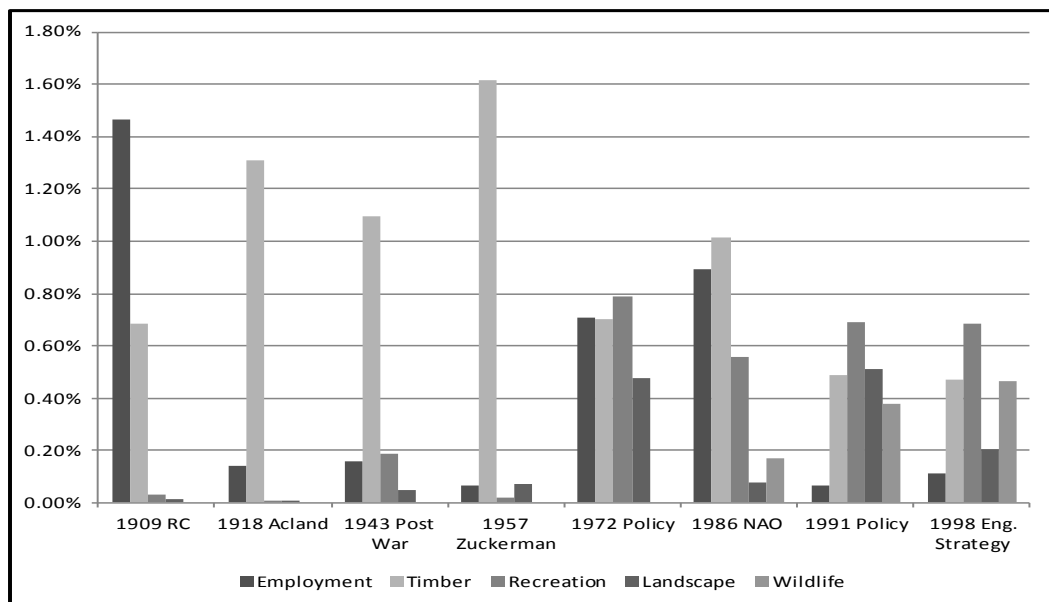


Figure 19-9 Frequency of vocabulary related to “objectives” in key reports to 1998¹⁰¹

“Profit” words peaked for all annual reports in 1987, which seems appropriate since that was the year following the NAO report on the viability of the Forestry Commission (National Audit Office, 1986).

We have some insights into the Forestry Commission and its staff from Whetstone’s part-time Commissioner vantage point; she had once thought, “there was something about people who work for government that made them less able than their counterparts in private industry”. In the case of the Forestry Commission she conceded that they were “enthusiastic, tolerant, conscientious and hard-working, but that the system would inhibit and frustrate them.” She concluded further that “conformists

¹⁰¹ A chi-square test showed a relationship between the values and the different reports ($\chi^2 = 2194.4$, $df = 28$, $p < 0.01$).

gain promotion” and that “there are no prizes for any enterprising bureaucrat who wishes to institute change.” This characterisation of the Forestry Commission fits much of the careful study of the US Forest Service carried out by Kaufman (1967): Whetstone suggests that in the Forestry Commission it was “only human nature for employees to be overwhelmed by the arguments of senior officials who in their early days may have themselves questioned the system but in their turn had it talked out of them”. This could also apply to a private-sector institution: Whetstone suggests that the key is the security of senior managers in the civil service rather than of those in a potentially failing private business. Whetstone’s expectation that junior officials may have had, or have, more radical views may be optimistic, in underestimating the process of “selecting men who fit” before those staff are even recruited (Kaufman, 1967, p.161).

The bureaucracy itself may have had more direct support from the MP in whose constituency its Great Britain HQ lay. Clarke recalls:

Lord Selkirk of Douglas, if I remember correctly, was strong in defending the FC as so many of his constituents (Edinburgh West) worked for the Commission. (Clarke, P. 2013. Pers.Comm. Email, 11 December.)

Clarke goes on to make what is really an ethnographic point about the culture of the Forestry Commission:

There is a paradox in that fact. The self image of FC folk is fairly beardie ecological or lumberjack-ish - yet the reality was civil servant dwellers in an urban office block.

This may underestimate the personal and practical links between the denizens of what was called “The Black Banana”¹⁰² in Edinburgh, and the forests around the country. Robin Cutler, the Director General in the early 1990s, gives a picture of the institution and its relations with government in a collection of recollections of former Aberdeen forestry students:

I found the organization to be more formal than I had been used to and relationships with Ministers and Whitehall could be very difficult at times. (Cutler, 2008)

There is some indication that HM Treasury was one of the sources of difficulty. The institutional status of the Forestry Commission provided some protection in the view of one of the most engaged ministers:

...the semi-autonomous nature of the FC and its statute both gave it some independence of operation and the fact you would need legislation to change its status was also an argument to protect it from the malevolent view of some in the Treasury. Demand for parliamentary time for legislation was at a premium and the need for this was seen as a big disadvantage. (Morley, E. 2013. Pers.Comm. Forestry Notes for Alec Dauncey, 25 August)

While this unusual status was a protection against abolition; it did not prevent the Treasury from exerting influence and ending the tax concessions, which then led to the end of the afforestation project.

¹⁰² A crescent-shaped office block of brownish colour, in Corstorphine, Edinburgh.

HM Treasury

Figure 19-10 shows that timber prices were variable between 1979 and 2000, rising and falling sevenfold. These prices were about a third of the sharp peak at the time of the oil crisis in 1973. Low timber prices reduced the Forestry Commission's ability to fund itself and required it to seek resources from the Treasury.

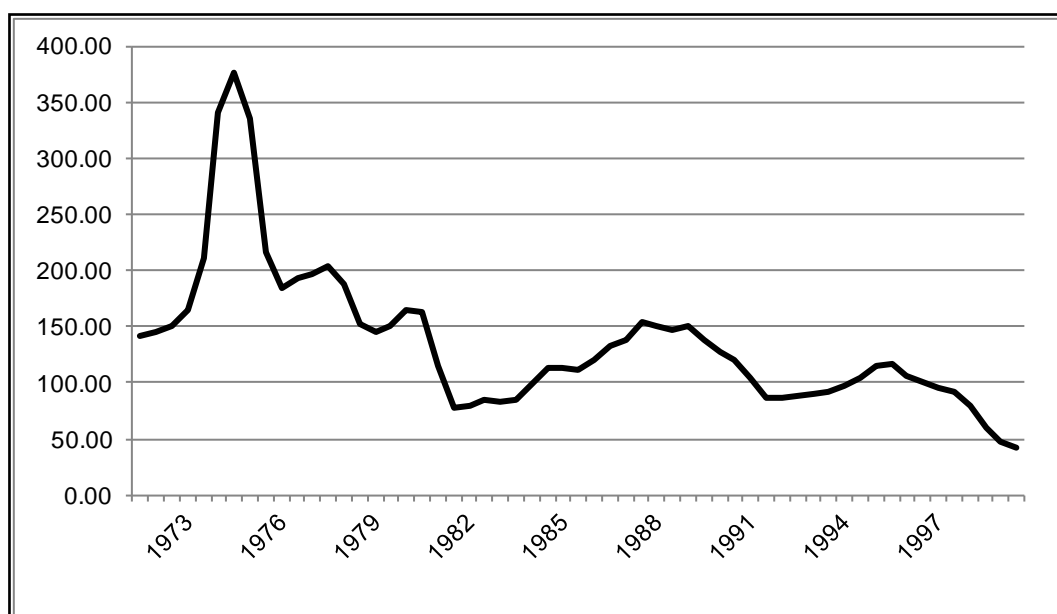


Figure 19-10 Forestry Commission standing sales prices, Laspeyres Index¹⁰³ (September 1996=100, derived from Forestry Commission (1999))

Prices were lower again at the end of the 1980s and early 1990s. David Bills, as the Director General succeeding Robin Cutler, recalls:

I remember Robin Cutler telling me on day one, his whole tenure had been nothing but a war with treasury he could not wait to hand over as my first task was to engineer a[n] 18 percent reduction in wage and salary costs.(Bills, D. 2013. Pers.Comm. Email, 29 November)

When Morley became a Minister, prices had fallen further to a third of their level in the late 1980s and one seventh of the (brief) spike in 1974. Morley noted the power this gave the Treasury:

One important factor was cost. My time as Minister was in a period of poor returns from forestry and the FC needed grant in aid to bridge their budget shortfall. There was not the slightest chance of me convincing MAFF as was and later DEFRA and ultimately the Treasury of making up losses for commercial forestry. The Treasury response would be the FC should sink or swim. They were already unsympathetic asking why is the state running forests? What are they worth and can't we just flog them off?

Justifying money for a public good was the only logical approach. The Treasury couldn't care two hoots to be honest but ministers could. (Morley, E. 2013. Pers.Comm. Forestry Notes for Alec Dauncey, 25 August)

¹⁰³ This takes account of the size mix of material.

It is clear from correspondence released under a Freedom of Information Act (2000) request¹⁰⁴ that the Treasury changes to the tax arrangements had been decided in the face of some concern from the Secretary of State for Scotland, or perhaps his junior ministers (Rifkind, Sir M. 2013. Pers.Comm. *Email*, 26 July). This advice will probably have come from the Forestry Commission itself, since as Whetstone critically observed; “the only reason the Commission continues to exist is that it is the Government’s adviser on forestry”.

NCC gained more power?

The Nature Conservancy Council appeared to have gained considerable institutional influence. In November 1989 the Institute of Chartered Foresters wrote directly to the Nature Conservancy Council Director General, attaching a paper, *The Way Forward* (TNA: FT 42/57, 1986-1991). This noted the “sharp decline in investment in the establishment of new forests.” The Institute proposed measures for a return to afforestation; these included:

Exemption from inheritance tax.

Up-front grants (as opposed to mainly upon successful establishment).

Annual grant payments for 25 years for coniferous afforestation (50 years for broadleaves).

The internal Nature Conservancy Council thinking was scathing:

The ICF document seems to me superficial and poorly argued. There is much reliance on the old argument of import substitution, and a lot of emphasis on improving the public image of forestry. ... The obligatory green-tinged jargon about sustainable development is all there, but in my view the concept is not really understood. The grasp of nature conservation concerns is discouragingly minimal. Nature conservation is not even mentioned in the statement of five objectives; ... There is a determined bid for more upland afforestation, but no acknowledgement of the clashes with nature conservation that would almost certainly result. (TNA: FT 42/57, 1986-1991)

The FICGB also produced a paper which Nature Conservancy Council appeared to take more seriously (TNA: FT 42/57, 1986-1991) since it had a more strategic content. The Nature Conservancy Council internal thinking was forthright and logical:

FICGB envisage a continued programme of conifer afforestation in the uplands at about the same rates as in recent years. This cannot be achieved without massive habitat destruction, but FICGB nowhere confront this issue.

More interestingly, and strikingly the Nature Conservancy Council noted that:

On the credit side, there is strong support for multiple-objective forestry. FICGB criticise the present system of incentives for failing to support multiple objectives, pointing out that grant is related exclusively to area/density of tree planting, and amenity / conservation objectives are not grant-aided but imposed by constraint. This reflects our own view exactly.

¹⁰⁴ The Budget papers for 1988 are marked “secret” and remain under the “30 year rule” which means that there is in general less archive material for this period.

This was an interesting development the industry lobby developing an understanding of environmental economics “à la Pearce,” as noted by the Nature Conservancy Council writer. David Pearce had just published *Blueprint for a Green Economy* (1989, p.134), which included a basic and uncritical reference to the use of “additive” test discount rates as a “subsidy” for afforestation. At this time a member of the Nature Conservancy Council staff in the field in Wales noted greater flexibility in negotiation of afforestation cases involving the Economic Forestry Group (Bray, R. 2013. Pers.Comm. *Interview*, 22 July.).

The Nature Conservancy Council replied to FICGB that:

The main area on which we differ is the requirement for continuing expansion of conifer afforestation in the uplands at existing rates. The development of Indicative Forestry Strategies should, of course, help to reduce conflict over specific cases, and we greatly welcome your support for these strategies. However, as new opportunities expand for forestry in the lowlands, we feel it is reasonable to expect the general levels of upland afforestation to decline.

This raises the question, of course, of the overall objectives of national forestry policy.

It appears that power relations had shifted, the Nature Conservancy Council was now a key player, almost bypassing the Forestry Commission.

Tsouvalis (2001, p.82) highlights the way the Countryside Commission (1984) and the Nature Conservancy Council built on criticism of the economics by the NAO. Tsouvalis also notes the conflict of views between Fountain Forestry and other forestry interests. Her interpretation is of “symbolic power struggles that ensued about the vision and division (through definition) of the world”, and manifested in “networks of power.” Oosthoek (2013, p.153) saw a perception of “rogue forestry” even *inside* the forestry profession. Terry saw more concrete division in the policy network: “Some blamed Fountain Forestry,” he heard rumours of “a reunion at Aberdeen”¹⁰⁵ where there was a ‘fight’ between people who worked for Fountain and those working for EFG and Tilhill” (Terry, J. 2013. Pers.Comm. *Email*, 27 November).

Tsouvalis (2001, p.88) saw the outcome in terms of “co-emergent space to identify different types of land in the Flow Country”. Tsouvalis suggests that the NCC paid a price for being seen to “meddle in what was considered an essentially Scottish affair,” and asserts that “few would now doubt that the NCC was split [afterwards] to disempower”. This was certainly the view of NCC staff at field level at the time (Bray, R. 2013. Pers.Comm. *Interview*, 22 July.).

NCC as an institution attacked the afforestation project in three publications. The first was *Nature Conservation and Afforestation in Britain* (1986). Boyd (1999, p.215) saw this as stemming from the desire of William Wilkinson, the Chair of the NCC, to use clear scientific conservation evidence “against forestry with the powers of the Wildlife and Countryside Act.” Boyd strikes a critical note in referring to the London (rather than Scottish) launch of the second publication *Birds, Bogs and Forestry* (Stroud et al., 1987), which:

¹⁰⁵ One of the four centres of degree level forestry education; the others were Edinburgh, Bangor and Oxford.

...illustrated more than any other event at that critical time how far out of touch the NCC had become with the culture and temperament of the Scottish people, particularly in the Highlands and Islands.

The third document, *The Flow Country: The Peatlands of Caithness and Sutherland* (Lindsay et al., 1988) was determinedly scientific. Boyd provides an insight by quoting a personal comment from William Wilkinson:

The science of the Flow Country must be beyond any doubt; I am sparing no effort in making it so!

Boyd considered that the Scottish NCC, (of which he was the Director until 1985) had a distinct position, drawing the mainly negative effects of afforestation on nature to government attention. Boyd saw some of the confrontation as risky, noting that he:

...lived each day seeing the NCC and the voluntary bodies pitching themselves in confrontation against the citadels of vested interest. This they did using the heavy shot of Parliamentary Questions, primary features in press radio and television. (Boyd, 1999)

Boyd thought the NCC unprepared as an institution for the relatively sudden development of afforestation proposals in the Flow Country (Boyd, 1999, p.214). This accords with the recollections of a former Forestry Commission Director General (Francis, G. 2013. Pers.Comm. *Upland Afforestation 1960 to 1990*. 27 November.). Nature Conservancy Council, field staff were aware of the “struggle” (Bray, R. 2013. Pers.Comm. *Interview*, 22 July.):

AD: ...to what extent was it the NCC sort of sticking its head above the parapet and saying this really ought to stop?

Bray: Oh it was entirely, and it led to the head being chopped off of course! That was the final thing, I think with Ridley and co.

It is not clear which ministers pushed for the breaking-up of the Nature Conservancy Council: it may Scottish ministers rather than Nicholas Ridley. On 3 March 1987, the Forestry Commission's Rowan and Clarke were meeting with Nature Conservancy Council staff, and, while liaising on joint training, were continuing to emphasise the commitment to planting 33,000 hectares. There is an air of conflict in the note of the meeting (TNA: FT 42/57, 1986-1991):

Mr Mowle said that he was concerned that the only way the NCC could influence planting was by imposing a designation. He was concerned that the Commission were not taking account of surrounding interests when considering grant applications. Mr Clarke denied this and pointed out a number of cases where the Commission had been influenced in refusing the applicant on grounds related to conservation and the needs of the surrounding areas.

Internal NCC papers in the Public Records Office include a manuscript note referring to Rifkind's statement in October 1987 as “hugely disappointing” (TNA: FT 42/57, 1986-1991). There was clear frustration with the Government, which had made this a very formal response to NCC as a letter made public by answer to a Parliamentary Question (HC Deb 23 October 1987 vol 120 cc918-22W). Rifkind's letter made clear the commitment to 33,000 ha of afforestation per annum and included some comments which appeared to minimise the risk of damage to SSSI:

I am pleased to note from your report that only one SSSI has in fact been damaged by forestry, and that, I understand, was accidental. I do not believe it would be reasonable, therefore, to put an absolute ban on planting within SSSIs.

The Rifkind letter includes a reference to what could be called institutional learning on the part of the Forestry Commission:

There has been an important shift of emphasis on the part of the Forestry Commission in recent years in response to changing perceptions on environmental matters, including nature conservation, and in the light of advice it has received from the Nature Conservation Council and other statutory authorities such as the Countryside Commissions. The statutory remit of the Forestry Commissioners has been extended to include a duty to endeavour to achieve a reasonable balance between timber production and the environment. That is not to suggest that the pursuit of this new duty will necessarily avoid conflicts of interest in every instance, but the Government believes that such conflicts will be reduced as the Forestry Commission's policies and practices develop. In this connection, I was pleased to learn that discussions have begun between the Forestry Commission and yourselves aimed at the provision of constructive advice on nature conservation issues in the wider countryside.

Further research might establish whether this form of words represented a clear steer from the Secretary of State for Scotland to the Forestry Commission, or was drafted by the Forestry Commission and showed the extent of internal institutional change and learning. In December 1987 the NCC itself responded to the letter, rather insistently continuing the argument, and making its views public, after approval by its council.

There was also a defensive attitude in the Forestry Commission: Bray recalls discussion about acidification of water courses in the late 1980s:

Remember the Tywi forest, everybody was talking about acid rain in those days, but it was not so much acidity in the rainfall itself as the acidity in the water that had gone through the forest, the trees, and it had an effect on the fish population ...

I do remember a sort of seminar talking about the ... results and the fisheries people were presenting all the results and [a] representative of the Forestry Commission who shall remain nameless was clearly told to go and say we don't believe a word of it. People were just amazed and said in the light of all this evidence you can say this? (Bray, R. 2013. Pers.Comm. Interview, 22 July.)

Ratcliffe, an architect of the attack on afforestation, reviewed the situation in September 1988: "It is now 2 years since our major report", telling the Nature Conservancy Council Director General:

The forestry industry itself has remained virtually unmoved on afforestation. Its response has been to step up the propaganda war to justify its activities, and to lobby even harder to maintain the status quo.

The NAO Report of December 1986 seemed a very strong card for us, but the FC (at whom it was aimed) seemed to have got away with virtually ignoring it. There were very clear implications for the private sector forestry but these too have been brushed aside. Nothing better illustrates the power of the forestry lobby. Who else is allowed to wave NAO criticisms aside?

Ratcliffe was writing a mere six months after the budget changes. With hindsight we can see that he underestimated both the tax changes, and the "Ridley statement":

The 1988 tax changes were a severe psychological blow to the forestry industry. We need to assess the effects visible on the ground, in investment confidence, especially in the areas of greatest conservation concern. One effect may have been to kill the enthusiasm for the speculative value of the establishment phase of afforestation, and make investors more concerned about the long-term value of the eventual crop and the attendant risks.

The Ridley-MacGregor thumbs-down to large afforestation schemes in the uplands of England is the most positive achievement so far. It may have damaged confidence more widely than England alone, though it is a decision which could easily be reversed. (Ratcliffe in TNA: FT 42/57, 1986-1991)

This internal letter has a combative tone: it could have been written by a campaigning NGO rather than a government agency. In fact, whether Ratcliffe realised at the time, coniferous afforestation in Britain was collapsing and would not recover. Ratcliffe ended by suggesting further public action. The Nature Conservancy Council Director General disagreed and pointed out that the National Audit Office report had affected the budget decision.

By 1990, the Nature Conservancy Council was being reorganised into three country agencies. It appears that the Forestry Commission Director General, Francis,¹⁰⁶ invited his opposite number to discuss institutional relations. The Nature Conservancy Council Director General, Hornsby, wrote to Francis (TNA: FT 42/57, 1986-1991, 13/9/90):

...I do not consider that they represent any deep seated attempt to mount partisan critiques of each other's position. That said, I can accept that cumulatively they add up to a situation which is at best an irritant and which you considered was more serious.

Francis sought acceleration in notifying SSSI in Caithness and Sutherland, this was clearly still contentious, and the Forestry Commission clearly remained interested in further afforestation but in search of clarity. Indeed Hornsby's letter indicates that the Forestry Commission had an interest in:

...the possibility, in appropriately selected areas, of considering afforestation in the English uplands, despite the existing Government policy announced a little time ago by Mr Ridley.

It seems clear that institutional battle lines were still in place.

19.7. Policy network analysis

Policy networks and subsystems

Tompkins (1989, p.117) was concerned that the forestry lobby would mount a successful "major propaganda campaign to recover from the setback it received from the closure of the tax loophole in the 1988 Budget." He was writing when in effect the "Battle for the Hills" (his subtitle) was actually already won, in that upland afforestation rapidly fell after 1989. In that year, 26,178 hectares of conifers were planted in Britain. This more than halved; to 12,426 two years later, and then to a mere 6,228 in 1999. The policy situation was confused. Reviewing UK forestry policy twenty years later, Moxey (2008) noted the "cluttered policy landscape of multiple arms of government and myriad

¹⁰⁶ Director General 1986 to 1990.

interventions, most measures are used in combination rather than isolation and thus should be assessed jointly rather individually.”

Tompkins appears to see the conflict as one between competing interests and lobby groups. His book has a clearly labelled Part II entitled “The Rise of the Forestry Lobby” (1989, p.80).

From a Forestry Commission perspective, the Director General of the time reflected upon the:

...vigorous campaign in the press in which the RSPB were prominent. The Observer Magazine devoted the greater part of one issue opposing the planting in the Flow Country and the tax regime supporting it. This was combined with intense lobbying of politicians at all levels. While environmental concerns were uppermost, the campaign attributed investors' interest in afforestation to a favourable tax regime rather than their desire to create, own and manage forests in the longer term. (Francis, G. 2013. Pers.Comm. Upland Afforestation 1960 to 1990. 27 November.)

Internationalisation, policy diffusion and multi-level governance

Mather et al. (2006) drew attention to the UNCED Forest Principles adopted at Rio de Janeiro in 1992 as an “external impetus.” However, this and the Ministerial Conference on the Protection of Forests in Europe, took place in 1990 after the crucial changes in Britain. They may have been influential in discouraging action to reinstate the afforestation programme, and resulted in the reference to sustainable management in the 1991 statement of policy.

19.8. Critical policy analysis

Ideas, narratives, frames and discourses

The key narrative was becoming post-productivism. Lowe et al (1993) provide a definition of “productivism” in agriculture:

...a commitment to an intensive, industrially driven and expansionist agriculture with state support based primarily on output and increased productivity.

Mather (2001) quotes Ilbery and Bowler’s (1998) description of post-productivism:

...a reduced output of food, a progressive withdrawal of state subsidies, the production of food within an increasingly competitive international market, and the growing environmental regulation of agriculture.

Writing later, Mather et al. (2006) suggest characteristics of post-productivism: a shift from commodity to non-commodity outputs and service provision, in this case environmental services. Lowe et al. (1993) note the underlying change from productivism in agriculture during the 1980s and the ensuing uncertainty in land-use. Mather et al. (2006) concluded that although there are difficulties with the definition of “post-productivist” the alternatives, “multi-functionality” and “ecological modernization” were less appropriate.

The wildlife and countryside act 1985

The Wildlife and Countryside Act (1985) was of major significance in nature conservation in general. Boyd (1999, p.202) describes it as a “breakthrough” in that it gave very important powers to the NCC

in the designation of SSSI. The formal requirement for balance in the Forestry Commission's activities was also embodied in the Wildlife and Countryside Act (1985). Before this, it had been clearer that timber production was pre-eminent. That said, the Forestry Commission's own statement of objectives continued to emphasise timber production until the policy statement of 1991 (Forestry Commission, 1991). which introduced to this particular discourse the concept of "sustainable management" and "multiple objectives". In addition The EIA Directive (85/337/EEC) came into force in 1985 and led eventually to greater environmental consideration of afforestation proposals. Regulations embodied ideas and discourses about the value of nature and made them "real" by embedding them in legislation and the language of land-use. This was significant in the eventual development of the Flow Country controversy.

Mather also sets out a challenge:

The emergence of postproductivism, in forestry and more generally, is easier to describe than to explain.

Today, many ancient woodlands and old-growth forests are protected and generally revered, while the regimented rows of conifers are disparaged. Order, simplicity, and regulation have been challenged in the scale of values by perceived naturalness, diversity, and complexity. ... if it is accepted that new forestry is one expression of postproductivism, the implication is that postproductivism is simply to postmodernism as productivism is (or was) to modernism. In other words, a full explanation of the trend towards postproductivism would require a full explanation of the trend to postmodernism. (Mather, 2001, p.261)

In forestry there was a turning away from timber production in the late 1980s and early 1990s which could be called "abrupt and radical" and was more "obvious" than that seen in agriculture (Mather et al., 2006).

In evaluating these changes after twenty years, Mather et al.(2006) note the cessation of large scale coniferous afforestation for timber and the ranking of production as only one of 12 objectives in grant schemes. However, they also note that this represented activity on a relatively small area but conclude that there is empirical evidence for "post-productivism".

Mather (2001) identified broad historical phases or "successive paradigms of forest use." A "preindustrial" phase in Europe made use of non-timber forest products as well as timber, and was succeeded by a more industrial phase, in Germany associated with scientific forestry. This thesis deals with the relatively late arrival of this paradigm in early twentieth-century Britain. Mather notes the separation of such forests from the wider landscape:

Sharp, linear boundaries and monocultural, even-aged forests epitomised the new era of rational forestry, and translated the abstraction of the standard tree, on which the notion of sustained yield of timber was based, into reality.

Mather noted: "Distinctive emphases and features are listed; it is not implied that (for example) timber production is wholly irrelevant in the postindustrial forest."

While the changes in the vocabulary of Forestry Commission annual reports may indicate a change in thinking of the type suggested by Mather, the more significant question is that of the source of this

change in the Forestry Commission as an institution. Was the political rhetoric changing in advance of this?

The change in attitude to “Ancient Woodland” and to broadleaves in general, can be seen as a paradigm shift related to postproductivism. Nail (2008, p.73) suggests that the Broadleaves in Britain conference itself arose out of the level of conflict between “conservationists and foresters,” and described it as “a turning-point in the Forestry Commission’s thinking and policy”. The conference was organised by the ICF and the Forestry Commission. The signs of the dichotomy described by Nail were evident in the discussions at the ICF meeting in 1977 described in the previous chapter.

Two observers identify this discussion of the role of broadleaved trees as a fundamental point in twentieth-century British forestry policy history.

Foot (2010) was a member of the Forestry Commission’s senior staff at the time. He described the changes in this period, especially the publication of a consultative paper, *Broadleaves in Britain* (Forestry Commission, 1984) as a “eureka” moment which marked a period of “rapid evolution in thinking”. Foot saw the change as arising from “an accumulation of pressures”. Interestingly, he ascribes the combination of Dutch elm disease and hedgerow clearance by farmers as having highlighted a “prairie-like” landscape.

The dynamics of this conference and its origins are explored in detail by Tsouvalis (2001, p.102-104), who notes the development of the Forestry Commission attitude to ancient woodland. She cites three positions adopted by the Director General of the Forestry Commission, George Holmes.

The first was a reaction in 1978 to the concept of “ancient woodland” advanced by the Nature Conservancy Council. Citing a personal communication in 1996, Tsouvalis describes Holmes’s reaction: that it was a “notion” to be “rejected” (Tsouvalis-Gerber, 1998).

The second quote is from the opening of the Broadleaves in Britain conference, Tsouvalis emphasises the conception of *forester*:

...the forester wants to improve productivity by more intensive management, perhaps involving fast growing broadleaved species where appropriate.

The third record of Holmes’s view is from the closing remarks of the conference:

The NCC is concerned primarily with identifying the areas that need to be managed in the national interest. We shall certainly endeavour to help with the classification...

Tsouvalis sees this conference as a microcosm of the struggle for the “institutionalisation of ancient woodland.” In highlighting Holmes’s identification as a forester and of the idea of a forester with production, Tsouvalis notes the struggle with others at the conference with a different “knowledge-culture” and that the Forestry Commission had to “accommodate ‘other’ views of forests and woodlands”.

Nail (2008, p.73)⁷³ sees a strong influence from “changes of perception of forestry internationally”, though does not make explicit the evidence for this, apart from reviewing the increasingly social themes of World Forestry Congresses from 1960 onwards.

Foot highlighted the recognition in a House of Lords committee recommendation that in such woodlands commercial revenue from timber should be “incidental”, and sees this as a question in the “metaphorical small print”: “should the production of timber still be the dominant theme of forest policy?” Foot sees a multi-purpose woodland answer based upon a “clear shift of public opinion”. This opens the question as to whether public opinion had actually shifted so clearly, or was the forestry policy community simply having to take account of a more long-held public view? Tsouvalis sees a role for the mindsets of foresters, or more specifically, the “habitus” described by Bourdieu, and the product of what foresters had been “taught to see through language and practice” (Tsouvalis-Gerber, 1998). In support of this, Tsouvalis quotes a *Guardian* article (Wright, 1992), itself alluding to the views of a Forestry Commission insider and author of a book on landscape design, Oliver Lucas:

Foresters have been trained to look at their plantations and see little more than cellulose or potential paper-pulp.

The views of the public, and perhaps more particularly a wider policy community, are noted by Foot: “it became commonplace for voluntary bodies to be represented on advisory panels”. Most importantly for afforestation, “planting became subject to a plethora of new “processes”. Most of these were non-statutory, with the exception of Environmental Impact Assessment which took effect in 1988.

It is worth noting that the question of hardwoods and their role in relation to “softwoods” (later “broadleaves” and “conifers can be traced almost throughout the history of the Forestry Commission, in 1929, the Commission had felt the need to publish a statement on its policy.

The discourses around the Flow Country controversy were perhaps more emotional and, to some, sensational attempts to distort thinking. Foot (2010), an internal voice, challenges the characterisation of it as “The Scottish Serengeti.” He draws the contrasting images of a little visited or utilised wilderness, which “on the contrary, as we now know it is outstandingly rich in moorland birdlife”. He interestingly highlights the fact that the identity itself, “Flow Country”, was popularised (if possibly not coined) in the 1980s.

Tompkins (1989, p.93) makes a point about the “mind of the forestry lobby,” which relates both to mindsets and the morale effect of the tax changes: the “blanket afforestation” had taken place in “one or two working generations”. Hence, particularly for those in the management companies whose only work was afforestation, the ending of the tax schemes and of the activity which had dominated their lives meant that they could not be expected to “alter their views overnight”. It could be that this also created a divergence between their mindsets and perhaps the more adaptable experience of Forestry Commission foresters who would probably have a more balanced experience including some older plantations being thinned, and perhaps (even if unrecognised) “ancient woodland” sites with longer

history. As Terry (Terry, J. 2013. Pers.Comm. *Email*, 27 November) points out, of the managers in these companies:

Suddenly they were out of touch and I am pretty sure they were not particularly adaptive. If you look at the mid ranking stars in the management companies in the late 80's and early 90's – the people who would be the directors of the companies now they are no longer there. Many just seemed to disappear...

However, by 1989, there was evidence of adaptive management in the Forestry Commission. Alistair Scott took the place of Alastair Rowan as Director, Private Forestry with the word “Environment” added to his title. Nature Conservancy Council staff were pleased to receive a letter (TNA: FT 42/57, 1986-1991) from Scott on liaison, which ended:

I would expect relations between our field staff to be such that your knowledge is tapped everywhere. Does this help?

This attracted a manuscript comment:

a more +ve¹⁰⁷ approach at least in tone. Can we keep this going as a way of maintaining dialogue w. F.C.

A note of a meeting between the Nature Conservancy Council and Scott and Britton of the Forestry Commission survives in the National Archives (TNA: FT 42/57, 1986-1991, /8/90). This provides evidence of a number of concrete “learning” behaviours. These included the Forestry Commission seeking “Training courses for Private Forestry and Environment Officers in woodland ecology and management”. These were relatively senior staff in each conservancy. Keith Kirby, reporting back to the Nature Conservancy Council on the meeting, commented that:

There are obvious drawbacks with all this but I suspect it will do little good to try to stand in front of the FC steamroller – better to jump on board and try to grab the wheel? (TNA: FT 42/57, 1986-1991)

Reflecting on the situation more than twenty years later, Kirby sees the beginning of genuine institutional learning and change at this time:

I think by 1990s FC could be classed as “learning” but certainly elements in the mid-eighties when the Broadleaves Policy came in seemed to feel they were being “pushed” (Kirby 2013 pers.comm.)

There is considerable evidence of institutional change within the Forestry Commission in the late 1980s and early 1990s. The Forestry Commission was undergoing a division between its “Authority” and “Enterprise” roles. By 1998 this had been reversed and Morley felt that as a minister he was dealing with an organisation which was in the process of learning, and to some extent in conflict with its industry partners:

I had the impression the industry itself was struggling to come to terms with a multi-use forestry role particularly the Forestry Commission and was in transition from a traditional mono-culture

¹⁰⁷ Assume abbreviation of “positive”.

driven by the timber industry towards a more thoughtful approach utilising grants for such things as forestry for land regeneration and working more closely with local authorities and conservation bodies for both conservation and habitat restoration such as heathland and bog land. It was a sector that I think had underestimated its expertise in these much wider roles ... (Morley, E. 2013. Pers.Comm. Forestry Notes for Alec Dauncey, 25 August)

Forest transition

This change is linked to the concept of “The Forest Transition,” which was developed in the 1990s by writers like Mather, who coined the term, and summarised it as “intellectual shorthand for a historical generalization about long-term changes in forests and the surrounding human societies. The point of inflection in the transition occurs when deforestation disappears and reforestation commences.”

Grainger (1995) used the phrase “national land-use transition” and developed the concept of “forest replenishment” through reafforestation. He cited Britain as an example.

Purdon (2003) identifies the paradox inherent in the concept, of “nature” as containing a “binary opposition between Nature and Society, humans and the environment.” Nature is on the one hand “natural” and includes humans: on the other hand, it can be seen as an artificial human construction. Purdon explores this in the context of ecosystem approaches to sustainable forest management in the boreal forest. He cites Messier and Kneeshaw, (1999): “to emulate nature in our interventions in such a way as to minimize potential impact and to conserve biodiversity”. The use of the concept of nature in forestry is a power struggle. Ancient woodland is legitimised by its naturalness; continuous cover or close-to-nature forestry does the same, though is perhaps more complex in also having recourse to productivist claims as well. Arguments about policy and power go further in the direction of; “but humans are part of nature as well”. Purdon suggests that it is at this point that we must have recourse to post-modernism and goes on to challenge the use of “nature” at all, recommending that:

First and perhaps most difficult, in order to avoid the metaphysical false-start of the Nature–Society opposition, ecologists and forest managers should abandon the use of Nature as a referent in forest discourse.

There is now surprisingly large agreement among researchers that to solve the Nature–Society dualism we need a new language, that we need new metaphors and categories! we need new ways of thinking for sustainable forest management that avoid binary oppositions, the separation of the dancer from the dance.

There is debate about the extent to which there has been genuine change away from productivism. Doubt comes from two directions: whether the mindset of the Forestry Commission and its staff has changed; and to what degree the actual activities have changed:

...the institution appears to be uncertain how to meet the demands of post-productivism, which challenge the Forestry Commission’s role as a professional elite geared to timber production and diffuse its focus. More fundamentally, Forestry Commission personnel questioned why the institution is turning towards post-productivism. (Kitchen et al., 2002)

Schwarz and Thompson describe the ecologists’ view (Holling 1979, 1986, Timmerman 1986) and set out four “myths of nature”:

“Nature benign” – self correcting allowing “laissez-faire attitude”

“Nature ephemeral” – vulnerable to “catastrophic collapse”

“Nature perverse/tolerant” – mostly “forgiving” but sometimes catastrophic.

“Nature capricious” – random and “erratic”

Those who hold these positions are “rational”, but the effect is “plural rationality” (Schwarz and Thompson, 1990). Hoogstra and Schanz reviewed Schwarz and Thompson’s four rationalities, and added related approaches to time (Hoogstra and Schanz, 2008a):

(1) The hierarchist, “procedural rationality “having a balanced distinction between short and long term);

(2) The egalitarian, “Critical rationality” – “long term dominating short term”;

(3) The individualist, “Substantive rationality” – “short term dominating the long term”;

(4) The fatalist, “Fatalistic rationality” – “perceiving time as involuntary myopia.”

This is useful in analysing the approach to time, forethought and foresight in forestry policy. Hoogstra and Schanz’s empirical work is discussed in Chapter 8, together with the distinction between “Promethean” and “Arcadian” approaches summarised by Peterken (1996).

Analysis using Bengston and Xu’s (1995) “spiritual” word list, (see Appendix) provides indicative evidence of a change in late twentieth-century British forestry rhetoric (Figure 13-6).

The Agriculture Act 1986 is cited by Mather et al (Mather et al., 2006) as a “milestone’ which amounted to a sudden shift from emphasis on increased agricultural production to “social and environmental objectives”. While Mather suggests that the changes in forestry were not as clearly signified, it seems plausible that this represented a collective change of view amongst politicians and policy-makers, Mather et al. term these “changes in policy climates”. They conclude that a paradigm shift has taken place.

Knowledge

The Nature Conservancy Council influenced by its Chief Scientist, Derek Ratcliffe, advanced the scientific case against afforestation. Research into the value of mires was coordinated by the International Mires Conservation Group established in 1984, and articles were published drawing attention to the issue (Oldfield, 1987). The results of Nature Conservancy Council and other research were disseminated, with appropriate public relations efforts (Good, 1987; Nature Conservancy Council, 1986; Stroud et al., 1987).

Class, capital, taxation and equity

The drive for afforestation in the Flow Country was very much influenced by the tax subsidies for forestry of most value to the wealthy. Grayson (1993) notes that the “size of the fortunes involved” played a part in the development of public opposition to the schemes in the Flow Country. Price (1971) explored the impact of this tax regime on potential afforestation in the Yorkshire Dales and set out the way in which such a tax system is quite unable to discriminate between afforestation that

provided public benefits and that which did not. He described the mechanism as a vestige of the blunter, but “defunct” objective of creation of a strategic reserve.

Peterken reflects on where some of Ratcliffe’s motivation may have come from:

I think his drive came as much from his temperament and politics ... Politically, my impression was that he was left of centre and totally antagonistic to hereditary land ownership and a system that allowed high earners to mitigate tax by planting conifers. (Peterken, G. 2013. Pers.Comm. Telephone, Email, 5 August.)

The equity issue in forestry has rarely been fully explored even during periods of socialist ascendancy. A rare and modest demurral caused a bit of a flurry in the Treasury in 1977 when the Welsh Office junior Minister Barry Jones¹⁰⁸ questioned the wisdom of the announcement:

Many of our supporters will argue that the private forestry interests are, on the whole, a privileged section of society and that, as is admitted in the report, the present income tax regime can already be used to their considerable advantage. It seems to me that the recommendations would be more deserving of sympathetic consideration when times are better and when we are not engaged in reducing public expenditure in other fields where cuts have an immediate public impact. (PRO T366/115 Sec of State for Wales to Chancellor 30 March 1977)

The Forestry Commission itself appears to have proposed an interesting change to the report of the 1977 interdepartmental group:

If it was clear that the high marginal rate taxpayer was a rarity in forestry the point may be of relatively minor significance. In fact the reverse is true: it is not disputed that the majority of private foresters have substantial income outside forestry and the sheer size of the tax subsidy illustrates this. (TNA: T366/115, 1977)

Moxey (2008), writing a report commissioned by the Forestry Commission on policy instruments, notes that equity can be an objective of taxation.

The role of the landed gentry and their representation in the House of Lords has been discussed in more detail in an earlier chapter, but David Bills, the Director General at the turn of the twenty-first century has a more contemporary comment:

I was often surprised at how some of our senior management would show undue respect bordering on sycophancy for the landed gentry who at the end of the day were seeking rents from the public at the same time as trying to deliver as little as possible in terms of multi functional forestry. (Bills, D. 2013. Pers.Comm. Email, 29 November)

Even a Conservative politician reflected upon the same issue:

The Forestry Commission was significantly out of touch both with public opinion and with movements in the forestry world. It paid far too much attention to the very large forest owners, many of whom seemed to see this as an extension to the Common Agricultural Policy. (Deben, Lord J. 2013. Pers.Comm. Email, 27 November)

¹⁰⁸ Parliamentary Under Secretary (Welsh Office) 1974-79. (Lord Jones, 2013)

Gender

Peterken suggested that some of the change seen in the late 1980s might have been related to the arrival of women in the profession and in the Forestry Commission, albeit in small numbers:

There was another element, ... how shall I put it, the feminisation of forestry. One of the conspicuous things was that it was virtually a male exclusive profession when I first came into it ... which was very late 60s, and it was quite exceptional to have a woman doing forestry, even doing research. As time went on more and more women came in. I think that to some extent ... was [when] forestry ceased to be a kind of macho profession and became much more what I would call balanced... (Peterken, G. 2013. Pers.Comm. Telephone, Email, 5 August.)

Some of the few general considerations of gender in forestry were explored in Section 10.6.3. Forestry has been traditionally seen as a male occupation world-wide, and even by the early twenty-first century it was the case that while:

...improvements have been made in the number of women holding technical, professional and managerial positions over the last 10 to 15 years, women are still clearly underrepresented in the forestry industry. (Lidestav, 2006)

The Forestry Commission reviewed the situation in Britain (Tomlin, 2001), and concluded that despite some improvement, there were still fewer women in the industry than a balance would require. This was more marked at senior levels and some evidence was found of an “old boys’ attitude”. Leslie et al (Leslie et al., 2006) found some improvement in this.

Storch (2011) sets out two potential dynamics associated with increased numbers of women in professional forestry and policy-making:

a) women have special qualities that suggest their role as potential change agents contributing to changes in the profession's values and

b) the profession's values will not be influenced by a change in the gender ratio because professional socialisation is more influential.

Storch carried out research into the attitudes of German foresters in 2008 and concluded:

...that gender does not make such a big difference within the forestry profession, compared to the differences between foresters and the general public.

On the other hand, the work of Varghese and Reed (2011) described greater openness to environmental values from women in the US Forest Service. It is difficult to believe that the limited number of women, in relatively junior roles, in the Forestry Commission in the late 1980s were able to exert any significant effect upon mindsets.

19.9. Advocacy Coalitions

Whetstone, as a free-market activist, was struck by the way in which, although the government might have wished at some levels to sell off the Forestry Commission, it met “well-organised opposition, largely from the Conservative side”. She explained this as a privatisation a bit “too close to home”:

After all, many MPs, and even more Lords, have a direct interest in forestry. Although I don't believe that direct financial loss or gain came into their calculations, it is not easy to abolish an institution the employees of which you meet and like.

Whetstone is discussing ownership rather than the afforestation effort itself, but her analysis of the nature of shared values and the coalition created are relevant. In terms of the productivist coalition, Lowe et al. (1993) describe the “productivist regime” as:

...the network of institutions oriented to boosting food production from domestic sources which became the paramount aim of rural policy following World War II. These included not only the Ministry of Agriculture and other state agencies but the assemblage of input suppliers, financial institutions, R&D centres, etc., which facilitated the continued expansion of agricultural production.

These definitions appear to be apposite to the forestry of the same period.

A number Advocacy Coalition Framework features have been identified above (see Figure 10-3). While the basic constitutional structure was stable, a number of sociocultural values around the “mixed economy” consensus had been challenged by the Conservative government as well as policy subsystems which had taken state action and subsidy as normal. On the other hand, there was a supportive coalition within government. However, hostile public and media opinion, were mobilised as never before in opposition to afforestation. A major policy change would have been the abolition and privatisation of the Forestry Commission and cessation of forestry subsidies. This happened in New Zealand. There was increasing consensus between policy entrepreneurs *inside* the Forestry Commission and the environmental policy subsystems of the Nature Conservancy Council and RSPB. There was at least some openness of the political system, firstly to significant change of all sorts, and secondly to environmental issues, for instance in the persons of Nicholas Ridley and John Gummer, as Conservative politicians.

Sabatier and Jenkins Smith (1999, p.124) suggest that learning “across belief systems” requires: an “intermediate level of informed conflict”; technical resources for debate; and that the issues be core to one actor but secondary to the other. This model might describe Flow Country afforestation if we separate the Forestry Commission as a key institutional player from the forestry investment companies. The nature conservation interests, such as the RSPB, were acting on their core beliefs, while for the Forestry Commission *afforestation* had become secondary. Firstly, very large state-owned forests already been existed; and secondly, for nearly ten years, most afforestation had been private. In this sense, the activity had ceased to seem a core part of the organisation's beliefs and functions.

Tsouvalis (2001, p.87) looks at the semi-religious nature of the forestry lobby and *Forestry and British Timber's* characterisation of the opposition as emotive. She concluded:

...in short people who criticised forestry practice had to be out of their mind. But the government did not seem too impressed with the economic understanding of foresters.

By the late 1980s and 1990s, the Forestry Commission did appear to understand the economics. The management companies were out on their own.

19.10. Policy termination

This narrative has finally reached a policy termination. In the space of a decade after 1989, coniferous planting fell from 26,178 hectares to 6,228 in 1999, a fall of 76 percentage points. In 2008 it reached a low of 800 hectares.

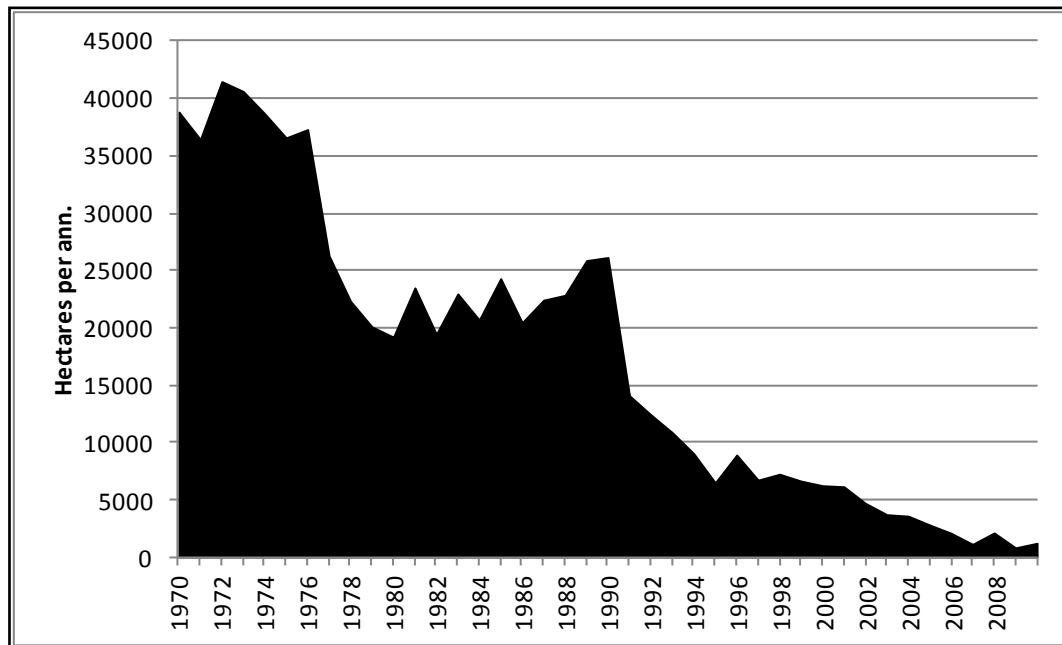


Figure 19-11 The decline of annual coniferous afforestation 1970 to 2009¹⁰⁹

Parsons (1993) suggests that one should look to “political dimensions” for policy termination. The English ministers did end coniferous afforestation in England, but their political colleagues in Scotland did not intend a policy termination. Parsons' (1993, p.579) summary of tips for terminators (Section 10.2.1) includes redefining the problem to change the agenda; and, “be nice and caring whilst you are wielding the axe”. This would appear to cover the increased grants and reassurance provided in the Secretary of State for Scotland’s speech to the House of Commons on 15 March 1988, but was the intention to wield the axe?

The Forestry Commission was advising ministers on the afforestation tax changes; it may have recognised that organisational survival demanded a strategic withdrawal from the most unpopular afforestation programmes, an example of an “ecological perspective”, an organisation evolving to fit a new space in the environment.

This is the concluding phase of the twentieth-century coniferous afforestation project. A mass of social and societal values were assailing the industrial productivist idea. These were combined with another assault of economic evaluation, typical of the longstanding tension between the Forestry Commission

¹⁰⁹ Produced from Forestry Commission data in Excel file NPRS1920, obtained from Forestry Commission, Edinburgh.

and the Treasury. In a simple rational policy cycles process, civil servants and politicians would have considered the evidence in the context of current conditions and concluded that the policy should be terminated.

In England this may have happened. Little evidence has been found on the processes within the DoE and Ministry of Agriculture to allow such a rational stagist interpretation. It is also clear from the evidence that nothing of the sort took place in the Treasury, which changed the financial conditions, or the Scottish Office, at least as expressed by their Secretary of State. But what of the Forestry Commission? Is it possible that sufficient learning had taken place that the Forestry Commission management was actually ahead in its thinking of both the forestry management companies and the government itself?

If progressive thinking was taking place inside the Forestry Commission as a result of institutional learning, rather than the Forestry Commission simply losing a power struggle with the Nature Conservancy Council, the more environmental foresters in the Forestry Commission were part of a learning process and for the moment stand respected at the bar of history.

Chapter 20.

Conclusions and recommendations

20.1. Research questions

The Great Spruce Project had its naissance in the first decade of the twentieth century. It was initiated during the maritime siege of the First World War, and entrusted to an institution enshrined in law. In its first two decades, it survived a financial challenge, and an aesthetic attack. It was reinforced and relaunched during a second war of blockade; survived the advent of the Bomb and the apparent end to the likelihood of protracted wars; and continued unchanged, with different but revived justifications. It ended untidily, after an environmental controversy, in changes to a budget in 1988.

Three broad research questions have been addressed:

What are the conditions of policy change and inertia which explain the start of the Great Spruce Project, its persistence in the face of pressures for potential change, and its final termination?

Could the actors involved have chosen to change earlier? Are they culpable, in that they could have applied greater forethought, developed better foresight, and ended the programme significantly earlier? Alternatively, were they prisoners of their times, unable to exercise the forethought which might be expected of them from hindsight based on one historical outcome?

What can be learned about potential approaches for developing better foresight in forestry policy-making?

Other workers have provided historical, social and geographical accounts. This research has used mixed methods and shed new light on the subject. In particular, quantitative data from innovative computer-aided text analysis has provided evidence of the frames of thinking in documents and parliamentary debates. Newly available digital archives have allowed systematic searches for media comment. Relatively novel qualitative methods have been applied to later periods in the history, including autoethnography and email interview techniques. The research has not sought to specifically judge or appraise the policy. It does imply that a change might have been expected earlier, but the aim is to explain the processes of stability and change, and answer the research questions. Eight policy decision processes were examined.

20.2. Conditions for policy change or inertia

The first research question can be answered in relation to each policy decision process.

The decades before the Great War: policy entrepreneurs fail to persuade

This research has explored a network of policy entrepreneurs, some of them new to the literature. The role of the proponents of more scientific forestry in the two decades before the First World War has been noted by other workers: (Nail, 2008; Tsouvalis, 2001), and (Oosthoek, 2013). Quantitative text

analysis of the writings of these policy entrepreneurs has shown that they were committed to “scientific forestry” and timber production. Text analysis has demonstrated a focus on the employment value of afforestation in addition to simple productivism.

The writings of the period exhibit attempts to exercise forethought in analysing timber supply patterns, “foreseeing” timber famine and higher timber prices.

The coalition of support for afforestation strikingly included both landed aristocrats and advocates of socialism. This confirms the view of Maier (1970) that a combination of classes were in support of Taylorism and its productivist ideas. They succeeded in formulating the massive state afforestation proposals of the Royal Commission in 1909.

A search for alternative or dissenting views in large databases of parliamentary, media and published material revealed very few advocates of landscape or biodiversity values. The very few advocates of such values were themselves not hostile to a large state forestry body.

Policy change could not happen because the coalition of afforestation policy entrepreneurs was unable to dislodge the status quo, despite their potentially influential combination of ideological interests. The government, facing other pressing issues, ignored the forestry lobby.

The Great War – shock and crisis

The First World War provided the afforestation advocacy coalition with their opportunity. The policy entrepreneurs had been proposing a solution to the problems of timber supply and unemployment, which had not been sufficiently salient. The war provided a crisis and a shock. The policy entrepreneurs seized the strategic argument, even though it was demonstrably absent from their advocacy before the war.

The “garbage can” model of policy change (Cohen et al., 1972) is unsophisticated in explanatory terms, but seems to describe the dynamics of the policy change. The wartime problem and the Acland policy decision process encountered an already formulated solution and well-equipped actors in its support.

The archives make clear the role of highly placed advocates in pressing the case for afforestation in the corridors of power, armed with a new and “rational” argument. The Acland Committee was established, and its recommendations for major afforestation were accepted.

The answer to the research question is that the preeminent condition facilitating policy change was “shock and crisis”. Without the First World War, it is not clear that the coalition would have eventually overcome the inertia. While there might have been other responses to the risk of difficulty in importing timber, the setting up of the Forestry Commission does indeed seem a rational response, in a stagist sense.

Alternative ways of thinking do not seem to have been present. Searches and analysis of Hansard, and of the press and other publications, have not identified alternative approaches which were

proposed, but ignored. Some voices calling for nature reserves or care of amenity existed, but were so limited that it is reasonable to conclude that to “think differently” was difficult.

Geddes – lobbying and institutional survival

The first challenge to the afforestation project was the Geddes Committee's search for radical reductions in public expenditure. It recommended cessation of afforestation, having dismissed all five arguments for afforestation presented by the infant Forestry Commission, including the strategic argument. However, the government rejected abolition and maintained the policy of afforestation.

The Geddes Committee was itself the manifestation of an alternative discourse hostile to the afforestation project. However, this was indirect, and arising from popular ill-focused public opposition to high government expenditure.

The archives reveal that policy change appears to have been prevented by a feverish mobilisation of policy entrepreneurs in defence of the afforestation project. This was combined with the sudden severity of unemployment as a problem, for which forestry had already portrayed itself as a solution. There is no evidence that the Forestry Commission had developed an institutional personality beyond the commissioners themselves. There is, however, some evidence that the Prime Minister was explicitly reluctant to reverse a decision only recently made by his own previous administration.

The Lakes – the institution resists an influential coalition

A large and influential network of opponents to the aesthetic effects of Lake District afforestation emerged in the late 1930s. This opposition included aristocrats, academics and members of both Houses of Parliament. Two organisations were also mobilised: the Friends of the Lake District, and the Council for the Preservation of Rural England. The Forestry Commission resisted and made only minor compromises. Institutional power was key. The fact that the Forestry Commission was able to resist such a coalition appears to be explained by two factors.

Firstly, both the archives and contemporary witnesses provided evidence that by this stage the Forestry Commission was an intransigent and single-minded institution with a strong central leadership.

Secondly, the opposition did demonstrate an alternative way of thinking about forests and aesthetics, but the evidence suggests that it was muted by the strength of the productivist mindset in society as a whole, a mindset which applied to the opponents of afforestation in the Lake District themselves.

The Second World War – the institution confirms its raison d'être and escalates its plans

The Second World War, and a repeat of the submarine blockade and timber shortage, confirmed the *raison d'être* and rationality of the Great Spruce Project, at least in 1943. The institutional power and networking of the Forestry Commission, led by an expert policy entrepreneur, drove through preparation and adoption of an ambitious policy of afforestation, widely supported in Parliament and the media. The advent of nuclear weapons immediately after the adoption of this policy then rendered its stated objective obsolete, but had no policy-changing effect.

In this policy decision process, the power of the Forestry Commission was clear from the evidence, with only modest resistance coming from other parts of government. The renewed shock of another war dominated deliberations. Almost no evidence of alternative thinking was found by this research: productivist attitudes dominated, as in 1917. What concern there was, related to a competing productivist and strategic paradigm valuing the production of sheep meat.

Zuckerman – employment and productivism justify policy inertia

The review of the use of “marginal land” in 1957 finally confirmed the irrelevance of the defence-related strategic argument, following the advent of nuclear weapons. However, there is little evidence that this was any kind of policy shock. The Forestry Commission as an institution survived the scrutiny of an Interdepartmental Committee. The Great Spruce Project emerged from the process unscathed, but with reformulated objectives based on the social (employment) and timber production benefits originally advocated by the policy entrepreneurs before the First World War.

The conditions for policy change were not present. In particular, there was no strong competing paradigm or advocacy coalition; rather, the debate was between the competing productivist and social claims of agriculture on the one hand, and forestry on the other.

There were modest environmental voices present in the House of Commons at this stage, but little other manifestation of alternative discourses.

Cost-benefit analysis 1972 – treasury challenge fails

Financial doubts underlay the cost-benefit analysis of 1972. The process focused on an attempt to value the afforestation project. There was an attempt to evaluate recreational values, but almost no depth of consideration for biodiversity. Despite the status quo having a relatively weak financial case, the government accepted its continuation.

The policy inertia appears to be explained, again, by the institutional power of the Forestry Commission and the absence of a coherent coalition pressing for change.

While recreation and, to a lesser degree, biodiversity were acknowledged, their appearance seems to have been part of the institutional learning within the Forestry Commission rather than a manifestation of alternative frames of discourse.

The end of the Great Spruce Project – muddling through

In the 1980s, a conjunction of forces combined to bring the afforestation project to an effective halt. The institutional situation changed, as the Nature Conservancy Council set out to end what it saw as environmentally damaging peatland afforestation. It was supported by a coalition of other bodies representing the wider public. Changes to the fiscal arrangements for forestry caused afforestation to collapse, despite the explicit restatement of objectives. There was no careful policy cycle review and no actual political decision at the Great Britain level. Change appears to have taken place because an advocacy coalition had formed with sufficient power to challenge the Forestry Commission, but also that there was very important learning taking place within the Forestry Commission itself as an

institution intent on its own survival. Its interests had changed, since it was no longer directly engaged in, or fundamentally identifying with, new conifer afforestation as an activity. Subsidiary factors were also important:

A general trend common to other modern increasingly affluent societies, away from productivism to less material values.

The intellectual development and clear enunciation of biodiversity values, such as the idea of “ancient woodland”.

The afforestation of the environmentally iconic area Flow Country.

The fact that the unpopular distributional effects of forestry tax incentives were politicised.

The exposure of the poor financial performance of the plantations already created.

The challenging of public enterprise by a radical government.

A new coalition assembled, and change took place, almost by default, without evident political control.

20.3. Conclusions

The quantitative and qualitative evidence explored in this research provides answers to the research questions.

The Great Spruce Project was initiated because a coalition of productivist policy entrepreneurs, which crossed social and political boundaries and presented an answer to the problems presented by the shock and crisis of the First World War.

The project persisted because an institution was created, under expert control, which was able to develop considerable power to resist challenges, aided by the lack of a coherent alternative narrative, and the acceptance by many opponents of the need for the project in general. Environmental discourses were not well developed and there were some, but few, contrary voices or mindsets. Some institutional learning took place, but the productivist enterprise was relaunched after the crisis of the Second World War in a process which seemed stagist and rationalist, until the sudden manifestation of nuclear weapons. The project, and most particularly the institution, survived two further reviews in the 1950s and 1970s, with an emphasis on employment serving to maintain productivist policy inertia.

Alternative policies to the productivist project, in both forestry and agriculture, do appear to have been hard to conceive of. Statistical evidence suggests that the vocabulary for such different discourses was not present.

Are our predecessors culpable, in that they could have applied greater forethought, developed better foresight, and ended the programme significantly earlier?

The evidence assembled suggests that to have thought differently would have been to step outside the frames and mindsets of the time. Furthermore, the nature of the Forestry Commission meant that

alternative thinking within the institution was particularly difficult, as its power as an expert bureaucracy allowed it to relatively easily resist what alternative discourse there was. It therefore seems from this research that past forestry policy-makers were prisoners of their times, but also to an extent prisoners within an institution. It was hard for them to exercise the forethought which might be expected of them, by those of us who know what happened with hindsight.

Autoethnographic conclusions

The research question poses a challenge to foresters, including myself. If the current less-productivist forestry now meets the needs of society, then a change could have been made earlier, if forestry policy-makers had achieved greater foresight. If they had, some forests, which appear to us now to be of limited value, might not have been created. The conclusion of this research is to exonerate past forestry policy-makers at the bar of history. However, as an individual forester I find this hard to accept at a moral level. I genuinely regret cheerfully planning and overseeing the planting of Sitka spruce on the last heather-clad hill tops of Tweeddale and on a deep peat bog in West Lothian. The Google Earth aerial images of these dense monocultural conifer stands, thirty growing seasons later, embarrass me. These are now considered to be environmentally damaging acts to be regretted and in some cases expensively corrected (Anderson, 2010). There is a distinction to be made between this afforestation and that carried out earlier. These afforestation events took place in 1985. There really were alternative voices by that stage in the “story”: Tompkins (1986) for instance. I did not “hear” them until later. Perhaps my autoethnography simply confirms the point: I see myself as a prisoner of the times. However, if I am ashamed not to have broken the shackles earlier, and been more in the forefront of change. I also am proud to have been part of some of the change which eventually took place, in concert with others more influential and perhaps more clear sighted than myself.

20.4. Review of the power of policy theories

This research did not seek to test theories, but rather provide an explanation of policy phenomena. It is worth commenting on the apparent explanatory power of the five groups of theoretical approaches identified in Chapter 10.

Rational policy analysis

A number of the policy decision processes examined appeared at first sight to be classic rational stagist policy cycle approaches. However, more careful examination suggests that they were based more on existing values – mindsets and intentions – particularly as evidenced by the issues *not* considered. Even the most apparently rational policy decision process, such as the 1972 cost-benefit study, was clearly a product of values at the time, and even then had limited effect on the actual policy decision. Of the change factors identified under the classification of rational policy analysis (Section 10.3), the role of policy entrepreneurs is revealed most strongly by the evidence especially before the First World War. Under the “rational” heading, external shocks and crises appeared to have explanatory power in both the genesis of the Great Spruce Project, and less clearly, in the radical political conditions of its ending. Apart from the political shock of Thatcherism, there is very

little evidence of rational policy impact from political parties, even from the Conservative government in power in 1988.

Institutional policy analysis

The power of the Forestry Commission was key, particularly in making clear political accountability and direction relatively obscure and uninteresting to politicians. March and Olsen (1984), in describing new institutionalism, propose that “the organisation of political life makes a difference.” They also recognise the roles of individuals within institutions, and the way in which the institution moulds the thinking of individuals. The power of the Forestry Commission as an institution comes across strongly in the observations of others throughout the narrative. Weber’s comments on the power of (expert) civil servants are supported by the archival and interview evidence from contemporary politicians. The power of the Forestry Commission over forestry policy thinking meant that the alternative voices and discourses were easily overcome, and learning by those within the institution was difficult.

Policy network analysis

The power of the institution and the absence of coherent alternative mindsets appear to be more significant than networks in explaining change and inertia. While an iron triangle (Section 10.5.1) between Forestry Commission, industry and government might have been expected, there is little evidence for the latter two elements having a sufficiently strong role in any policy decision process to justify the term.

Critical policy analysis

The computer-aided text analysis carried out provides quantitative evidence of the nature of the concepts current in policy decision processes: essentially, a lack of diversity in the afforestation narratives. If language shapes our view of the world (section 10.6.1), then the evidence suggests that in particular a clear valuation of biodiversity was difficult to conceive of during many of the policy decision processes: there is little evidence of its being part of a shared understanding of the world.

Distributional issues appear to remain a neglected issue, together with class. Some of the evidence of the close coalition between the Forestry Commission and landed interests throughout the period, from the landed policy entrepreneurs to the observations of an Australian Director General of the Forestry Commission in the 1990s, suggests that there might have been alliances of social and material interest deserving further exploration. A more specific piece of research might focus on the possibility that state-organised afforestation represents social investment to the benefit of timber-using interests (section 10.6.2).

Advocacy Coalition Framework

The Advocacy Coalition Framework provided a useful basis for qualitatively weighing the eclectic influences and dynamics of the policy decision processes. It provided the most useful checklist, integrating some of the other theories and providing a “map” (Figure 10-3) for understanding the way in which coalitions resulted in change during the two key policy decision processes. Conversely, such coalition dynamics were not present in the processes which exhibited policy inertia.

20.5. Limitations and future work

All historical work suffers from the problem that it is impossible to really experience the times involved. This was more significant for the beginning of the period studied for obvious reasons; however, living witnesses and my own autoethnography became available in consideration of later periods. Basic word-count statistics are a relatively unsophisticated form of discourse analysis. If a smaller, more limited period had been chosen, more forensic manual coding could have been carried out. The research was sensibly limited by accepting the policy as it was without judging or auditing the outcomes systematically. This would have been to answer a slightly different research question, such as: “Was the coniferous afforestation from 1945 to 1988 a benefit or disbenefit to modern society?” An attempt to answer this would have complemented the research, or perhaps more beneficially, have preceded it. In general, this research was wide ranging and used eclectic methods, and in this sense was ambitious. I hope that it provides a survey which other workers may use to examine particular issues. The different methods and theoretical approaches provided different insights.

The conclusions of this work could be explored through more detailed examination of a particular policy decision process, with a more comprehensive consideration of the wider social and political environment such as coevolving social processes (John, 2003) and concepts like forest transition and the Kuznets curve (Mather et al., 1999; Mather, 2004).

In particular, this could involve a finer-toothed search for alternative voices in the media and elsewhere to test the conclusions of this work, that actors at the time were not exposed to alternative views and could not think differently.

A more systematic attempt could be made to find alternative voices by looking for people and organisations that might have been in opposition but did not gain sufficient media or parliamentary traction to have been uncovered using the methods employed in this research. The archives of organisations like the Council for the Protection of Rural England, the National Trust, the Royal Society for the Protection of Birds and the National Park Authorities could be explored.

Further research into the roles of different types of policy entrepreneurs might be fruitful. They may be seen as rational actors, and in some theories would be seen as pursuing self-interest. The text analysis examined the way in which they were following ideas, which makes more sense in the context of the conclusion that certain ways of thinking dominated. This of course contains a paradox, or even a contradiction. If we call upon foresters to note the role of the individual policy entrepreneur and consider their consciences (Price, 2013), and strive harder to prepare forests for the hard-to-predict needs of generations not yet born, it is inconsistent to say at the same time, “but we know you cannot see or think outside the box”.

One of the relatively original findings of this thesis is the scale and connectedness of unsuccessful policy entrepreneurs before the First World War who were influenced by German thinking. Other workers have examined the German influence on British colonial forestry (Rajan, 2006), and on British forestry (Oosthoek, 2012). The links between German silviculture and British foresters of the

early twentieth century could be explored, perhaps in conjunction with a continental worker. This could be compared with more recent sharing of silvicultural ideas across Europe. The results might be relevant to current European technology and knowledge-sharing practices undertaken under EU auspices.

A systematic examination of the Forestry Commission in the context of institutionalism (March and Olsen, 1984) might provide useful evidence on the role of such a powerful organisation led by experts with a strong productivist mindset. Others have examined the process of turbulent learning at the end of the Great Spruce Project (Schiellerup, 2008). An examination of the nature of the Forestry Commission, perhaps by comparing Kaufman's (1967) conclusions about the US Forest Service, might also be illuminating.

Looking forward, this work has demonstrated the usefulness of statistical analysis of text in forestry policy documents. This could be extended to more contemporary issues – in particular climate change and the potential return of carbon-associated productivism. The same methods might also be used to inform understanding and quantify any policy divergence between the different countries of the United Kingdom following devolution in 1999.

A more Marxian approach might yield useful insights into the relationship between landed interests and the Forestry Commission, taking into account the thinking of Miliband (1969) and perhaps Gramsci's concept of hegemony. This might overlap, to an extent, with a simpler analysis of class-based interests.

For posterity, a project to record the recollections of many of the surviving actors from the 1970s onwards would be of service to future researchers.

20.5.1. Climate change

Timber growth in standing trees is a function of the carbon which the tree removes from the atmosphere to create wood. This inextricable link might be expected to result in a return to more single issue productivist afforestation, reversing the trend from productivism traced in this research, and discussed by others (Holmes, 2002; Mather, 2001; Mather et al., 2006).

Even Boyd, one of the policy entrepreneurs before the First World War, noted that:

...nature has a use for CO₂ in the atmosphere, ... if a balance is to be maintained in the atmosphere, a proper proportion of every country should be devoted to forests. (Boyd, 1918, p.15)

Boyd, and Darling (1970) make points which conform with current conceptions of the atmosphere as a "global common".

It is also worth noting that "early warning" voices on any issue may not mean they are well founded opinions: many things in climate science and elsewhere can "surprise" (Schneider et al., 1998).

Some climate change-related policy action was taken from the 1990s onwards. A Forestry Commission short rotation coppice grant was introduced in 1990, in order to reduce greenhouse gases (HL Deb 10 June 1992 vol 537 cc1300-27). The 1991 policy statement (Forestry Commission, 1991) directed the Forestry Commission to take account of climate change. The House of Commons Environment Committee (1992) noted that: “Reforestation can make a useful contribution to UK balances of non-atmospheric carbon.”

Perhaps surprisingly in this climate change context, afforestation (with conifers and broadleaves) fell generally after 1993 to a low point in 2009. More recently, as a result of largely climate-change-inspired policy thinking, all parts of Great Britain have significant afforestation aspirations at the end of the first decade of the twenty-first century (DEFRA, 2007; Forestry Commission Wales, 2009; Scottish Executive, 2006). These areas totalled 20,000 hectares per annum. Afforestation in Great Britain was increasing in 2012.

During a number of policy decision processes, new or recycled arguments have been deployed in support of the Great Spruce Project. It is strange that its proponents and policy-makers were slow to seize on the potentially powerful climate change argument.

A counterfactual history could be postulated. By 1990, climate change had gained public profile and tree planting as sequestration was a current idea. The forestry lobby and the environmental lobby could have coalesced around a call for continued support or increased support to replace the tax changes of 1988, and maintain a high level of total afforestation. Foot (2010, p.172) hoped that the multiple uses of new woodland in both mitigating and adapting to climate change might result in a “coming together” in a “cause to which all the different tree interests” might “rally”. If this had happened in 1990, timber productivism might have smoothly transformed into carbon productivism. *This did not happen.*

More than a decade later, Read et al. (2009) proposed a further one million hectares of woodland in the UK over 40 years. Nail (2008, p. 161) draws attention to the market for carbon which was developing at the turn of the twenty-first century, in particular tree planting for carbon sequestration as offsetting, and the level of popular belief that tree planting is good for the atmosphere. Slee (2009) suggested a subtle approach to a “re-imagining of forests” with the implication of new tradeoffs between production and other values, but without a cyclical return to previous productivism.

Two policy change questions therefore arise from the inextricable link between forests and carbon sequestration: Why has the adoption of climate change related forestry policy been so slow? Moreover, will the emergence of climate change-related afforestation programmes result in a return to productivist approaches and coniferous afforestation?

The mixed methods used in this research could be usefully applied to these questions and inform current policy thinking, and perhaps alert forestry policy-makers to policy pitfalls. This might be particularly import where new concepts and metrics emerge like carbon pricing. Their implications may be more complex than they appear at first sight.

20.6. Recommendations – foresight and forests for the future

Analysis of text, both in this research and elsewhere (Hoogstra and Schanz, 2008a; Price, 1989) suggests that foresters and forest policy-makers do not engage in as much significant “future thinking” as the longevity of forests would suggest. A conscious effort to open our minds to possibilities and our responsibilities might be fruitful. Perhaps, as Shannon (2008) suggests, we should anticipate surprise. The events of the twentieth century analysed by this research would probably be a considerable surprise to someone like Simpson (1900). Some interesting exercises of this sort have recently taken place (Petrokofsky et al., 2010): perhaps more should. A range of foresight methods is available. They seem to have been little used in forestry.

20.6.1. More conflict needed?

The period of policy change at the end of the Great Spruce Project was one of conflict and questioning of the previous consensus. This research has uncovered the degree to which earlier questioning of that consensus from 1919 had been ineffective, and the fact that such questioning was difficult, given the mindsets and “frames” of productivist discourse that prevailed, as well as the power of the institution dominated by such discourse.

This research has partially vindicated our predecessors (and for some of us, our younger selves), as perhaps having been unable to “think differently”. However, there is a tendency to be affronted by the suggestion that, as it has turned out, some of our forests would meet our modern needs better if previous generations of foresters had done nothing.

Perhaps there needs to be more provocative research into how effectively some of our modern forests supply the perceived needs of our current society (Mather et al., 2006). It could be that such an audit of the success or failure of past policy would open minds to the fact that future needs may be different. A cliometrics approach like that applied to railway development described in Section 2.4 might be revealing. Perhaps forestry needs more argument and robust debate about the past and future. This might cultivate some useful mavericks, even though not all of them will be right. Nonetheless, if they bring about more diverse forests, and some of them prove to be pioneering the supply of future needs, perhaps future generations will be unknowingly grateful, and the foresters of twenty years hence will have a greater range of pioneers to follow (and others to ignore).

20.6.2. Multi-purpose forestry - a holy grail for flexible resilience?

This research set out on the hypothesis that better foresight and forethought was possible. The conclusion is that if it is possible, it is incredibly difficult to do, and surprise is to be expected.

This means that the most effective insurance for future generations against uncertainty may be diversity. This requires the best possible design of forest landscapes and ecosystems in order to maximise their resilience, the ability of a kind of forest to deliver in the face of both natural threats and changes in the demands of society. This involves trade-offs, compromises, balance and a search for

“win-wins”. The patterns of ecological interaction, sophisticated economics and mathematical modelling may be important. The development of this discipline may be a better approach to uncertainty than faith in improved futurology.

This leads me to conclude that I have studied the past sufficiently. It is time to return to work on the nature of the forest, and the interaction of human decisions and nature, in crafting the forest’s potential resilience in meeting human needs.

Appendix: Text Analysis Word Lists

Vocabulary related to “objectives”

These words were selected for this research and used in the series of results for each policy decision process. They are presented as simple lists to aid use by other workers.

Strategic

war wars warfare "strategic reserve" "strategic considerations" blockade submarine "shipping space" convoy bomb "commerce raider"

Employment

employ employment unemployment labour job

Landscape and amenity

landscape amenity attractive beautiful aesthetic beauty landscapes amenities aesthetically scenery "forest design" "coupe design" scenic pleasing

Recreation

recreation recreational picnic "car park" "forest park" walks walker walkers walking hike hiking hiker hikers leisure pleasure camp camps camping camper* "nature trail" cyclist cyclists trail trails bothy bothies "public access" "forest parks" rambler rambles rambling "youth hostel" "youth hostels" "youth hostelling" visitor visitors caravan caravans caravanning trail resort resorts holiday "overnight stay" "overnight stays" tourist tourists waymarked path paths waymarking "guide book" "guide books"

Wildlife

wildlife "wild life" wild-life "nature reserve" naturalist "wild animals" wildflower* wilderness "natural heritage" SSSI "site of special scientific interest" "sites of special scientific interest" pinewood "conservation of nature" habitat "native woodland" "nature conservation" "wildlife conservation"

Timber

timber produce harvest harvesting production lumber product pitwood log logs harvest harvesting volume cubic feet metres wood tons tonnes pulp chipboard chip chips particle poles load loads haulage carriage forwarder skidder extraction "standing sale" "standing sales" stumpage yield bark m3 produce sawn standing fell cut clearfell thin thinning diameter branchwood wood felling firewood biomass logging

“Scientific” vocabulary

These words were selected for this research:

science scientific rational systematic rationally evidence experiment scheme survey method
methodical

Vocabulary related to “future”

Author-chosen words

These words were selected for this research:

future forward eventually predict predicted expect will plan programme expect "will be" "should be"
anticipated "will develop" "will produce"

Vocabulary related to “future” from Tiainen

These words are from Tiainen (2010):

Can will shall may must could would should might aim anticipate approach aspire assume become
begin believe change commence construct continue develop down-grade embark emerge endeavour
ensure establish estimate expand expect forecast foresee head hope improve intend introduce launch
opt plan predict prepare proceed project pursue schedule seek start strive target try upgrade wish

Time and space

These words were selected for this research.

hectarage acre* time period* cycle rotation* year* mature immature uniform productive yield* m3
cubic foot feet yard* mile* kilometre* metre* sustained yield hectare* increment space land

(* is a wildcard.)

Bengston spiritual words

From Bengston and Xu (1995), with some modifications to account for trans-Atlantic differences.

"ancient forest" "ancient woodland" "ancient tree" "land ethic" anthropocentric, nonanthropocentric
legacy biocentric meditate, meditation, meditative cathedral, cathedrals morals, morality cherish,
cherished, cherishing mythic, mythical, mythological, mythology consecrate, consecrated,
consecration "national treasure", "natural treasure" desecrate, desecration normative dignity paradise
divine, divinity posterity "duties and obligations" profaned, profaning ecocentric religion, religious
eden, edenic revered, reverence, reverential, reverently "environmental ethics" "rights and duties"
exalted, exaltation, exaltedness, exaltedly sacred, sacredness "future generations" sanctity,
sanctuary, sanctuaries, sanctum "good steward" shrine enshrine heritage spiritual holier, holy,
holiness stewardship immortal, immortality tabernacle "inherent value" "intrinsic value"
transcendence, transcendent, transcendental, inspiration, inspirational, inspire, inspired, inspiring
transcending irreplaceable venerate, venerable beauty beautiful taste tasteful sympathy

Notes: various American usages removed "old growth" etc. "ancient woodland" added. Word "ancient" alone, removed due to high incidence of "ancient message" in 'Office of Woods' reports. Other oddities observed: "heritage" picks up English Heritage, but this is relevant. Mr and Mrs Paradise who rented a cottage in 1910 distort some figures slightly. So does the river Eden. American usage of "cathedral grove" means majestic trees. Cathedral actually usually means a cathedral building (or its grounds) in FC reports.

Loughran and McDonald financial sentiment dictionaries

Word lists from Loughran and McDonald (2013), discussed in Loughran and McDonald (2011).

Uncertainty words

abeyance abeyances almost alteration alterations ambiguities ambiguity ambiguous anomalies anomalous anomalously anomaly anticipate anticipated anticipates anticipating anticipation anticipations apparent apparently appear appeared appearing appears approximate approximated approximately approximates approximating approximation approximations arbitrarily arbitrariness arbitrary assume assumed assumes assuming assumption assumptions believe believed believes believing cautious cautiously cautiousness clarification clarifications conceivable conceivably conditional conditionally confuses confusing confusingly confusion contingencies contingency contingent contingently contingents could crossroad crossroads depend depended dependence dependencies dependency dependent depending depends destabilizing deviate deviated deviates deviating deviation deviations differ differed differing differs doubt doubted doubtful doubts exposure exposures fluctuate fluctuated fluctuates fluctuating fluctuation fluctuations hidden hinges imprecise imprecision imprecisions improbability improbable incompleteness indefinite indefinitely indefiniteness indeterminable indeterminate inexact inexactness instabilities instability intangible intangibles likelihood may maybe might nearly nonassessable occasionally ordinarily pending perhaps possibilities possibility possible possibly precaution precautionary precautions predict predictability predicted predicting prediction predictions predictive predictor predictors predicts preliminarily preliminary presumably presume presumed presumes presuming presumption presumptions probabilistic probabilities probability probable probably random randomize randomized randomizes randomizing randomly randomness reassess reassessed reassesses reassessing reassessment reassessments recalculate recalculated recalculates recalculating recalculation recalculations reconsider reconsidered reconsidering reconsiders reexamination reexamine reexamining reinterpret reinterpretation reinterpretations reinterpreted reinterpreting reinterprets revise revised risk riskier riskiest riskiness risking risks risky roughly rumors seems seldom seldomly sometime sometimes somewhat somewhere speculate speculated speculates speculating speculation speculations speculative speculatively sporadic sporadically sudden suddenly suggest suggested suggesting suggests susceptibility tending tentative tentatively turbulence uncertain uncertainly uncertainties uncertainty unclear unconfirmed undecided undefined undesignated undetectable undeterminable undetermined undocumented unexpected unexpectedly unfamiliar unfamiliarity unforecasted unforeseen unguaranteed unhedged unidentifiable unidentified unknown unknowns

unobservable unplanned unpredictability unpredictable unpredictably unpredicted unproved unproven
unquantifiable unquantified unreconciled unseasonable unseasonably unsettled unspecified
unspecified untested unusual unusually unwritten vagaries vague vaguely vagueness vaguenesses
vaguer vaguest variability variable variables variably variance variances variant variants variation
variations varied varies vary varying volatile volatilities volatility

Modal words strong

always best clearly definitely definitively highest lowest must never strongly unambiguously
uncompromising undisputed undoubtedly unequivocal unequivocally unparalleled unsurpassed will

Vocabulary related to “power” and “cooperation” from General Inquirer

Word list from General Inquirer (2013) General Inquirer discussed in Stone et al. (1962). This wordlist was originally devised by Lasswell (Namenwirth and Weber, 1987).

accommodate accommodation accordance affiliate agree agreeable agreement align alliance allied
ally ally along along arbitrate arbitration armistice arrange article assemble backer ban band cement
club co-ordinate co-ordination coalition coexistence cohesive cohesiveness collaboration colleague
collective collectivity compliance comply compromise compromise concert conciliation conciliatory
concur confederacy confederate conjunction consensus consent consent cooperation cooperative
cooperative cooperative coordinate eye federate federation feeler go7 group group harmonious
harmonization harmonize harmony integrate integration intermediate join join joiner joint jointly
mediate mediation mediator meet meet meet moderation negotiate negotiation organization organize
organize overtures pact partner partnership peace peacetime polaria polarize postwar protocol
rapprochement reciprocal reconciliation share share share share signatory solidarity supporter team
together unanimity unanimous unification unify union union unison unity voluntarily voluntary weight

REFERENCES

- Abbott, A. (2001). *Time Matters: On Theory and Method*. Chicago: University of Chicago Press.
- Abercrombie, L., Aberdare., Balniel, W. H. Beveridge, J. W. Burns-Lindow, Helen Darbishire, John Dower, Reginald Lennard, J. A. Lichfield, W. Nunn, Claude Petriburg, Eileen Power, Wilfrid Roberts and H. Graham White. (1936a). Afforestation in the Lake District. (Letter), *The Times*, September 28, p.8.
- Abercrombie, L., Aberdare., Balniel., William Beveridge, J. Burns-Lindow, Howard Of Penrith, Lennard, R., Lichfield, J. A., Nunn, W., Petriburg, C., Power, E. and White, H. G. (1936b). Forestry in the Lake District. *The Times*, December 24, p.8.
- Abercrombie, P. (1926). *The Preservation of Rural England: The Control of Development by Means of Rural Planning*. Liverpool: The University Press.
- Acland F.D. (1926). Lakeland Scenery. (Letter), *The Manchester Guardian*, December 4, p.9.
- Adams, W. M., Brockington, D., Dyson, J. and Vira, B. (2003). Managing Tragedies: Understanding Conflict over Common Pool Resources. *Science*, **302** (5652), 1915-1916.
- Adler, P. (1987). *Membership Roles in Field Research*. Newbury Park, Calif: SAGE Publications.
- Aldhous, J. (1997). British forestry: 70 years of achievement. *Forestry*, **70** (4), 283.
- Analoui, B., Doloriert, C. and Sambrook, S. (2012). A Missed Opportunity for Tacit Knowledge Sharing in Academia: A Doctoral Student's Perspective.
- Anderson, L. (2006). Analytic Autoethnography. *Journal of Contemporary Ethnography*, **35** (4), 373-395.
- Anderson, R. (2010). *Restoring afforested peat bogs: results of current research*. Forestry Commission Research Note FCRN006. Roslin: Forest Research, pp.8.
- Anon. (2013). *Zuckerman. Who Was Who* online edition. A & C Black, <http://www.ukwhoswho.com/view/article/oupww/whowaswho/U176441>.
- Arts, B. (2012). Forests policy analysis and theory use: Overview and trends. *Forest Policy and Economics*, **16**, 7-13.
- Arts, B. and Buizer, M. (2009). Forests, discourses, institutions: A discursive-institutional analysis of global forest governance. *Discourse and Expertise in Forest and Environmental Governance*, **11** (5-6), 340-347.
- Atkinson, P., Coffey, A. and Delamont, S. (2003). *Key Themes in Qualitative Research: Continuities and Change*. Oxford: AltaMira Press.
- Avery, M. and Leslie, R. (2011). *Birds and Forestry*. London: A & C Black.
- Bachrach, P. and Baratz, M. S. (1972). *Power and poverty: theory and practice*. Oxford: Oxford University Press.
- Bangor University. (2013). *Regulations for Postgraduate Research Programmes*. Regulation 03: 2013 Version 01. Bangor: Bangor University.
- Bardach, E. (1976). Policy termination as a political process. *Policy Sciences*, **7** (2), 123-131.
- Barton, G. A. and Bennett, B. M. (2010). 'There is a Pleasure in the Pathless Woods': The Culture of Forestry in British India. *British Scholar*, **3** (2), 219-234.
- Baumgartner, F. R., Jones, B. D. and Wilkerson, J. (2011). Comparative studies of policy dynamics. *Comparative Political Studies*, **44** (8), 947-972.
- Bazeley, P. and Jackson, K. (2013). *Qualitative Data Analysis with NVivo*. London: SAGE Publications.
- Behn, R. D. (1978). How to terminate a public policy: A dozen hints for the would-be terminator. *Policy Analysis*, **4** (3), 393-413.
- Bendor, J. (1995). A Model of Muddling Through. *The American Political Science Review*, **89** (4), 819-840.
- Bengston, D. N. and Fan, D. P. (1999). Conflict Over Natural Resource Management: A Social Indicator Based on Analysis of Online News Media Text. *Society & Natural Resources: An International Journal*, **12** (5), 493 - 500.
- Bengston, D. N., Fan, D. P., Reed, P. and Goldhor-Wilcock, A. (2009). Rapid Issue Tracking: A Method for Taking the Pulse of the Public Discussion of Environmental Policy. *Environmental Communication: A Journal of Nature and Culture*, **3** (3), 367-385.
- Bengston, D. N., Webb, T. J. and Fan, D. P. (2004). Shifting Forest Value Orientations in the United States, 1980-2001: A Computer Content Analysis. *Environmental Values*, **13**, 373-392.
- Bengston, D. N. and Xu. (2006). *Changing National Forest Values: a content analysis*. <http://nrs.fs.fed.us/pubs/806>.

- Bengston, D. N. and Xu, Z. (1995). *Changing National Forest Values: a content analysis*. Research Paper NC-323. St. Paul, MN: U.S. Dept. of Agriculture, Forest Service, North Central Forest Experiment Station. <http://ncrs.fs.fed.us/pubs/viewpub.asp?key=806>.
- Berger, P. L. and Luckmann, T. (1967). *The social construction of reality: a treatise in the sociology of knowledge*. London: Allen Lane.
- Bernstein, S. and Cashore, B. (2000). Globalization, four paths of internationalization and domestic policy change: the case of ecoforestry in British Columbia, Canada. *Canadian Journal of Political Science*, **33** (1), 67-100.
- Biro, Y., Buttoud, G., Flies, R., Hogl, K., Pregernig, M., Päivinen, R., Tikkanen, I. and Krott, M. (2002). Voicing interests and concerns: institutional framework and agencies for forest policy research in Europe. *Forest Policy and Economics*, **4** (4), 333-350.
- Bobrow, D. B. and Dryzek, J. S. (1987). *Policy analysis by design*. Pittsburgh, Pa.: University of Pittsburgh Press.
- Böcher, M. (2008). *Environmental and Forest Governance. The Role of Discourses and Expertise*. Göttingen: Universitätsverlag Göttingen.
- Böcher, M. (2012). A theoretical framework for explaining the choice of instruments in environmental policy. *Forest Policy and Economics*, **16** (0), 14-22.
- Bochner, A. P. and Ellis, C. (1992). Personal Narrative as a Social Approach to Interpersonal Communication. *Communication Theory*, **2** (2), 165-172.
- Boyd, J. (1918). *Afforestation*. Edinburgh: Chambers.
- Boyd, J. M. (1999). *The Song of the Sandpiper: Memoir of a Scottish Naturalist*. Grantown-on-Spey: Colin Baxter.
- Brown, C. (2007). Tragedy, 'tragic choices' and contemporary international political theory. *International relations*, **21** (1), 5-13.
- Brown, J. (1847). *The forester*. Edinburgh and London: Blackwood.
- Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of mixed methods research*, **1** (1), 8-22.
- Bryman, A. and Bell, E. (2007). *Business Research Methods*. Oxford: Oxford University Press.
- Bulhof, J. (1999). What If? Modality and History. *History and Theory*, **38** (2), 145-168.
- Bullock, H. (2001). *Better policy-making*. London: Cabinet Office.
- Burnett, M. and Davis, C. (2002). Getting out the Cut. *Administration & Society*, **34** (2), 202-228.
- Burnier, D. (2006). Encounters With the Self in Social Science Research. *Journal of Contemporary Ethnography*, **35** (4), 410-418.
- Burrows, G. and Cobbin, P. (2009). Controlling government expenditure by external review: The 1921—2 "Geddes Axe". *Accounting History*, **14** (3), 199-220.
- Burton, P. (2006). Modernising the Policy Process - Making policy research more significant? *Policy Studies*, **27** (3), 173-173.
- Buttoud, G. (2006). Forest policy evaluation in Europe : State of art. *Forest Policy and Economics*, **8** (5), 499-501.
- Cabinet Office. (1999). Professional policy making for twenty-first century.
- Capano, G. (2009). Understanding Policy Change as an Epistemological and Theoretical Problem. *Journal of Comparative Policy Analysis: Research and Practice*, **11** (1), 7-31.
- Capano, G. and Howlett, M. (2009a). *European and North American Policy Change: Drivers and Dynamics*. New York: Taylor & Francis.
- Capano, G. and Howlett, M. (2009b). Introduction: The determinants of policy change: Advancing the debate. *Journal of Comparative Policy Analysis*, **11** (1), 1-5.
- Centre for Agricultural Strategy. (1980). *Strategy for the United Kingdom Forest Industry*. Reading: University of Reading.
- Churchill, W. S. (1951). *The Second world war*. Cambridge Mass.: the Riverside press.
- Clark, C. (2012). *The Sleepwalkers: How Europe Went to War in 1914*. London: Penguin Books Limited.
- Clark, D. (1975). Foresters see threat to jobs in tax changes. *The Guardian*, January 20, p.6.
- Cohen, D. and Crabtree, B. (2006). Qualitative research guidelines project. <http://www.qualres.org/HomeUnst-3630.html>. Accessed 14 May 2013.
- Cohen, M. D., March, J. G. and Olsen, J. P. (1972). A garbage can model of organizational choice. *Administrative Science Quarterly*, **17** (1), 1.
- Colman, A. (2008). *Hindsight Bias*. A Dictionary of Psychology. Oxford University Press, <http://0-www.oxfordreference.com.unicat.bangor.ac.uk/10.1093/acref/9780199534067.001.0001/acref-9780199534067-e-3779>. Accessed 8/4/13.

- Committee on British Forestry. (1902). *Committee on British Forestry. Report of the Departmental Committee appointed by the Board of Agriculture to inquire into and report upon British forestry*. Cd. 1319. London: HMSO.
- Considine, M. (2005). *Making public policy: institutions, actors, strategies*. Cambridge: Polity Press.
- Cosgrave, P. (1993). Lord Ridley of Liddesdale. (Obituary), *The Independent*, March 6.
- Countryside Commission. (1984). *A Better Future for the Uplands*. Cheltenham: Countryside Commission.
- Cox, T. R. (1985). Americans and Their Forests: Romanticism, Progress, and Science in the Late Nineteenth Century. *Journal of Forest History*, **29** (4), 156-168.
- Crabtree, J. R. and Macmillan, D. (1989). UK fiscal changes and new forestry planting. *Journal of Agricultural Economics*, **40** (3), 314-322.
- Crawley, A. E. (1921). Our Native Orchids. *The Observer*, July 31, p.7.
- Cubbage, F., Harou, P. and Sills, E. (2007). Policy instruments to enhance multi-functional forest management. *Economic perspectives and analyses of multiple forest values and sustainable forest management*, **9** (7), 833-851.
- Cubbage, F. W., O'Laughlin, J. and Bullock, C. S. (1993). *Forest resource policy*. New York: Wiley.
- Cunningham, C. (1992). Sea Defences, A Professionalized Network? In: Marsh, D. and Rhodes, R. A. W. (eds) *Policy networks in British government*. Oxford: Clarendon Press.
- Cutler, R. (2008). Tales from the university of Aberdeen forestry graduates of 1956. In: Anon. (ed). <https://homepages.abdn.ac.uk/forestry/> Accessed 14/12/13. Aberdeen University,.
- Dahl, R. (1967). *Pluralist democracy in the United States conflict and consent*. Chicago: Rand McNally.
- Dahl, R. A. (1957). The concept of power. *Behavioral Science*, **2** (3), 201-215.
- Daily Telegraph. (1983). The Wood and the Trees.
- Dalton, H. D. (1962). *Memoirs: High tide and after, 1945-1960*. London: Muller.
- Dangerfield, G. (1935). *The strange death of Liberal England*. New York: Harrison Smith & Robert Haas.
- Darmstadter, J. and Toman, M. A. (eds) (1993). Assessing surprises and nonlinearities in greenhouse warming : proceedings of an interdisciplinary workshop. Washington, D.C.: Resources for the Future.
- Davies, P. (2004). Is evidence-based government possible? Jerry Lee Lecture 2004.
- Davies, R. (1995). *Nautilus: the story of man under the sea*. London: BBC Books.
- Davison, R. and Galbraith, C. A. (2006). *Farming, Forestry and the Natural Heritage: Towards a More Integrated Future*. HMSO.
- Dawkins, H. C. (1969). The future of industrial cellulose: unlimited or end in sight? *Forestry*, **42** (Supplement).
- de Jong, W., Arts, B. and Krott, M. (2012). Political theory in forest policy science. *Forest Policy and Economics*, **16** (0), 1-6.
- DEFRA. (2007) *Strategy for England's trees, woods and forests*. London: Department for the Environment, Food and Rural Affairs.
- DeLanda, M. (2003). The Archive before and after Foucault. In: Brouwer, J., Mulder, A., Charlton, S. (ed) *Information is Alive*. Rotterdam: NAI Publishers, pp.8-13.
- Denzin, N. K. and Lincoln, Y. S. (2011). *The SAGE Handbook of Qualitative Research*. Los Angeles: SAGE Publications.
- Development Commission. (1911). *Development Commission. First report of the proceedings of the Development Commissioners for the period from 12th May, 1910, to the 31st March, 1911*.
- Diack, W. (1918). Reconstruction. *The Scottish review*, 1882-1920, **41** (92), 431-456.
- Dobson, J. (1977). The Formulation, Implementation, and Achievement of a National Forest Policy. *Forestry*, **50** (1), 3-20.
- Doloriert, C. and Sambrook, S. (2009). Ethical confessions of the "I" of autoethnography: the student's dilemma. *Qualitative Research in Organizations and Management: An International Journal*, **4** (1), 27-45.
- Doloriert, C. and Sambrook, S. (2011). Accommodating an autoethnographic PhD: The tale of the thesis, the viva voce, and the traditional business school. *Journal of Contemporary Ethnography*, **40** (5), 582-615.
- Doloriert, C. and Sambrook, S. (2012). Organisational autoethnography. *Journal of Organizational Ethnography*, **1** (1), 83-95.
- Dorey, D. P. (2005). *Policy Making in Britain: An Introduction*. London: Sage.
- Dror, Y. (2008). Training for Policy Makers. In: Moran, M. (ed) *The Oxford Handbook of Public Policy*. Oxford: Oxford University Press, pp.80-105.

- Dryzek, J. S. (2005). *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford University Press.
- Du Gay, P. (2000). *In Praise of Bureaucracy: Weber, Organization and Ethics*. London: SAGE.
- Dutton, D. (2006). Sir Frank Medlicott. *Journal of Liberal History*, **51**
- Economist, T. (1909). Forestry and the State. *The Economist*, January 30, p.3-4.
- Edlin, H. L. (1969). *Timber! your growing investment*. London: HMSO.
- Edwards, R. (1992). Against the grain. *The Guardian*, November 27, p.1.
- Ehrlich, P. R. (1971). *The Population Bomb*. New York: Buccaneer Books.
- Eisenhower, D. (1961). *Farewell Address*. Wikisource.
http://en.wikisource.org/wiki/Eisenhower%27s_farewell_address. Accessed 12 December 2014.
- Elder, R. I. (2001). J.M. Hogge: Backbench Maverick. *Journal of Liberal Democrat History*, **30**.
- Ellefson, P. V. (1989). *Forest resource economics and policy research : strategic directions for the future*. Boulder, Colo.: Westview Press.
- Ellis, C. (2004). *The Ethnographic I: A Methodological Novel About Autoethnography*. Walnut Creek, CA: AltaMira Press.
- Ellis, C., Adams, T. E. and Bochner, A. P. (2010). Autoethnography: An Overview. *Forum: Qualitative Social Research*, **12** (1).
- Environment Committee. (1992). *First report. Forestry and the environment. Volume I report, together with the proceedings of the committee relating to the report*. HC 257. London: HMSO.
- Evelyn, J. (1729). *Silva: or, a discourse of forest-trees, and the propagation of timber in His Majesty's dominions*. London: printed for J. Walthoe [and others].
- Farmer, R. (1993). Forestry in South Wales. *Forestry*, **66** (2), 113-134.
- Farmer, R. and Nisbet, T. (2004). An overview of forest management and change with respect to environmental protection in the UK. *Hydrology and Earth System Sciences Discussions*, **8** (3), 279-285.
- Fischer, F. and Forester, J. (eds) (1993). *The Argumentative turn in policy analysis and planning*. Duke University Press.
- Fischer, F., Miller, G. and Sidney, M. S. (2007). *Handbook of Public Policy Analysis: Theory, Politics, and Methods*. Boca Raton: CRC/Taylor & Francis.
- Flinders, M. (2002). Governance in Whitehall. *Public Administration*, **80** (1), 51-75.
- Fogel, R. W. (1964). *Railroads and American Economic Growth: Essays in Econometric History*. Baltimore: Johns Hopkins Press.
- Foot, D. (2010). *Woods and People: Putting Forests on the Map*. Stroud: The History Press.
- Forbes, A. C. (1904). *English estate forestry*. London: Edward Arnold.
- Forbes, A. C. (1910). *The Development of British Forestry*. London: Arnold.
- Forbes, A. C. and Fisher, W. R. (1904). *Two prize essays on the adaptation of land of afforestation*. London: Laughton.
- Foresight Land Use Futures Project. (2010). *Land use futures : making the most of land in the 21st century*. London: Government Office for Science, London.
- Forestry Commission. (1921). *First annual report of the Forestry Commissioners*. London: HMSO.
- Forestry Commission. (1934). *Fifteenth annual report of the Forestry Commissioners for the year ending September 30th 1934*. London: HMSO.
- Forestry Commission. (1935). *Sixteenth annual report of the Forestry Commissioners for the year ending September 30th 1935*. London: HMSO.
- Forestry Commission. (1946). *Twenty-sixth Annual Report of the Forestry Commissioners for the year ending September 30th 1945*. London: HMSO.
- Forestry Commission. (1947). *Twenty-seventh annual report of the Forestry Commissioners for the year ending September 30th 1946*. London: HMSO.
- Forestry Commission. (1971). *Fifty-second annual report and accounts of the Forestry Commission for the year ended 31st March 1972 together with the comptroller and auditor general's report on the accounts*. London: HMSO.
- Forestry Commission. (1974a). *Fifty-fourth annual report and accounts of the Forestry Commission for the year ended 31st March 1974 together with the comptroller and auditor general's report on the accounts*. London: HMSO.
- Forestry Commission. (1974c). *Fifty-third annual report and accounts of the Forestry Commission for the year ended 31st March 1973 together with the comptroller and auditor general's report on the accounts*. London: HMSO.
- Forestry Commission. (1984). *Broadleaves in Britain: A Consultative Paper*. Edinburgh: Forestry Commission.

- Forestry Commission. (1990). *Annual Report and Accounts of the Forestry Commission. Together with the Comptroller and Auditor General's Report on the Accounts*. London: HMSO.
- Forestry Commission. (1991) *Forestry policy for Great Britain, September 1991*. Edinburgh: Forestry Commission.
- Forestry Commission. (1999). *Industry*. Webarchive. <http://web.archive.org/web/19990125095408/http://www.forestry.gov.uk/>. Accessed 18/11/13.
- Forestry Commission. (2013a). *History of the Forestry Commission*. <http://www.forestry.gov.uk/forestry/cmon-4uum6r>. Accessed 2/10/13.
- Forestry Commission. (2013b). *Timber Price Indices Data to September 2013*. Edinburgh: Forestry Commission.
- Forestry Commission, Building Research Establishment and Great Britain. Dept. of Industry. (1977). *The Wood production outlook in Britain : a review*. Edinburgh: Forestry Commission.
- Forestry Commission Wales. (2009) *Woodlands for Wales – Wales Woodland Strategy: the Welsh Assembly Government's Strategy for Woodlands and Trees*. Aberystwyth: Forestry Commission Wales, pp.62.
- Frank, A. W. (2000). The Standpoint of Storyteller. *Qualitative Health Research*, **10** (3), 354-365.
- Fraser Darling, F. (1970). *Wilderness and Plenty*. Boston: Houghton Mifflin.
- Gains, F. and Stoker, G. (2011). Special advisers and the transmission of ideas from the policy primeval soup. *Policy & Politics*, **39** (4), 485-498.
- Gaiser, T. J. (1997). Conducting On-Line Focus Groups A Methodological Discussion. *Social Science Computer Review*, **15** (2), 135-144.
- Gamborg, C. and Larsen, J. B. (2003). 'Back to nature'—a sustainable future for forestry? *Forest Ecology and Management*, **179** (1-3), 559-571.
- General Inquirer. (2013). *Descriptions of Inquirer Categories and Use of Inquirer Dictionaries*. Harvard University. <http://www.wjh.harvard.edu/~inquirer/homecat.htm>. Accessed 1/7/13.
- Giessen, L. (2011). Reviewing empirical explanations of policy change: Options for its analysis and future fields of research. *Allgemeine Forst-und Jagdzeitung*, **182** (11/12), 248-259.
- Glaser, B. G. and Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.
- Good, J. E. G. (1987). *Environmental Aspects of Plantation Forestry in Wales: Proceedings of a Symposium. 20-21 November, 1986*. Institute of Terrestrial Ecology, Snowdonia National Park Study Centre, Plas Tan-y-Bwlch, Maentwrog, Gwynedd, North Wales.
- Grainger, A. (1995). The forest transition: an alternative approach. *Area*, 242-251.
- Grayson, A. J. (1993). *Private forestry policy in Western Europe*. Wallingford: CAB International.
- Grenfell, A. P. (1912). *Afforestation and unemployment*. London: The Fabian Society.
- Gribbin, J. (1974). Future of forestry in Britain. *Nature*, **249** (May 10).
- Griffith, J. A. G. (1951). The Forestry Commission. *The Political Quarterly*, **22** (2), 194-197.
- Guardian. (1919). Afforestation in the Lakes. *The Guardian*, December 4.
- Guardian. (1943). Fresh Woods. (Editorial), *The Guardian*, July 7.
- Guba, E. G. (ed) (1990). *The Paradigm Dialog*. London: SAGE Publications, pp.424.
- H. M. Forestry Commissioners. (1943). *Post-war Forest Policy*. Cmnd. 6447. London: HMSO.
- Haas, P. M. (1992). Introduction: epistemic communities and international policy coordination. *International Organization*, **46** (01), 1-35.
- Habermas, J. (2007). *Moral Consciousness and Communicative Action*. Cambridge: Polity.
- Hajer, M. A. (1995). *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*. Oxford: Clarendon Press.
- Hamilton, G. J., Christie J. M. and Bradley R. T. (1971). *Forest management tables (metric)*. London: HMSO.
- Hardach, G. (1981). *The First World War, 1914-1918*. Berkeley: University of California Press.
- Hardey, M. (2002). Life beyond the screen: Embodiment and identity through the Internet. *The Sociological Review*, **50** (4), 570-585.
- Harris, B. and Boyne, W. J. (2001). *The Navy Times Book of Submarines: A Political, Social, and Military History*. New York: Berkley Books.
- Hartley, L. P. (1954). *The Go-Between*. New York: Alfred A. Knopf.
- Hawke, G. R. (1970). *Railways and economic growth in England and Wales, 1840-1870*. Oxford: Clarendon Press.
- Haydu, J. (1998). Making Use of the Past: Time Periods as Cases to Compare and as Sequences of Problem Solving. *American Journal of Sociology*, **104** (2), 339-371.
- Hays, S. P. (1999). *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920*. Pittsburgh: University of Pittsburgh Press.

- Hertin, J., Jacob, K., Pesch, U. and Pacchi, C. (2009). The production and use of knowledge in regulatory impact assessment – An empirical analysis. *Discourse and Expertise in Forest and Environmental Governance*, **11** (5-6), 413-421.
- Hill, M. (2004). *The Public Policy Process*. Harlow: Longman.
- HM Treasury. (1972). *Forestry in Great Britain: An Interdepartmental Cost/Benefit Study*. London: HMSO.
- HM Treasury. (1988) *Papers released under Freedom of Information Act (2000) request*.
- HM Treasury. (2003). *The Green Book: Appraisal and Evaluation in Central Government*. London: HMSO.
- Hoberg, G. (1996). Putting Ideas in Their Place: A Response to “Learning and Change in the British Columbia Forest Policy Sector”. *Canadian Journal of Political Science/Revue canadienne de science politique*, **29** (01), 135-144.
- Hobsbawm, E. J. (1994). *Age of extremes: the short twentieth century, 1914-1991*. London: Michael Joseph.
- Hogwood, B. W. and Gunn, L. A. (1984). *Policy analysis for the real world*. Oxford: Oxford University Press.
- Holmes, J. (2002). Diversity and change in Australia’s rangelands: a post-productivist transition with a difference? *Transactions of the Institute of British Geographers*, **27** (3), 362-384.
- Hoogstra, M. A. and Schanz, H. (2008a). The future orientation of foresters: An exploratory research among Dutch foresters into the prerequisite for strategic planning in forestry. *Forest Policy and Economics*, **10** (4), 220-229.
- Hoogstra, M. A. and Schanz, H. (2008d). How (Un)Certain Is the Future in Forestry? A Comparative Assessment of Uncertainty in the Forest and Agricultural Sector. *Forest Science*, **54**, 316-327.
- Horwitz, E. (2007). The experience of mothers in stepfather families. *thirdspace: a journal of feminist theory & culture*, **1** (1), 51-72.
- House of Commons. (1987) *Twelfth report from the Committee of Public Accounts. Forestry Commission: Review of Objectives and Achievements*. HC 185.
- House of Commons. Committee of Public Accounts. (1987) *Session 1986-87. Minutes of evidence Wednesday, 4 February 1987. Forestry Commission: review of objectives and achievements*. HC 185-i.
- Howlett, M. (2002). Do Networks Matter? Linking Policy Network Structure to Policy Outcomes: Evidence from Four Canadian Policy Sectors 1990-2000. *Canadian Journal of Political Science/Revue canadienne de science politique*, **35** (02), 235-267.
- Howlett, M. and Ramesh, M. (1995). *Studying public policy: policy cycles and policy subsystems*. Oxford: Oxford University Press.
- Howlett, M. and Ramesh, M. (1998). Policy Subsystem Configurations and Policy Change: Operationalizing the Postpositivist Analysis of the Politics of the Policy process. *Policy Studies Journal*, **26** (3), 466-481.
- Howlett, M. and Rayner, J. (2006). Understanding the historical turn in the policy sciences: A critique of stochastic, narrative, path dependency and process-sequencing models of policy-making over time. *Policy Sciences*, **39** (1), 1-18.
- Howlett, M., Rayner, J. and Tollefson, C. (2009). From government to governance in forest planning? Lessons from the case of the British Columbia Great Bear Rainforest initiative. *Forest Policy and Economics*, **11** (5), 383-391.
- Hume, D. (1739). *A Treatise of Human Nature*. London: John Noon.
- Humphreys, D. (2009). Discourse as ideology: Neoliberalism and the limits of international forest policy. *Forest Policy and Economics*, **11** (5), 319-325.
- Hunter, D. J. (2009). Relationship between evidence and policy: A case of evidence-based policy or policy-based evidence? *Public Health*, **123** (9), 583-586.
- Hurditch, W. (1992). *Problems of public forestry and the socio-economic implications of privatisation*. Oxford: Oxford Forestry Institute.
- Hurmekoski, E. and Hetemäki, L. (2013). Studying the future of the forest sector: Review and implications for long-term outlook studies. *Forest Policy and Economics*, **34** (0), 17-29.
- Hutton, P. H. (1993). *History as an Art of Memory*. Hannover NH: University Press of New England.
- Ilbery, B. W. and Bowler, I. R. (1998). *From Agricultural Productivism to Post-productivism*. London: Longman.
- Irland, L. C. (1994). *Ethics in forestry*. Portland, Or.: Timber Press.
- J. M. Lee. (2007). Nash, Vaughan Robinson (1861-1932) *Oxford Dictionary of National Biography*. online edn, Jan 2008 ed. Oxford: Oxford University Press.

- James, N. (2007). The use of email interviewing as a qualitative method of inquiry in educational research. *British Educational Research Journal*, **33** (6), 963-976.
- James, N. D. G. (1990). *A History of English Forestry*. Oxford: Basil Blackwell.
- Jenkins, W. I. (1978). *Policy analysis: a political and organisational perspective*. New York: St. Martin's Press.
- Jenkinson, H. (1944). *Reflections of an Archivist*. London: A. Strahan.
- John, P. (2003). Is there life after policy streams, advocacy coalitions, and punctuations: using evolutionary theory to explain policy change? *Policy Studies Journal*, **31** (4), 481-498.
- Johnson, J. A. and Price, C. (1987). Afforestation, employment and depopulation in the Snowdonia National Park. *Journal of Rural Studies*, **3** (3), 195-205.
- Johnston, D. R., Grayson, A. J. and Bradley, R. T. (1967). *Forest planning*. London: Faber.
- Joint Informal Committee of the Forestry Commission the Council for the Preservation of Rural England. (1936). *Afforestation in the Lake district*. London: HMSO.
- Jones, B. D. and Baumgartner, F. R. (2012). From There to Here: Punctuated Equilibrium to the General Punctuation Thesis to a Theory of Government Information Processing. *Policy Studies Journal*, **40** (1), 1-20.
- Jordan, G. and Schubert, K. (2006). A preliminary ordering of policy network labels. *European Journal of Political Research*, **21** (1-2), 7-27.
- Kahneman, D. (2012). *Thinking, Fast and Slow*. London: Penguin Books, Limited.
- Kaplan. (1993). Reading Policy Narratives: Beginnings, Middles, and Ends. In: Fischer, F. and Forester, J. (eds) *The Argumentative turn in policy analysis and planning*. Durham N.C.: Duke University Press.
- Kaufman, G. (1980). *How to be a minister*. London: Sidgwick & Jackson.
- Kaufman, H. (1981). Fear of Bureaucracy: A Raging Pandemic. *Public administration review*, **41** (1), 1-9.
- Kaufman, P. H. (1967). *The Forest Ranger: A Study in Administrative Behavior*. Washington DC: Resources for the Future.
- Kennedy, J. J. (1985). Conceiving forest management as providing for current and future social value. *Forest Ecology and Management*, **13** (1-2), 121-132.
- Kingdon, J. W. (1984). Agendas, alternatives and public policies. *Journal of Policy Analysis and Management*, **5** (3), 607-613.
- Kingdon, J. W. (2003). *Agendas, alternatives, and public policies*. London: Longman.
- Kissling-Näf, I. and Bisang, K. (2001). Rethinking recent changes of forest regimes in Europe through property-rights theory and policy analysis. *Forest Policy and Economics*, **3** (3-4), 99-111.
- Kitchen, L. (2012). Are Trees Always 'Good'? Urban Political Ecology and Environmental Justice in the Valleys of South Wales. *International Journal of Urban and Regional Research*, no-no.
- Kitchen, L., Marsden, T. and Milbourne, P. (2006). Community forests and regeneration in post-industrial landscapes. *Geoforum*, **37** (5), 831-843.
- Kitchen, L., Milbourne, P., Marsden, T. and Bishop, K. (2002). Forestry and environmental democracy: the problematic case of the South Wales Valleys. *Journal of Environmental Policy & Planning*, **4** (2), 139-139.
- Klayman, J. and Ha, Y.-w. (1987). Confirmation, disconfirmation, and information in hypothesis testing. *Psychological Review*, **94** (2), 211-228.
- Klein, R. and Marmor, T. R. (2008). Reflections on policy analysis: Putting it together again. In: Moran, M. (ed) *The Oxford Handbook of Public Policy*. Oxford: Oxford University Press, pp.890-910. .
- Klenk, N. L. and Hickey, G. M. (2011). Government science in forestry: Characteristics and policy utilization. *Forest Policy and Economics*, **13** (1), 37-45.
- Krott, M. (2005). *Forest Policy Analysis*. Dordrecht: Springer.
- Krott, M. (2009). Value and risks of the use of analytical theory in science for forest policy. *Forest Policy and Economics*, (0).
- Krott, M. and Hasanagas, N. D. (2006). Measuring bridges between sectors: Causative evaluation of cross-sectorality. *Forest Policy and Economics*, **8** (5), 555-563.
- Kvale, S. (1996). *Interviews: an introduction to qualitative research interviewing*. London: Sage Publications.
- Labour Party. (1974a). *British Labour Party election manifesto February 1974*. Politics Resources. <http://www.politicsresources.net/area/uk/man/lab74feb.htm>. Accessed 3 November 2013.
- Labour Party. (1974b). *British Labour Party election manifesto October 1974*. Politics Resources. <http://www.politicsresources.net/area/uk/man/lab74oct.htm>. Accessed 3/11/13.

- Labour Party. (1983). *The New Hope for Britain*. PoliticalStuff.co.uk. <http://www.labour-party.org.uk/manifestos/1983/1983-labour-manifesto.shtml>. Accessed 6/10/13.
- Lankester, E. R. (1915). *Diversions of a naturalist*. New York: The Macmillan Company.
- Lasswell, H. D. (1956). *The decision process: seven categories of functional analysis*. College Park: Bureau of Governmental Research, College of Business and Public Administration, University of Maryland.
- Lasswell, H. D. and Leites, N. (1965). *Language of politics: studies in quantitative semantics*. Cambridge Mass.: M.I.T. Press.
- Lerner, D., Lasswell, H. D. and Fisher, H. H. (1968). *The policy sciences: recent developments in scope and method*. Stanford: Stanford University Press.
- Lertzman, K., Rayner, J. and Wilson, J. (1996). Learning and Change in the British Columbia Forest Policy Sector: A Consideration of Sabatier's Advocacy Coalition Framework. *Canadian Journal of Political Science/Revue canadienne de science politique*, **29** (01), 111-133.
- Leslie, A., Wilson, E. and Starr, C. (2006). The current state of professional forestry education in the United Kingdom. *International Forestry Review*, **8** (3), 339-349.
- Lewis, M. W. (1992). *Green delusions*. Durham: Duke University Press.
- Li, T. M. (2005). Beyond "the state" and failed schemes. *American Anthropologist*, **107** (3), 383-394.
- Library of Congress. (2010). Experience. In: Billington, J. H. (ed) *Respectfully Quoted: A Dictionary of Quotations*. New York: Dover Publications.
- Lidestav, G. (2006). *Time for Action: Changing the Gender Situation in Forestry : Report of the Team of Specialists on Gender and Forestry*. Rome: FAO.
- Lindbladh, M. and Bradshaw, R. (1998). The Origin of Present Forest Composition and Pattern in Southern Sweden. *Journal of Biogeography*, **25** (3), 463-477.
- Lindblom, C. E. (1968). *The policy-making process*. Upper Saddle River, NJ: Prentice-Hall.
- Lindblom, E. (1959). The Science of "Muddling Through". *Public administration review*, **19** (2), 79-88.
- Linder, S. H. and Peters, B. G. (1990). An Institutional Approach to the Theory of Policy-Making: The Role of Guidance Mechanisms in Policy Formulation. *Journal of Theoretical Politics*, **2** (1), 59-83.
- Lindsay, R. A., Ratcliffe, D. A. and Oswald, P. H. (1988). *The Flow Country: The Peatlands of Caithness and Sutherland*. Nature Conservancy Council.
- Linnard, W. (2000). *Welsh woods and forests: a history*. Llandysul, Ceredigion, Wales: Gomer.
- Lloyd George and Bonar Law. (1918). *Election Manifesto*. PoliticalStuff.co.uk. <http://www.conservativemanifesto.com/1918/1918-conservative-manifesto.shtml>. Accessed 6/10/13.
- Long, A. P. (1953). Roy Lister Robinson: An Appreciation. *Forestry*, **26** (1), 1-3.
- Lönnstedt, L. (1997). Non-industrial private forest owners' decision process: A qualitative study about goals, time perspective, opportunities and alternatives. *Scandinavian Journal of Forest Research*, **12** (3), 302-310.
- Lord Jones. (2013). House of Lords. <http://www.parliament.uk/biographies/lords/lord-jones/530>. Accessed 24/11/13.
- Loughran, T. and McDonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *The Journal of Finance*, **66** (1), 35-65.
- Loughran, T. and McDonald, B. (2013). *Loughran and McDonald Financial Sentiment Dictionaries*. University of Notre Dame. https://www3.nd.edu/~mcdonald/Word_Lists.html. Accessed January 3 2015.
- Lovat and Stirling, A. (1911). Afforestation in Scotland. Forest Survey of Glen Mor and Certain Problems Arising Therefrom. *Transactions of the Royal Scottish Arboricultural Society*, **XXV**.
- Loveridge, D. (2008). *Foresight: the art and science of anticipating the future*. Abingdon: Routledge.
- Lowe, P., Murdoch, J., Marsden, T., Munton, R. and Flynn, A. (1993). Regulating the new rural spaces: the uneven development of land. *Journal of Rural Studies*, **9** (3), 205-222.
- Lynn, J. and Jay, A. (1989). *The Complete Yes Prime Minister: The Diaries of the Right Hon. James Hacker*. London: BBC Books.
- Mack, R. P. (1971). *Planning on uncertainty: decision making in business and government administration*. New York: Wiley-Interscience.
- MacRaild, P. D. M. and Black, J. (2007). *Studying History*. Basingstoke: Palgrave Macmillan.
- Mahoney, J. (2000). Path dependence in historical sociology. *Theory and Society*, **29** (4), 507-548.
- Mahoney, J. and Thelen, K. (2009). *Explaining Institutional Change: Ambiguity, Agency, and Power*. Cambridge: Cambridge University Press.
- Maier, C. S. (1970). Between Taylorism and Technocracy. *Journal of Contemporary History*, **5** (2), 27.

- Malcolm, D. C., Evans, J. and Edwards, P. N. (1982). *Broadleaves in Britain: Future Management and Research*. Institute of Chartered Foresters, Great Britain Forestry Commission, Proceedings of Symposium, University of Technology, Loughborough.
- Manchester Guardian. (1922). Money for Relief Works. *The Manchester Guardian*, December 7, p.5.
- Mannheim, K. (1960). *Ideology and Utopia, etc.* London: Routledge & Kegan Paul.
- March, J. G. and Olsen, J. P. (1984). The New Institutionalism: Organizational Factors in Political Life. *The American Political Science Review*, **78** (3), 734-749.
- Marechal, G. (2009). Autoethnography. In: Mills, A. J., Durepos, G. and Wiebe, E. (eds) *Encyclopedia of Case Study Research*. London: Sage, pp.43-45.
- Mark, C. (2002). The introduction of roof bolting to US underground coal mines (1948-1960): a cautionary tale. *Proceedings of the 21st International Conference on Ground Control in Mining*. 150-160.
- Markham, A. (2004). Representation in online ethnographies: a matter of context sensitivity. 2004). *Online Social Research: Methods, Issues, and Ethics*, Peter Lang, New York, 141-155.
- Marsh, D. and Rhodes, R. A. W. (1992). *Policy networks in British government*. Oxford: Clarendon Press.
- Marsh, D. and Stoker, G. (2010). *Theory and methods in political science*. Basingstoke: Palgrave Macmillan.
- Marx, K. and Engels, F. (1998). *The Communist Manifesto*. London: Verso.
- Maser, C. (1994). *Sustainable Forestry: Philosophy, Science, and Economics*. Delray Beach, FL: St. Lucie Press.
- Mason, D. (1990). Pining for Profit. In: Aldhous J. R. and Field A. B. (eds.) *UK Forest Policy into the 1990s. Proceedings. ICF Discussion Meetings, 31 March-2 April 1989*. Institute of Chartered Foresters, University of Bath, 118-126.
- Mather, A., Needle, C. and Fairbairn, J. (1999). Environmental Kuznets curves and forest trends. *Geography*, 55-65.
- Mather, A. S. (1993). *Afforestation: policies, planning, and progress*. London: Belhaven Press.
- Mather, A. S. (2001). Forests of consumption: postproductivism, postmaterialism, and the postindustrial forest. *Environment and Planning C: Government and Policy*, **19** (2), 249-268.
- Mather, A. S. (2004). Forest transition theory and the reforestation of Scotland. *Scottish Geographical Journal*, **120** (1-2), 83-98.
- Mather, A. S., Hill, G. and Nijnik, M. (2006). Post-productivism and rural land use: cul de sac or challenge for theorization? *Journal of Rural Studies*, **22** (4), 441-455.
- Maw, P. T. (1909). *The practice of forestry: concerning also the financial aspects of afforestation*. London: T. F. Unwin.
- McConnell, G. (1971). The Environmental Movement: Ambiguities and Meanings,. *Natural Resources Journal*, **11**, 427.
- McDonald, A. (1989). The Geddes Committee and the Formulation of Public Expenditure Policy, 1921?1922. *The Historical Journal*, **32** (03), 643-674.
- Medford, K. (2006). Caught With a Fake ID Ethical Questions About Slippage in Autoethnography. *Qualitative Inquiry*, **12** (5), 853-864.
- Meho, L. I. (2006). E-mail interviewing in qualitative research: A methodological discussion. *Journal of the American society for Information Science and Technology*, **57** (10), 1284-1295.
- Meier, K. J. (2009). Policy Theory, Policy Theory Everywhere: Ravings of a Deranged Policy Scholar. *Policy Studies Journal*, **37** (1), 5-11.
- Meijerink, S. and Huitema, D. (2010). Policy entrepreneurs and change strategies: lessons from sixteen case studies of water transitions around the globe. *Ecology and society*, **15** (2), 21.
- Meiland, J. W. (1965). *Scepticism and Historical Knowledge*. New York: Random House.
- Mey, T. D. and Weber, E. (2003). Explanation And Thought Experiments In History. *History and Theory*, **42** (1), 28-38.
- Miles, R. O. (1967). *Forestry in the English landscape: a study of the cultivation of trees and their relationship to natural amenity and plantation design*. London: Faber.
- Miliband, R. (1969). *The state in capitalist society*. London: Weidenfeld & Nicholson.
- Miller, H. (1990). Weber's Action Theory and Lowi's Policy Types in Formulation, Enactment, and Implementation. *Policy Studies Journal*, **18** (4), 887-905.
- Miller, R. (1981). *State forestry for the axe : a study of the Forestry Commission and de-nationalisation by the market*. London: Institute of Economic Affairs.
- Ministry of Agriculture Fisheries and Food. (1972) *Forestry policy: June 1972*. HMSO.
- Ministry of Reconstruction. (1917). *Ministry of Reconstruction. Reconstruction Committee. Forestry Sub-Committee. Final report*. Command Paper. Cd. 8881. London.

- Ministry of Reconstruction. (1918). *Final Report, Reconstruction Committee, Forestry Sub-Committee*. London: HMSO.
- Modica, S. and Rustichini, A. (1994). Awareness and partitional information structures. *Theory and Decision*, **37** (1), 107-124.
- Monbiot, G. (2013). *Feral: Searching for enchantment on the frontiers of rewilding*. London: Allen Lane.
- Monroe, B. L. and Schrod, P. A. (2008). Introduction to the Special Issue: The Statistical Analysis of Political Text. *Political Analysis*, **16** (4), 351-355.
- Morgan Kenneth O. (2004). Addison, Christopher, first Viscount Addison (1869-1951). *Oxford Dictionary of National Biography*. online edn, Jan 2011 ed. Oxford: Oxford University Press.
- Moxey, A. (2008). *Scoping study to review forestry policy instruments in the UK. Report to the Forestry Commission*. Edinburgh.
- Muir, J. (1901). *Our National Parks*. Madison, Wis.: University of Wisconsin Press.
- Mytelka, L. K. and Smith, K. (2002). Policy learning and innovation theory: an interactive and co-evolving process. *Research Policy*, **31** (8-9), 1467-1479.
- Nail, S. (2008). *Forest policies and social change in England*. New York: Springer.
- Namenwirth, J. Z. and Weber, R. P. (1987). Lasswell Dictionary. *Dynamics of Culture*. <http://www.wjh.harvard.edu/~inquirer/lasswell.htm> Accessed January 4 2015. Boston: Allen and Unwin, pp.46-53.
- National Archives of the United Kingdom. (2012) *Records collection policy*. Kew.
- National Audit Office. (1986). *Review of Forestry Commission Objectives and Achievements: Report by the Controller and Auditor General*. HC75.
- National Audit Office. (2001). *Modern policy-making: ensuring policies deliver value for money report by the comptroller and auditor general HC 289 session 2001-2002: November 2001*. London: National Audit Office.
- National Audit Office. (2009). *Delivering high quality impact assessments*. http://www.nao.org.uk/publications/0809/high_quality_impact_assessment.aspx.
- National Parks Commission. (1960). *National Parks and Access to the Countryside Act, 1949. Eleventh report of the National Parks Commission for the year ended September 30, 1960*. London: HMSO.
- Nature. (1937). Afforestation in the Lake District. *Nature*, **139** 144-145.
- Nature. (1943). Post-War Forest Policy in Great Britain. *Nature*, **152** (3856), 337-339.
- Nature. (1973). British Forests Need Lord Rothschild. *Nature*, **241** (Jan 12).
- Nature Conservancy Council. (1986). *Nature conservation and afforestation in Britain*. Peterborough: Nature Conservancy Council.
- Nature Conservancy, N. E. R. C. (1972). Lowland forestry and wildlife conservation. In: Steele, R. C. (ed.) *Monks Wood Symposium No 6*. Natural Environment Research Council, Monks Wood.
- Neil Kinnock. (1985). *1985 Labour Party Conference Speech*. <http://www.ukpolitics.org.uk/node/376>.
- Neuendorf, K. A. (2002). *The content analysis guidebook*. London: Sage Publications.
- Nijnik, M. and Mather, A. (2007). Analysing institutions and public perspectives to identify the future of British forests. *Sustainable forestry: from monitoring and modelling to knowledge management and policy science*, 171.
- Nisbet, J. (1900). *Our Forests and Woodlands*. London: J. M. Dent.
- Nowlin, M. C. (2011). Theories of the Policy Process: State of the Research and Emerging Trends. *Policy Studies Journal*, **39**, 41-60.
- O'Connor, J. (1979). *The fiscal crisis of the state*. New Brunswick, N.J.: Transaction.
- O'Riordan, T. (1981). *Environmentalism*. London: Pion.
- Observer. (1919). The Preservation of English Scenery. *The Observer*, June 22, p.14.
- Observer. (1927). The forest of the future a grim change - science and scenery. *The Observer*, March 6, p.13.
- OED Online. (2010). "forethought" Oxford University Press, definition/english/. Accessed 12/12/14.
- OED Online. (2013a). "foresight, n.". Oxford University Press, <http://0-www.oed.com.unicat.bangor.ac.uk/view/Entry/73170?rskey=WZoXxr&result=1>. Accessed 6/4/13.
- OED Online. (2013b). "hind-sight | 'hindsight, n.". Oxford University Press, <http://0-www.oed.com.unicat.bangor.ac.uk/view/Entry/87082?redirectedFrom=hindsight&result=1>. Accessed 6/4/13.
- Offer, A. (1981). *Property and Politics, 1870-1914: Landownership, Law, Ideology, and Urban Development in England*. Cambridge: Cambridge University Press.

- Office of Woods. (1914). *Board of Agriculture and Fisheries. Office of woods, forests, and land revenues. Joint annual report of the forestry branches for the year 1912-1913*. Cd. 7488. London: HMSO.
- Oldfield, S. (1987). Mires in danger in Western Europe. *Oryx*, **21** (4), 229-232.
- Oosthoek, K. (2001). An environmental history of state forestry in Scotland, 1919-1970.
- Oosthoek, K. J. (2013). *Conquering the Highlands - A history of the afforestation of the Scottish uplands*. Acton A.C.T: ANU E Press.
- Oosthoek, K. J. W. (2012). The Colonial Origins of Scientific Forestry in Britain.
- Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in qualitative research. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 7. <http://www.qualitative-research.net/index.php/fqs/article/view/175/391>. Accessed 15 May 2013.
- Ostrom, E. (1998). A behavioral approach to the rational choice theory of collective action: Presidential address, American Political Science Association, 1997. *American Political Science Review*, **92** (1), 1-22.
- Ostrom, E. (2005). *Understanding institutional diversity*. Princeton: Princeton University Press.
- Paltridge, B. (2006). *Discourse analysis: an introduction*. London: Continuum.
- Parsons, W. (1993). *Public policy: an introduction to the theory and practice of policy analysis*. Brookfield, Vt.: Elgar.
- Parsons, W. (2002). From Muddling Through to Muddling Up - Evidence Based Policy Making and the Modernisation of British Government. *Public Policy and Administration*, **17** (3), 43-60.
- Pearce-Moses, R. (2005). *A glossary of archival and records terminology*. Chicago: Society of American Archivists.
- Pearce, D. W., Markandya, A. and Barbier, E. (1989). *Blueprint for a Green Economy*. London: Earthscan.
- Pelli, P. i. (2008). *Review on forest sector foresight studies and exercises*. Wageningen: European Forest Institute.
- Perkins, J. (1920). A plea for the consideration of the aesthetic side in restocking our warfelled woods. *Quarterly Journal of Forestry*, **13**, 254-258.
- Peterken, G. (1987). Natural features in the management of upland conifer forests. *Proceedings of the Royal Society of Edinburgh B*, **93**, 223-234.
- Peterken, G. F. (1996). *Natural Woodland: Ecology and Conservation in Northern Temperate Regions*. Cambridge: Cambridge University Press.
- Peters, B. G. (1981). The Problem of Bureaucratic Government. *The Journal of Politics*, **43** (1), 56-82.
- Peters, B. G. (2001). *The Politics of Bureaucracy*. Abingdon: Routledge.
- Peters, B. G., Jon, P. and King, D. S. (2005). The Politics of Path Dependency: Political Conflict in Historical Institutionalism. *The Journal of Politics*, **67** (4), 1275-1300.
- Petrokofsky, G., Brown, N., Hemery, G., Woodward, S., Wilson, E., Weatherall, A., Stokes, V., Smithers, R., Sangster, M. and Russell, K. (2010). A participatory process for identifying and prioritizing policy-relevant research questions in natural resource management: a case study from the UK forestry sector. *Forestry*.
- Philips Price, M. (1909). Forestry and the State. (Letter), *The Economist*, February 6, p.21-22.
- Pieda. (1986). *Forestry in Great Britain : an economic assessment for the National Audit Office*. London: National Audit Office.
- Pierson, P. (2000). Not Just What, but When: Timing and Sequence in Political Processes. *Studies in American Political Development*, **14** (01), 72-92.
- Pinchot, G. (1910). *The Fight for Conservation*. New York: Doubleday, Page & Co.
- Plato, Annas, J. and Waterfield, R. (1995). *Plato: The Statesman*. Cambridge: Cambridge University Press.
- Political News. (2013). <http://www.libdemmanifesto.com>. Accessed 10/9/2013.
- Potter, N. and Christy, F. T. (1962). *Trends in Natural Resource Commodities: Statistics of Prices, Output, Consumption, Foreign Trade, and Employment in the United States, 1870-1957*. Baltimore: Johns Hopkins University Press.
- Price, C. (1971). The Effect of Tax Concessions on Social Benefit from Afforestation. *Forestry*, **44** (1), 87-94.
- Price, C. (1989). *The theory and application of forest economics*. Oxford: Blackwell.
- Price, C. (1993). *Time, discounting, and value*. Oxford: Blackwell.
- Price, C. (1997). Discounting — the last word. *Trends in Ecology & Evolution*, **12** (6), 230-230.

- Price, C. (2013). Impatience, Inconsistency, and Institutions to Counter Their Effects on Sustainable Forest Management. In: Kant, S. (ed) *Post-Faustmann Forest Resource Economics*. Dordrecht: Springer, pp.125-145.
- Pringle, D. (1994). *The first 75 years : Forestry Commission, 75th anniversary, 1919-1994 : a brief account of the history of the Forestry Commission 1919-1994*. Edinburgh: Public Information Division Forestry Commission.
- Purdon, M. (2003). The Nature of ecosystem management: postmodernism and plurality in the sustainable management of the boreal forest. *Environmental Science & Policy*, **6** (4), 377-388.
- Rabinbach, A. (1992). *The Human Motor: Energy, Fatigue, and the Origins of Modernity*. Berkeley: University of California Press.
- Rachlinski, J. (1998). A positive psychological theory of judging in hindsight. *The University of Chicago Law Review*, 571-625.
- Rackham, O. (2010). *Woodlands (Collins New Naturalist Library, Book 100)*. London: Harper Collins Publishers.
- Rajan, S. R. (2006). *Modernizing Nature: Forestry and Imperial Eco-development 1800-1950*. Oxford: Clarendon Press.
- Rantala, T. and Primmer, E. (2003). Value positions based on forest policy stakeholders' rhetoric in Finland. *Protecting Nature on Private Land - From Conflicts to Agreements*, **6** (3), 205-216.
- Rawnsley, C. (1919). Blots on English Landscape. *The Observer*, October 5, p.13.
- Rawnsley, H. D. (1920). *A Nation's Heritage*. London: George Allen & Unwin.
- Read, D. J., Freer-Smith, P. H., Morison, J. I. L., Hanley, N., West, C. C. and Snowdon, P. (eds) (2009). Combating climate change: a role for UK forests : an assessment of the potential of the UK's trees and woodlands to mitigate and adapt to climate change. Edinburgh: TSO, pp.222.
- Rein, M. and Schön, D. (1993). Reframing Policy Discourse. In: Fischer, F. and Forester, J. (eds) *The argumentative turn in policy analysis and planning*. Durham N.C.: Duke University Press.
- Rhodes, R. A. W. (2008). Policy network analysis. In: Moran, M. (ed) *The Oxford Handbook of Public Policy*. Oxford: Oxford University Press, pp.425-447.
- Richards, E. G. (2003). *British Forestry in the 20th Century: Policy and Achievements*. Leiden & Boston: Brill.
- Richards, J. C. (2011). "Every Word Is True": Stories of Our Experiences in a Qualitative Research Course. *The Qualitative Report*, **16** (3), 782-819.
- Richardson, S. (1970). The end of forestry in Great Britain. *British Association*, 8 Sept. 1970,.
- Riera, P., Aranda, L. and Mavsar, R. (2007). Efficiency and equity of forest policies: A graphic analysis using the partial equilibrium framework. *Forest Policy and Economics*, **9** (7), 852-861.
- Roberts, N. C. and King, P. J. (1991). Policy Entrepreneurs: Their Activity Structure and Function in the Policy Process. *Journal of Public Administration Research and Theory*, **1** (2), 147-175.
- Robinson, G. M. (1991). EC agricultural policy and the environment: Land use implications in the UK. *Land Use Policy*, **8** (2), 95-107.
- Rodney Lowe. (2004). *Barlow, Sir (James) Alan Noel, second baronet (1881–1968)*. Oxford Dictionary of National Biography,. Oxford University Press, <http://0-www.oxforddnb.com.unicat.bangor.ac.uk/view/article/30594>.
- Rose, R. (1973). Comparing Public Policy: An Overview*. *European Journal of Political Research*, **1** (1), 67-94.
- Ross, I. and Taylor, C. (2008). Current management of the native pinewood remnants - past, present and future influences. *Scottish Woodland History Discussion Group*, (Notes XIII).
- Royal Commission on Coast Erosion and Afforestation. (1909a). *Minutes of evidence appendices thereto accompanying the second report (on afforestation) (volume II.--Part I.)* Cd. 4461. London: HMSO.
- Royal Commission on Coast Erosion and Afforestation. (1909c). *Royal Commission on Coast Erosion and Afforestation. Volume II. (Part I.) Second report (on afforestation) of the Royal Commission appointed to inquire into and to report on certain questions affecting coast erosion, the reclamation of tidal lands, and afforestation in the United Kingdom*. Cd. 4460. London: HMSO.
- Rumsfeld, D. (2002). *News Transcript: DoD News Briefing - Secretary Rumsfeld and Gen. Myers*. <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=2636>.
- Ryan, G. W. and Bernard, H. R. (2003). Techniques to identify themes. *Field methods*, **15** (1), 85-109.

- Ryle, G. B. (1969). *Forest Service: First Forty-five Years of the Forestry Commission of Great Britain*. Newton Abbot: David & Charles
- Sabatier, P. A. (1988). An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sciences*, **21** (2), 129-168.
- Sabatier, P. A. (2007). *Theories of the policy process*. Boulder Colo.: Westview Press.
- Sabatier, P. A. and Jenkins-Smith, H. C. (1993). *Policy change and learning: an advocacy coalition approach*. Boulder Colo.: Westview Press.
- Sabatier, P. A. and Jenkins-Smith, H. C. (1999). The Advocacy Coalition Framework: An Assessment. In: Sabatier, P. A. (ed) *Theories of the Policy Process*. Boulder Colo.: Westview Press.
- Sabatier, P. A. and Weible, C. M. (2007). The Advocacy Coalition Framework: Innovations and Clarifications. In: Sabatier, P. (ed) *Theories of the Policy Process* 2nd ed. Boulder Colo.: Westview Press, pp.189-222.
- Sage, B. (1979). Forests vs Wildlife. *New Scientist*. 754.
- Saki. (1914). *When William Came: A Story of London Under the Hohenzollerns*. London: John Lane.
- Salter, A. S. (1921). *Allied shipping control: an experiment in international administration*. Oxford: Clarendon Press.
- Santayana, G. (1936). *The Life of Reason: Introduction, and Reason in common sense*. New York: C. Scribner's sons.
- Schaar, J. (1981). *Legitimacy in the modern state*. New Brunswick (U.S.A.): Transaction Books.
- Schiellerup, P. (2008). Insider perspectives on institutional change in contemporary British forestry: identity and environmental governance. *Environment and Planning C: Government and Policy*, **26** (6), 1061-1076.
- Schlich, W. (1904). *Forestry in the United Kingdom*. London: Bradbury Agnew & Co.
- Schlich, W. (1906). *Manual of Forestry. Vol. I. Forest Policy in the British Empire*. London: Bradbury, Agnew & Co.
- Schlich, W. and Fisher, W. R. (1895). *A Manual of Forestry. Vol. III. Forest Management*. London: Bradbury, Agnew & Co.
- Schneider, S., Turner, B. and Garriga, H. (1998). Imaginable surprise in global change science. *Journal of Risk Research*, **1** (2), 165-185.
- Schwartz, J. and Cook, T. (2002). Archives, records, and power: The making of modern memory. *Archival Science*, **2** (1-2), 1-19.
- Schwarz, M. and Thompson, M. (1990). *Divided We Stand: Redefining Politics, Technology and Social Choice*. Philadelphia: University of Pennsylvania Press.
- Scotsman. (1943). Forestry after the war. *Scotsman*, February 25, p.6.
- Scott, P. J. C. (1999). *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven and London: Yale University Press.
- Scottish Executive. (2006) *The Scottish Forestry Strategy*. Edinburgh: Forestry Commission Scotland.
- Scottish Government. (2012). *Woodland Creation*.
<http://www.scotland.gov.uk/Topics/farmingrural/SRDP/RuralPriorities/Options/WoodlandCreation>. Accessed 12/12/14.
- Scrase, J. I. and Ockwell, D. G. (2010). The role of discourse and linguistic framing effects in sustaining high carbon energy policy--An accessible introduction. *Energy Policy*, **38** (5), 2225-2233.
- Seidman, I. (2006). *Interviewing As Qualitative Research: A Guide for Researchers in Education And the Social Sciences*. New York: Teachers College Press.
- Select Committee on Forestry. (1886) *Report from the Select Committee on Forestry; together with the proceedings of the Committee, and minutes of evidence*. Paper Number 287. House of Commons Papers: Reports of Committees. London: House of Commons.
- Shannon, M. (1992). Foresters as strategic thinkers, facilitators, and citizens. *Journal of forestry (USA)*, **90** (10), 24-27.
- Shannon, M. A. (2008). Preparing for the 22nd Century: Anticipating Surprise and Planning for Uncertainty. in *Support of Good Governance*, 31.
- Sheail, J. (1976). *Nature in trust: the history of nature conservation in Britain*. Glasgow: Blackie.
- Sheail, J. (1981). *Rural conservation in inter-war Britain*. Oxford: Clarendon Press.
- Sheail, J. (1998). *Nature Conservation in Britain: The Formative Years*. London: HMSO.
- Sherren, W. (1918). What Reconstruction Means. *Quiver*, 819-822.
- Shiva, V. (1988). *Staying alive : women, ecology, and development*. London: Zed Books.
- Simon, H. A. (1957). *Administrative behavior: a study of decision-making processes in administrative organizations*. New York: Macmillan.

- Simpson, J. (1900). *The New Forestry, Or the Continental System Adapted to British Woodlands and Game Preservation*. Sheffield: Pawson & Brailsford.
- Šinko, M. (2004). Choice of Model for Forest Programs Evaluation: Case Study of Slovenia. *The evaluation of forest policies and programmes*, 7-7.
- Slee, B. (2009). Re-imagining forests as multifunctional and sustainable resources for a low carbon rural economy: the potential for forest-based rural development. *Developing rural policies to meet the needs of a changing world*. OECD Conference Quebec October 13-15th 2009.
- Smith, G. B. (1996). *Nietzsche, Heidegger, and the Transition to Postmodernity*. Chicago: University of Chicago Press.
- Smout, T. C. (1997). *Scottish woodland history*. Edinburgh: Scottish Cultural Press.
- Snow, C. P. (2000). *The New Men*. Thirsk: House of Stratus.
- Somerville, W. (1917). *British forestry, past and future: a Paper Read Before the Worshipful Company of Carpenters, on April 4 1917*. Oxford: Oxford University Press.
- Sotirov, M. and Memmler, M. (2011). The Advocacy Coalition Framework in natural resource policy studies — Recent experiences and further prospects. *Forest Policy and Economics*, **16** (0), 51-56.
- Stanford, M. (1994). *A companion to the study of history*. Oxford: Blackwell.
- Stebbing, E. P. (1916). *British forestry, its present position and outlook after the war*. London: J. Murray.
- Stebbing, E. P. (1919). *Commercial forestry in Britain : its decline and revival*. London: J. Murray.
- Stebbing, E. P. (1940). Robert Scott Troup. 1874-1939. *Obituary Notices of Fellows of the Royal Society*, **3** (8), 217-219.
- Stirling-Maxwell, J. (1912). *Departmental Committee on Forestry in Scotland. Report of the Departmental Committee on Forestry in Scotland, with appendices and evidence*.
- Stone, P. J., Bales, R. F., Namenwirth, J. Z. and Ogilvie, D. M. (1962). The general inquirer: A computer system for content analysis and retrieval based on the sentence as a unit of information. *Behavioral Science*, **7** (4), 484-498.
- Storch, S. (2011). Forestry professionalism overrides gender: A case study of nature perception in Germany. *Forest Policy and Economics*, **13** (3), 171-175.
- Strathman, A., Gleicher, F., Boninger, D. S. and Edwards, C. S. (1994). The consideration of future consequences: Weighing immediate and distant outcomes of behavior. *Journal of Personality and Social Psychology*, **66** (4), 742-752.
- Stroud, D. A., Ratcliffe, D. A., Oswald, P. H. and Council, N. C. (1987). *Birds, bogs and forestry: the peatlands of Caithness and Sutherland*. Peterborough: Nature Conservancy Council.
- Summerbell, T. (1908). *Afforestation: The unemployed and the land*. London: Independent Labour Party.
- Surveyors Institution. (1916). *Unemployment After the War*. pt. 2.
- Symonds, H. (1936). *Afforestation in the Lake district a reply to the Forestry commission's White paper of 26th August 1936*. London: J.M. Dent and Sons Ltd.
- Telegraph. (2008). Lord Rees - Pugnacious Chief Secretary to the Treasury who drove down public spending in the 1980s. (Obituary), *The Daily Telegraph*, December 12.
- Thaler, R. and Shefrin, H. (1981). An economic theory of self-control. *The Journal of Political Economy*, **89** (2), 392-406.
- The Economist. (1918). Afforestation. *The Economist*, January 12.
- The Economist. (1945). How Many Trees. *The Economist*, October 13, p.517-518.
- The Economist. (1971). Down in the forest. *The Economist*, August 7.
- The National Park Committee (Chairman Rt Hon Christopher Addison). (1931). *Report of the National Park Committee*. Cmd 3851. London: HMSO.
- Tiainen, H. (2010). Future orientation of narrative information in European half-yearly financial reports.
- Times. (1912). Nature Reserves. *The Times*, December 18, p.9.
- Times. (1914). German Fleet In Hiding - Admiral Von Tirpitz's explanations. *The Times*, December 24, p.6.
- Times. (1922). Half-Hearted Economy. *The Times*, 1922/03/02, p.12.
- Times. (1929). Mr. Stephen Walsh. *The Times*, March 18, p.19.
- Times. (1945). First Atomic Bomb Hits Japan. *The Times*, August 7, p.4.
- Times. (1968). Earl Of Radnor. *The Times*, November 25, p.10.
- Tipple, T. J. and Wellman, J. D. (1991). Herbert Kaufman's Forest Ranger Thirty Years Later: From Simplicity and Homogeneity to Complexity and Diversity. *Public administration review*, **51** (5), 421-428.

- The National Archives of the UK (TNA). (1970-1974). AT25/109 Afforestation in the National Parks: Council for the Protection of Rural England; correspondence regarding their resolution that afforestation in National Parks should come under planning control.
- The National Archives of the UK (TNA). (1918). CAB 24/5 War Cabinet and Cabinet: Memoranda (GT, CP and G War series). *Reafforestation Report by Lord Curzon and Mr Barnes*, July 1.
- The National Archives of the UK (TNA). (1945). CAB 65/49/29 War Cabinet and Cabinet: Minutes (WM and CM Series).
- The National Archives of the UK (TNA). (1944). CAB 66/53/20 War Cabinet and Cabinet: Memoranda (WP and CP Series). WP Series. Paper Nos. 401(44)-450(44). *Administration of Forestry Policy. Report by the Chairman of the Machinery of Government Committee*, July 31.
- The National Archives of the UK (TNA). (1957-1963). CAB 128/32/60 Cabinet: Minutes (CM and CC Series). CC Series (Harold Macmillan). Cabinet conclusions.
- The National Archives of the UK (TNA). (1958). CAB 129/93/50 Cabinet: Memoranda (CP and C Series). Subseries within CAB 129 - C Series. Forestry Policy.
- The National Archives of the UK (TNA). (1922). CAB/23/29 Conclusions of a Meeting of the Cabinet held in Mr. Chamberlain's Room at the House of Commons, S.W. Cabinet Conclusions for the period 1919-1939. February 24.
- The National Archives of the UK (TNA). (1922). CAB/24/132 War Cabinet and Cabinet: Memoranda (GT,CP and G War Series). 'C.P.' Series. Papers nos. 3592-3700 *Second Interim Report of Committee on National Expenditure*.
- The National Archives of the UK (TNA). (1927). CAB/24/190 Cabinet. Forestry Policy. *Treasury Memorandum on the paper prepared by the Forestry Commissioners. Circulated by direction of the Chancellor of the Exchequer*, December 9.
- The National Archives of the UK (TNA). (1918-1969). F1 Interim Forestry Authority and Forestry Commission: Minutes of Meetings.
- The National Archives of the UK (TNA). (1940). F18/235 Commissioners' Policy on post-war forestry. *Land Policy with Special Reference to Forestry*, November 28.
- The National Archives of the UK (TNA). (1986-1991). FT 42/57 Forestry policy: nature conservation in upland forests; implementation of Afforestation, Land Use and Forestry, Options for British Forestry; Woodland Grant Schemes.
- The National Archives of the UK (TNA). (1947). MAF 141/105 Forestry Act 1945: policy, announcement by Minister of Agriculture, Fisheries and Food: proposed forestry programme and its incidence in England, Wales and Scotland: relationship between forestry and agriculture. *Relationship between Forestry and Agriculture (Note for discussions at New Forest November 1947)*, October 1947, p.2.
- The National Archives of the UK (TNA). (1947). MAF 141/105 Ministry of Agriculture and Fisheries and Ministry of Agriculture, Fisheries and Food: Land Use Divisions: Registered Files, Land Utilisation (LU Series).
- The National Archives of the UK (TNA). (1947). MAF 141/105 Forestry Act 1945: policy, announcement by Minister of Agriculture, Fisheries and Food: proposed forestry programme and its incidence in England, Wales and Scotland: relationship between forestry and agriculture.
- The National Archives of the UK (TNA). (1945-6). MAF 230/4 Forestry policy in Great Britain.
- The National Archives of the UK (TNA). (1942-1945). T161/1195 Forestry. General: Post-war forestry policy. November 26 1943.
- The National Archives of the UK (TNA). (1943a). T161/1195 Forestry. General: Post-war forestry policy. *Forestry (Note of Ministerial meeting: Secretary of State for Scotland, Chancellor of the Exchequer, Minister without Portfolio, Minister of Town and Country Planning)*.
- The National Archives of the UK (TNA). (1943c). T161/1195 Files of the Supply Divisions of the Treasury. *Letter from Sir Roy Robinson to J A Barlow HM Treasury*, February 8.
- The National Archives of the UK (TNA). (1977). T366/115 Treasury: Domestic Economy Sector: Fiscal Policy (FP Series) Files. *Interdepartmental Review of Forestry*.
- Tomlin, P. (2001). *Professional women foresters in the British forestry industry*. Roslin, Midlothian: Wildcat One Consulting.
- Tompkins, S. C. (1986). *The Theft of the Hills: Afforestation in Scotland*. Ramblers' Association.
- Tompkins, S. C. (1989). *Forestry in crisis: the battle for the hills*. London: Helm.
- Trace, C. B. (2002). What is recorded is never simply 'what happened': record keeping in modern organizational culture. *Archival Science*, 2 (1-2), 137-159.
- Tregidga, G. (2006). *Killerton, Camborne and Westminster: the political correspondence of Sir Francis and Lady Acland, 1910-29*. Exeter: Devon and Cornwall Record Society.

- Troup, R. S. (1938). *Forestry and state control*. Oxford: The Clarendon Press.
- Troup, R. S. (2004). *Schlich, Sir William Philipp Daniel (1840–1925)*. Oxford Dictionary of National Biography. Online edition.: Oxford University Press, <http://www.oxforddnb.com/view/article/35970>. Accessed 27/9/10.
- Tsebelis, G. (1995). Decision making in political systems: Veto players in presidentialism, parliamentarism, multicameralism and multipartyism. *British journal of political science*, **25** (3), 289-325.
- Tsebelis, G. (2000). Veto Players and Institutional Analysis. *Governance*, **13** (4), 441-474.
- Tsebelis, G. (2011). *Veto Players: How Political Institutions Work*. Princeton University Press.
- Tsouvalis-Gerber, J. (1998). Making the invisible visible: ancient woodlands, British forest policy and the social construction of reality. In: Watkins, C. (ed) *European woods and forests: studies in cultural history*. Wallingford: Cab International, pp.215-229.
- Tsouvalis, J. (2001). *A Critical Geography of Britain's State Forests*. Oxford: Oxford University Press.
- UK Parliament. (2012). *Hansard 1803–2005*. <http://hansard.millbanksystems.com/>. Accessed 2 August
- UK Parliament. (2013). *Rt Hon Sir Gerald Kaufman*. <http://www.parliament.uk/biographies/commons/gerald-kaufman/451>. Accessed 5 September 2013.
- United Nations Economic Commission for Europe and Food and Agriculture Organisation. (2005). *European forest sector outlook study. 1960-2000-2020*. Geneva: United Nations Economic Commission for Europe (UNECE).
- Varghese, J. and Reed, M. G. (2011). Theorizing the Implications of Gender Order for Sustainable Forest Management. *International Journal of Forestry Research*, **2012**.
- Wareing, P. (1973). Forestry Policy. *Nature*, **241** (Feb 9).
- Washington Post. (2007). *The Long Consensus On Climate Change*. <http://www.washingtonpost.com/wp-dyn/content/article/2007/01/31/AR2007013101808.html>. Accessed 23 February 2016.
- Wazeka, R. (1984). "Editorial." *Unasylva*, **146**.
- Weber, M. (1964). *Theory of Social and Economic Organization*. Parsons, T. (ed). New York: Free Press.
- Webster, A. D. (1919). *National afforestation*. London: T. Fisher Unwin.
- Weible, C. M. (2006). An Advocacy Coalition Framework Approach to Stakeholder Analysis: Understanding the Political Context of California Marine Protected Area Policy. *Journal of Public Administration Research and Theory*.
- Weible, C. M. and Sabatier, P. A. (2007). A Guide to the Advocacy Coalition Framework. In: Fischer, F., Miller, G. and Sidney, M. S. (eds) *Handbook of Public Policy Analysis: Theory, Politics, and Methods*. Boca Raton: CRC/Taylor & Francis.
- Weible, C. M., Sabatier, P. A. and McQueen, K. (2009). Themes and Variations: Taking Stock of the Advocacy Coalition Framework. *Policy Studies Journal*, **37** (1), 121-140.
- West, A. J. (2003). Forests and National Security: British and American Forestry Policy in the Wake of World War I. *Environmental History*, **8** (2), 270-293.
- Whetstone, L. (1984). Forestry Commission for the Chop. *Economic Affairs*, **4** (2), 50-51.
- Whetstone, L. (1988). Chopping and Changing Forestry Policy. *Economic Affairs*, **8** (6), 21-22.
- Wolfe, J. N. and Caborn, J. M. (1973). *Some Considerations Regarding Forestry Policy in Great Britain: An Inter-disciplinary Study*. Forestry Committee of Great Britain.
- Worster, D. (1994). *Nature's Economy: A History of Ecological Ideas*. Cambridge: Cambridge University Press.
- Wright, P. (1992). The Disenchanted Forest. *The Guardian*, (6 Nov 1992).
- Young, L. and Soroka, S. (2012). Affective News: The Automated Coding of Sentiment in Political Texts. *Political Communication*, **29** (2), 205-231.
- Natural Resources Technical Committee. (Chairman Sir Solly Zuckerman). (1957) *Forestry, Agriculture and Marginal Land*. London: HMSO.