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Conservation Science and Practice

DOI:
10.1111/csp2.13260

E-pub ahead of print: 24/11/2024

Peer reviewed version

Lessons Lost: Lack of requirements for post-project evaluation and reporting is hindering evidence-based conservation

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**The findings and conclusions in this article are those of the author(s) and do not necessarily represent the views of the U.S. Fish and Wildlife Service.*

Keywords
Conservation funding; conservation impact evaluation; ERDF; evidence-based conservation; LIFE; post-project evaluation

Article Type
Contributed Paper

Target Audience
The target audience of this manuscript is broadly aimed at conservation funders and policy makers across the world.

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Abstract

For conservation to be based on evidence, the outcomes of conservation actions need to be shared. The European Union (EU) is a major funder of conservation action in Europe through the well-studied LIFE Programme. Less well-known, but also funding substantial conservation action, is the European Regional Development Fund (ERDF). Through a systematic review of conservation projects funded by LIFE and ERDF, we identify substantial expenditure on biodiversity conservation (€ 1300M and 760M between 2014 and 2024 respectively). We explore the extent to which LIFE & ERDF contribute to building an evidence base about the effectiveness of conservation actions. There were differences between LIFE and ERDF in the extent to which documentation about the project was publicly available (89% and 26% respectively), and large differences in whether any form of project evaluation was available

(63% and 5% respectively). A possible explanation for these results is differing funder requirements regarding the monitoring and reporting of project implementation and outcomes. We explore funder requirements across a sample of other conservation funders and suggest how changes could incentivize higher quality sharing of project outcomes. This would expand the evidence base needed to improve the effectiveness of conservation actions.

Introduction

Conservation actions are more likely to be effective when informed by high-quality evidence (Sutherland et al. 2004; Pullin et al. 2004; Rose et al. 2018). However, for conservation to be evidence-informed, data concerning the outcomes of conservation interventions and projects must be available to be used in evidence-synthesis efforts (Sutherland et al. 2019). Despite the rapid expansion of interest in the application of robust impact evaluation methods and cost-effectiveness evaluations in conservation (Baylis et al. 2016; Schleicher et al. 2020; Pienkowski et al. 2021), many conservation projects are not subject to even the most basic evaluation (Sutherland et al. 2018; Junker et al. 2020). This means that valuable learning and experiences are lost and cannot inform the prioritisation of future conservation action (Sutherland 2022).

The term evaluation has a variety of usages. For example, evaluation is defined broadly by the US Evidence Act (2018) as *"an assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and efficiency"* (OMB 2020, p.1). Here we use the term impact evaluation to talk specifically about efforts to assess impacts relative to a counterfactual, i.e., what would have happened if the intervention had not happened? While a range of approaches exist which vary in their robustness (Schleicher et al. 2020; Christie et al. 2021), all seek to answer the question: does the intervention work?". Crucially, this is distinct from standard project monitoring and evaluation which addresses the more basic question: "was the intervention delivered as planned?" or, sometimes, "has the outcomes changed?". For clarity we refer to the later as

implementation evaluation rather than impact evaluation. Robust data on the impacts of actions is vital to understanding the most effective and efficient conservation action, and improving the utility of decision making tools such as cost-effectiveness analyses (Pienkowski et al. 2021), or multi-criteria decision analysis (Adem Esmail & Geneletti 2018).

Conservation funders have an increasingly well-recognized role in driving the use of evidence by conservation practitioners. This can be through selective funding of projects based on their use of evidence in project design, ensuring a strong evidence base underlying funded projects, and promoting shifts towards evidence-based practice (Parks et al. 2022). Conservation Evidence lists 'Evidence Champions' on their website (Conservation Evidence 2023). This includes funders who have committed to require applicants to report on their use of evidence. However, funders also have the potential to shape the generation of evidence through encouraging funded projects to carry out evaluations and making that information public (Amano et al. 2022).

The European Union (EU) is a major funder of conservation in Europe. Their main specific funding mechanism for nature conservation is the LIFE Programme which aims to protect and improve the quality of the EU's natural environment and support the shift towards a cleaner and climate-neutral economy (though note agri-environment funding which can support conservation objectives swamps the resources in the LIFE programme; (Batáry et al. 2015)). LIFE requires beneficiaries to make project documentation publicly available under Regulation (EU) 2021/783 (**Table 1**). This transparency has allowed researchers to explore patterns of investment within the EU's LIFE programme (Hermoso et al. 2017; Sánchez-Fernández et al. 2018; Badia-Boher et al. 2019). For example, Mammola et al. (2020) revealed that vertebrates receive six times more conservation investments than invertebrates. While the LIFE programme is well researched, other lesser-known funding mechanisms such as the European Regional Development Fund (ERDF), have been overlooked and not analysed in the context

of biodiversity conservation, despite including substantial funding for environmental projects (European Commission 2023).

Anecdotally we know that valuable lessons from ERDF conservation projects are being lost because of the lack of evaluations. Caruana et al. (2024) explored the effectiveness of an ERDF-funded ecological restoration project that attempted to eradicate invasive red swamp crayfish (*Procambarus clarkii*) through mechanical excavation of a stream bed in an ecologically sensitive site in Malta. There is a need for more information on the effectiveness of approaches to controlling invasive crayfish (Gherardi et al. 2011; conservationevidence.com) and there are no reports of the effectiveness of mechanical excavation, meaning there is substantial value in knowing the outcome of this project which cost € 720,000 of taxpayers' money. A simple After Only analysis conducted by a masters project (visiting the restoration site three years after the project was complete) revealed abundant populations of the invasive crayfish meaning that the project had been ineffective (Caruana et al. 2024). However, no follow-up had been carried out by the project and without this independent student project, the failure of this project would be lost to the conservation evidence base.

To investigate the role of different funders in building the evidence base in the EU, we quantify the magnitude, and geographic distribution, of LIFE and ERDF funding for conservation over the past nine years and compare data availability from the two funding organisations. Using a sample of LIFE and ERDF projects (stratified by the recipient country's real GDP per capita) we quantify the extent to which they are contributing to the conservation evidence base by searching online for all available technical documents and extracting data relating to (i) the visibility of the project online, (ii) the availability of technical documentation and peer-reviewed publications associated with the project and (iii) the study design used in any publicly available evaluation carried out. Lastly, we review funding requirements for LIFE, ERDF and

selected other conservation funders. We use this investigation to reflect on practices that could improve the contribution that funded projects make to building conservation's evidence base.

Methods

Project search and inclusion terms

We searched the EU's publicly available databases on funding distribution. We only used publicly available information as we were interested in the information that is available to practitioners or scientists conducting reviews. LIFE Projects were searched through the LIFE Project Public Page (European Commission 2024b), while ERDF projects were searched through the Kohesio Database (European Commission 2024a). LIFE's project search period was set from 2014 to 2021 as 2021 was the latest data available when the search was conducted in January 2023. To capture all the projects approved during ERDF's last funding period (2014-2020) we set the search period from 2014 to 2024, as ERDF's search engine did not show projects if their full funding duration was not within range and the longest approved project is till 2024 (**Supplementary Information 1**).

We searched the relevant datasets to identify conservation-related projects supported by both funders. We experienced problems with the search engine on the LIFE website, so we downloaded the entire LIFE project database from 2014 - 2021 and filtered cells through Microsoft Excel containing the terms *"Biodiversity", "Conservation"* and *"Invasive"*. We carried out advanced searches on ERDF's search engine using the string *"Biodiversity Conservation" OR "Invasive Species"*. In total, 1,188 LIFE and 1,746 ERDF projects were identified as potentially relevant. Project titles and descriptions were re-filtered with keywords of non-relevant projects (to identify projects about heritage conservation for example) and these were manually checked before being discarded (more details in **Supplementary Information 1**). This resulted in 753 LIFE and 370 ERDF projects being removed. The final dataset of conservation-related projects consisted of 435 LIFE projects and 1,376 ERDF projects. Due to the limited time available, we took a stratified sample of projects from both

funding mechanisms to investigate further. We stratified the European Union into four groups of countries, based on the quartiles of the real GDP per capita per country (EuroStat 2023). Then, we randomly selected 25% of both LIFE and ERDF projects from each quartile group. The final stratified sample of projects included in our review of evidence produced by LIFE and ERDF projects was 109 LIFE and 345 ERDF.

Data extraction

To quantify the extent of project documents found online, the type of technical documentation available for each project, and the study designs used within evaluations of LIFE- and ERDF-funded projects, we conducted a thorough analysis of the information available on each project within our final stratified sample. First, the official project name and grant codes were searched online through Google's search engine, and any relevant website was documented. Then we categorized the websites found as 'in-depth' or 'short-summary' based on the level of information available online (**Supplementary Information 2**). Once categorized, we searched each website's site map and recorded any project-related documents available and categorized these based on the type of documents. We searched all available documentation for evidence of any impact evaluation carried out and recorded the study design used (after only, before-after, control-impact, before-after control-impact, randomized controlled trial; (Sutherland et al. 2019; Christie et al. 2021)). Finally, we searched for the project name and grant code on Google Scholar. All publications citing the project codes or names were documented and scored for whether they represented articles in the peer-reviewed literature. Furthermore, peer-reviewed publications were read, and if applicable, the study design used was documented. **Supplementary Information 2** provides a further in-depth explanation of the datasheet used to collect information from these projects.

Language bias

LIFE projects generally had versions of their project website and documentation available in English alongside their native language. However, it is common for documents from ERDF

projects to not be available in English. All projects were searched by the English project names listed on the LIFE project public page and the Kohesio Database (ERDF). We also searched for the projects using their grant codes which remain consistent across languages. Nevertheless, in instances where no search results were found on Google, we identified the beneficiary individual or organization responsible for the project listed on the Kohesio database. If the beneficiary was found online, we searched through their website using Google Translate for any mention of ERDF funding. If ERDF was mentioned, we read and compared project descriptions, funding amounts, and funding periods listed and checked if they matched our original project in English. We then proceeded with data extraction, using Google Translate when required.

Comparison of funder requirements

We examined the funding requirements of LIFE, ERDF, and selected other conservation funds (identified as those with comparable funding amounts from UNDP's Finance Resources for Biodiversity Initiative; (UNDP 2022)). For each funder, we searched for policy documents online to determine specific requirements related to transparency, technical documentation, and evaluation.

Results

Funding allocation and distribution

While LIFE projects did have the overall higher net investment in conservation-related projects (€ 1.3 billion), ERDF also had substantial investment over this period (€ 760 million). LIFE projects tended to be larger than conservation-related ERDF projects (€ 3.1 million ± € 2.8 million, compared to € 0.6 million ± € 1.2 million). The number of conservation-related LIFE- and ERDF-funded projects (**Figure 1:A, B**), as well as the total budget allocated (**Figure 1:C, D**) varied between member states.

Overall, LIFE funding was spread more evenly between member states, however, the largest beneficiaries were Germany (€ 190 million across 29 projects), Italy (€ 155 million across 78 projects), and Spain (€ 120 million across 62 projects), all of which are in the third quartile in terms of GDP per capita (€ 23,105 – € 36,199 real GDP per capita) (**Figure 2:A**). In contrast, the largest beneficiaries of conservation-related ERDF funding were Romania (€ 220 million across 95 projects) and Poland (€ 170 million across 285 projects) which are countries within the lowest quartile of GDP per capita (Group 1: € 6,950 – € 15,644 real GDP per capita) (**Figure 2:B**)

Online project presence

There is much more information available online about conservation-related LIFE-funded projects compared to ERDF-funded projects. Overall, 95% of our sample of LIFE-funded projects were found online (n = 104) with 61% (n = 67) being mentioned in peer-reviewed publications (**Figure 3:A**). There is no mention of most of our sample of ERDF-funded projects (68%, n = 233) on Google's search engine and only 1% (n = 4) were mentioned in any peer-reviewed publications found on Google Scholar (**Figure 3:B**).

Furthermore, the level of project information available online also differed between funding mechanisms. The majority of our sample of LIFE-funded projects (86%, n = 94) had in-depth websites while a further 8% (n = 9) had short summary websites (**Figure 3:A**). In contrast, only 3% (n = 9) of our sample of ERDF-funded projects had in-depth websites, a further 23% (n = 78) had short summary websites while the remainder of projects did not have a website (74%; **Figure 3:B**).

Technical documentation available

The availability of technical documentation was higher in conservation-related LIFE-funded projects than ERDF-funded projects. Overall, 89% of LIFE projects had documents available compared with 26% of ERDF projects (**Figure 3:A, B**). LIFE-funded projects had a higher

proportion of: project descriptions; monitoring reports; project conclusion documents; peer-reviewed publications; and in-depth websites available per project when compared to ERDF-funded projects (**Figure 4:A**). The number of peer-reviewed publications associated with the two funding mechanisms was drastically different. While our sample of 109 LIFE-funded projects was linked to 260 peer-reviewed publications, our sample of 345 ERDF-funded projects was only linked to 4 (**Figure 4:B**).

Project evaluation and study design used

In our sample, 63% of LIFE-funded projects and only 5% of conservation-related ERDF-funded projects had some form of project evaluation available (**Figure 3:A, B**). The most common study designs used were *after only* evaluations (28% in LIFE, 3% in ERDF) and *before-after* (31% in LIFE, 2% in ERDF), with a few using *control-impact* (3% in LIFE, 0% in ERDF). Less than 1% of LIFE- or ERDF-funded project samples had used *before-after control-impact,* and none used *randomized controlled trial* study designs (**Figure 4:C**).

Comparing the reporting requirements from a range of funders

The reporting requirements from different conservation funders vary markedly (**Table 1**). All the selected conservation funders have online databases listing the projects they have funded, but the amount of information required from the projects and made available varies greatly. For example, the LIFE programme, the Global Environment Facility, and the Biodiversity Challenge Funds (Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus) not only list their funded projects but also provide publicly available technical documentation like project descriptions and monitoring reports. However, other funders like the ERDF, the European Development Fund in the Biodiversity and Protected Areas Management (BIOPAMA), US Fish and Wildlife (USFWS), and the Bezos Earth Fund do not offer such documentation publicly. All the conservation funders we reviewed except ERDF require some form of project evaluation (note we could not find information on what the Bezos Earth Fund requires), however, only LIFE, the Global Environment Facility, and the Biodiversity

Challenge Funds require that project evaluations be made public. What funders require in terms of impact evaluation varies and is often not explicit (see **Table 1** and **Supplementary Information 3)**.

Discussion

Conservation funders have a vitally important role to play in promoting evidence-based practice in conservation (Winifred et al. 2022). While there has been a lot of attention given to the role of funders in encouraging the use of evidence in the design of conservation projects and how they can encourage the generation of evidence through what they choose to fund (Tinsley-Marshall et al. 2022; Amano et al. 2022; Parks et al. 2022; Jones & Shreedhar 2024), less attention has been given to the role of funder reporting requirements in contributing to the evidence base. Our study reveals that whilst there are an increasing number of project evaluations becoming available publicly, primarily funded through the EU's LIFE Programme, many EU-funded conservation projects, especially those funded by ERDF, are not making a significant contribution to the conservation evidence base. While there are important caveats to our findings (time lags mean some evaluations which will happen may not yet be available, and despite our efforts we may have missed evaluations published in languages other than English) it is clear that important lessons are being lost.

Barriers to conservation projects contributing to the evidence base

Funder requirements appear to influence the extent to which projects contribute to the conservation evidence base. The EU's LIFE Programme (with stronger requirements for publicly available project reporting) has a significantly higher proportion of projects for which information is available online, along with technical documentation, peer-reviewed publications, and project evaluations, compared to ERDF. Very few projects, even those funded by LIFE, are producing impact evaluations with more robust designs (**Figure 4:C**). There are a range of reasons why this might be the case.

The inherent challenge of carrying out robust impact evaluations: Evaluating the success of conservation projects is difficult for a variety of reasons including the range of possible outcomes (Gregory et al. 2012; Jones & Shreedhar 2024)and the difficulty of isolating impacts of a specific project in an often complex landscape of conservation interventions (Possingham & Gerber 2017). The more robust evaluation designs such as BACI are also often costly to implement as require data collection in controls as well as in the intervention area (Christie et al. 2019), and appropriate controls may not exist (Schleicher et al. 2020). Randomisation is also challenging and will not be practical or ethical in many circumstances (Pynegar et al. 2021) but more experimental evaluation of conservation interventions should be possible (Ockendon et al. 2021; Ferraro et al. 2023; Pynegar et al. 2024). We understand that BACI and RCT may not be suitable for every conservation project. Conservation funders have an important role to play in offering longer-term funding, and supporting research-practice partnerships between universities and implementing organizations to make such evaluations possible (Christie et al. 2019; Vargas et al. 2022; Jones & Shreedhar 2024).

Lack of specialist expertise required: Many projects implemented by conservation organizations lack the expertise to conduct robust evaluations themselves (Walsh et al. 2019). Funders inevitably want to fund projects run by organizations with expertise on the ground to implement projects, but such organization may lack the expertise to design and implement robust evaluations (Tinsley-Marshall et al. 2022). There are also important questions about which actors should be conducting impact evaluations. For example, there may be potential conflict of interest with some funders justifiably uncomfortable about impact evaluations designed and implemented in-house. There are important roles for both academic researchers and conservation practitioners in this space, where close collaboration can help overcome capacity and knowledge constraints (Kadykalo et al. 2021; Vargas et al. 2022)

Unwillingness to admit 'failure': Failures in conservation projects are rarely reported (Zedler 2007; Giakoumi et al. 2018; Godet & Devictor 2018). Funders may hesitate to

investigate project impacts because of the risk of reputational damage if the project is found to have been unsuccessful. However, while there is an understandable perception that admitting to poor outcomes in conservation may result in public criticism or loss of trust among stakeholders (Hunter et al. 2014; McKinnon et al. 2015; Guadagno et al. 2021), some degree of failure is inevitable where challenging things are being attempted (Catalano et al. 2018) and learning from failure is necessary for progress (Knight 2006; Catalano et al. 2019). It is also inevitable that effect sizes of interventions will be small when measured robustly against a credible counterfactual (Jones & Shreedhar 2024). Some organisations are actively attempting to create safe environments that facilitate collaborative learning from failure as well as promoting a transformative change in how conservation funders and beneficiaries operate - such as the Wildlife Conservation Society's *'Failure Factors'* (Guadagno et al. 2021; WCS 2023) and Cambridge Conservation Initiative's *'Embracing Failure in Conservation'* program (CCI 2023). Asking projects to consistently report on failures using a common taxonomy (Dickson et al. 2023), whether or not that information is made publicly available, could help advance learning from failure in conservation. Even where such information is not made public, conservation funders and projects can discuss why their previous projects have been unsuccessful and use the lessons learnt to inform their future decisions (Catalano et al. 2019).

What post-project information should be public?

Despite the fact the ERDF does not mandate making evaluations public, there are examples of good practice even for ERDF projects. For example, the Valencian Government in Spain hosts easy-to-access project dossiers and monitoring reports on their government website concerning ERDF-funded projects (Generalitat Valenciana 2023). However, the extent to which funders require public reporting clearly influences what makes it into the public domain. It is possible that further information is available internally for some projects. But without being publicly available this hinders learning by the wider community.

There can be downside from requiring all project's monitoring and evaluation data be made public meaning there are genuine trade-offs to be considered when funders develop their reporting requirements. Firstly, sharing and reporting biodiversity data publicly may present risks for rare species or habitats (Geggel 2016; Lindenmayer & Scheele 2017; Tulloch et al. 2018). The lack of a formal exemption for sensitive biodiversity data from public records requests in the US makes it difficult for federal agencies to request detailed monitoring information from funded conservation projects and may discourage the sharing of such information by groups with special expertise such as in tribal consultations (Fischman & Meretsky 2001; Amberson 2017). Secondly, many conservation projects operate in the context of delicate institutional relationships and trust between stakeholders. Making reports public could jeopardize these relationships if, for example, a project is drawing more negative conclusions about a threatened species' conservation status than national authorities. Finally, funders may be concerned that if projects are aware reporting will be publicly available, the information provided will be less candid and useful for the funder in understanding project performance and challenges. Some stakeholders may be apprehensive to publicly share data on outcomes, particularly on failures, due to perceived sensitivity or reputational risks. In some cases, where there are legitimate concerns about sensitivity of data, anonymised data could be utilised to facilitate building the evidence base without providing identifying information.

Looking forward

Recently a group representing 25 organizations which fund conservation projects came together to reflect on how funders could drive better use of evidence by projects (Parks et al. 2022). A similar initiative would be valuable to establish what post-project information should be made public, what should be exempt from public disclosure and, ideally, to agree minimum standards in a standardized template to make it easier for others to find and use information on project effectiveness. Such a standardized template, perhaps similar to the standard format used by Conservation Evidence to describe studies that test interventions (Sutherland et al. 2022),

may be more appropriate and palatable for funders and recipients to document lessons learned and provide a structure to discuss ‘failure’.

Such recommendations would be useful beyond the traditional funders of conservation projects to other organisations collecting biodiversity data and testing actions. Here we have focussed on a subset of influential conservation funders, but similarly much private sector spending on conservation to mitigate impacts is not appropriately monitored or impacts disclosed (including baseline data, as well as outcomes from interventions) (White et al. 2023). The EU also provides, through development finance, such as the European Bank for Reconstruction and Development, funds which are partly used for the mitigation of impacts and collecting biodiversity data. Assessments of development finance indicate that whilst large development banks often have disclosure requirements for monitoring and evaluation, reporting on the implementation and biodiversity outcomes of projects is limited (WWF & TBC 2021; Narain et al. 2023)

Conclusions

A lot of money is spent on conservation projects which contribute little to the conservation evidence base. Our results highlight the role that funder requirements can play in helping to encourage the generation and publication of evidence in conservation. The disparity in evidence-generation between two European funding mechanisms which fund a substantial amount of conservation action in Europe is an excellent illustration of this point. Whereas LIFE is contributing to the evidence base of what works in conservation, valuable lessons are being lost, particularly from ERDF-funded projects which have weaker requirements for transparency. Without better generation of evidence by projects, there is a risk that the hundreds of millions of euros at stake for biodiversity conservation within the EU are not being spent as efficiently as they could be. More broadly, we argue that differences in donor requirements play an important role in driving the generation of publicly available evidence of what works

in conservation. While justifiable concerns limit comprehensive public sharing, funders and the evidence and evaluation community should collaborate to establish practical expectations and standards of what post-project information should be public. Such an effort will help expand the evidence base for conservation practice and prevent valuable lessons being lost.

Acknowledgements

The research included in this publication is funded by the Endeavour Scholarship Scheme (Malta). Project part-financed by the European Union – European Social Fund (ESF) under Operational Programme II – Cohesion Policy 2014-2020, *"Investing in human capital to create more opportunities and promote the well-being of society"*. Thanks to Joe Bull for useful comments.

Conflict of interest

The authors declare no conflict of interest.

Data availability statement

Data and analysis code are available in the Zenodo repository, https://doi.org/10.5281/zenodo.13944908 (Caruana, 2024) and on Figshare (https://figshare.com/projects/Lessons_Lost_Lack_of_post-project_evaluation_is_hindering_evidence-based_conservation/177279)

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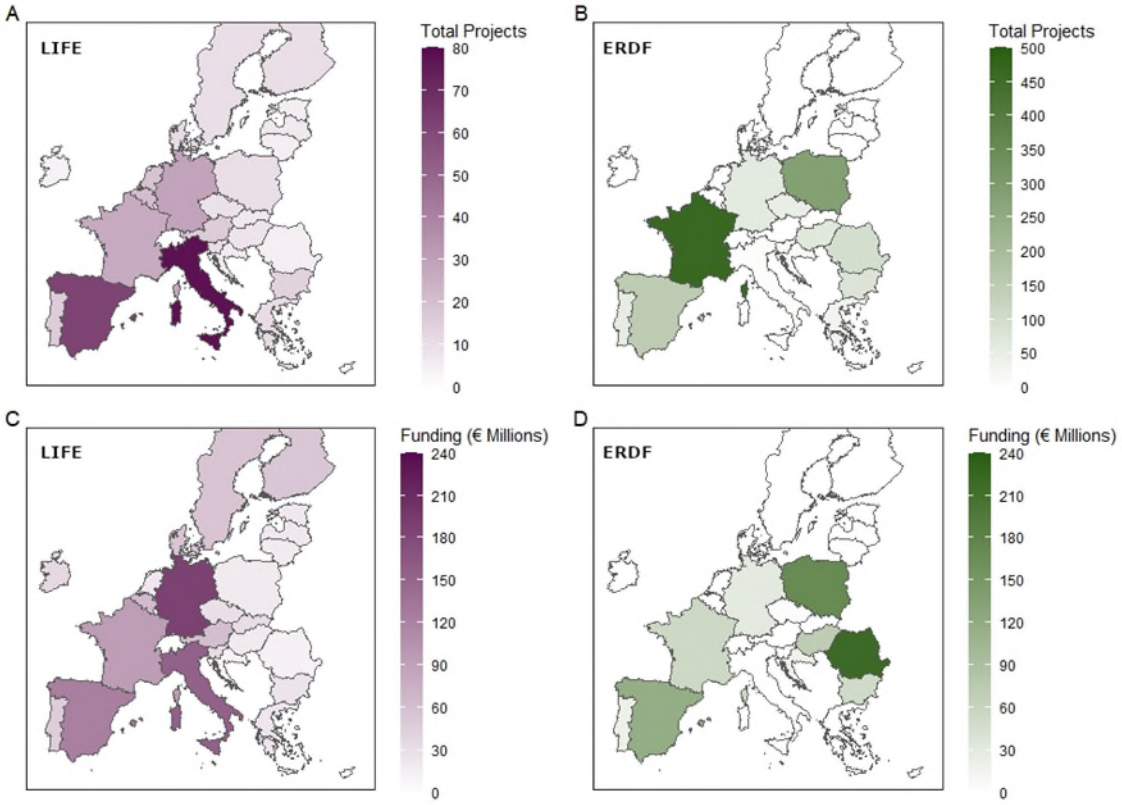
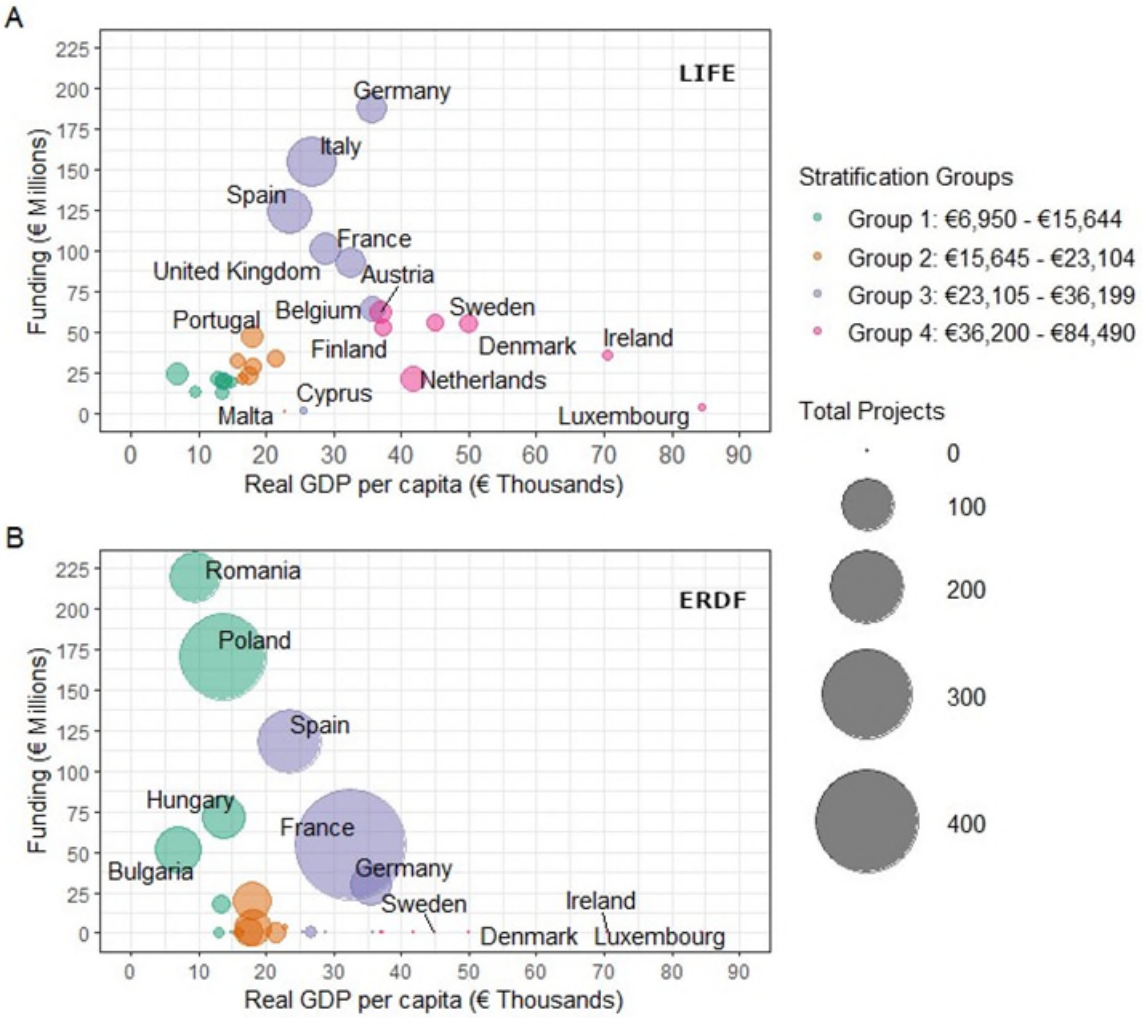


Figure 1. The distribution of conservation-related projects among member states funded by LIFE (A = 435 projects, C = € 1300M in total funds) and ERDF (B = 1,376 projects, D = € 760M in total funds).



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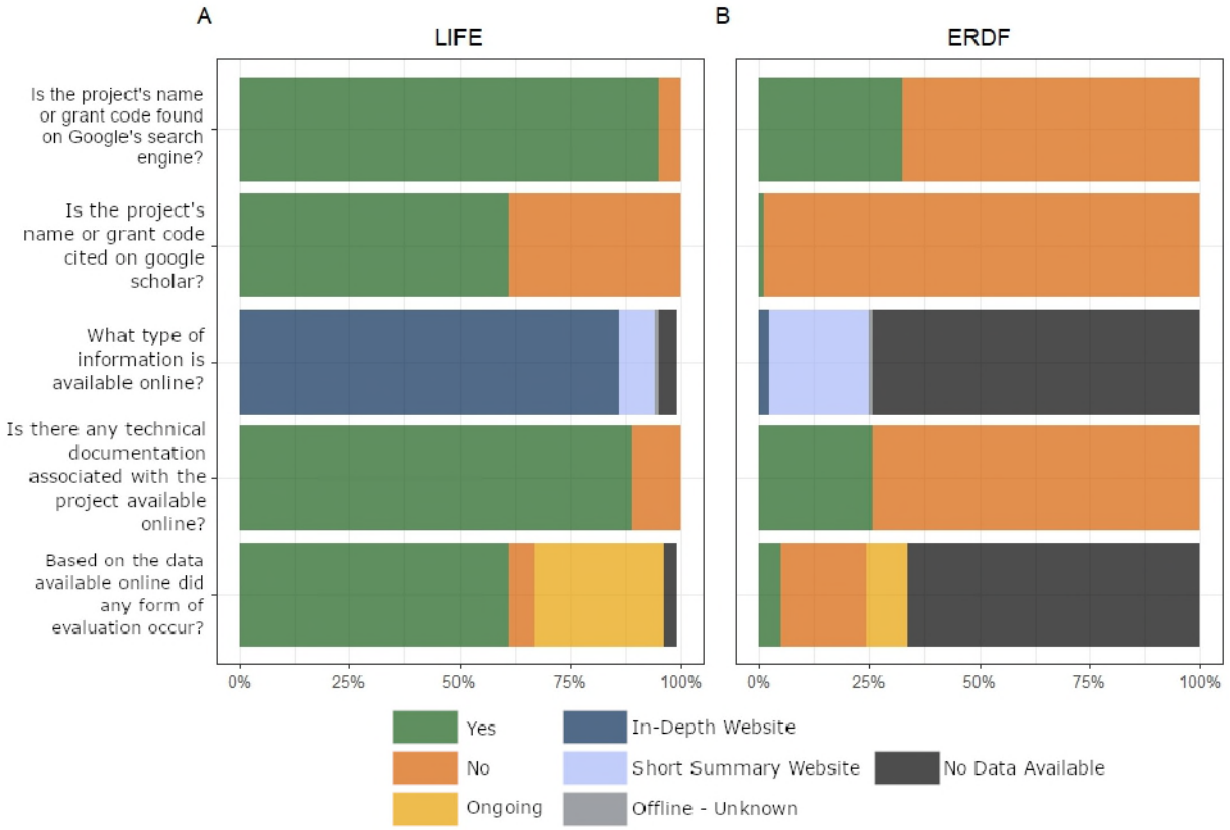
599 **Figure 2**. Illustration of the total number of projects and amount of funding each member state

600 is receiving for conservation-related projects from the LIFE Programme (A) and ERDF (B),

601 grouped by real-GDP stratification.



602 **Figure 3**. Summary statistics concerning the information available online about our stratified
603 random sample of conservation-related (A) LIFE (n = 109) and (B) ERDF (n = 345) projects.

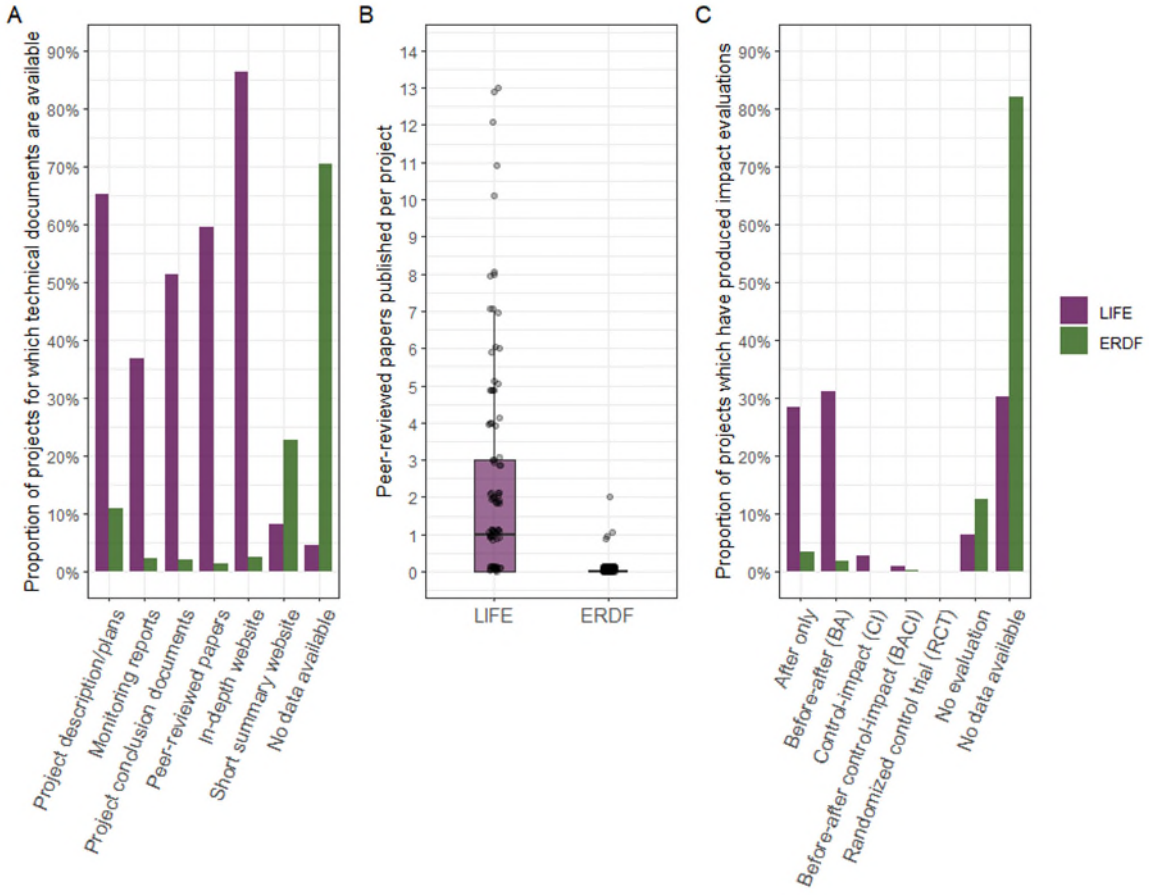


Figure 4. The type of technical documentation available (A), the number of peer-reviewed papers published per project for our stratified random sample of conservation-related LIFE- (n = 109) and ERDF- (n = 345) funded projects (B) and the study designs used in available impact evaluation (C).

Table 1. The reporting requirements of a range of conservation funders and a summary of transparency in reporting.

Conservation Funders	Source of funding	Total funding and number of projects	Are funded projects listed in a publicly accessible database?	Is technical documentation publicly available?	Is project evaluation required (yes/no)?	Is project evaluation publicly available (yes/no)?	Summary of reporting requirements
LIFE Programme	Multilateral (EU)	1.3B € across 435 projects from 2014 - 2032	Yes	Yes	Yes[1]	Yes	Beneficiaries are obliged to periodically provide technical reports to request payments. Impact evaluations ("measured against the objectives and indicators of the EU programme funding the grant" must be carried out by the beneficiaries and can also be carried out by the EC or third parties. The results of the project must be made public by the beneficiary and the EC retains rights to distribute background documents and results to the general public (European Commission 2021).
European Regional Development Fund (ERDF)	Multilateral (EU)	760M € across 1,376 projects from 2014 - 2024	Yes	No	Yes[1]	No	According to Regulation (EU) 2021/1058, Member states must report project results and conduct evaluations based on common output and results indicators listed in Annex I & II of the legislation. As a result, ERDF beneficiaries are conducting very basic reporting of their projects to their respective governments. Technical post-project evaluation is not required and little needs to be made public.
Global Environment Facility (GEF)	Multilateral (Global)	6.1B € across 885 projects from 2014 - 2023	Yes	Yes	Yes[1]	Yes	Funding transparency is a key policy throughout all of GEF's funding mechanisms (GEF 2018). Each project must have project monitoring and evaluation reports based on core and sub-indicators relevant to the expected results. These project implementation reports, mid-term monitoring and reviews, and final terminal evaluations must all be available on the GEF website (GEF 2019a). Furthermore, GEF's Independent Evaluation Office evaluates the effectiveness of GEF at project, program, portfolio, and institutional levels (GEF 2019b),and publishes the results online (www.gefieo.org).
Biodiversity Challenge Funds	National government	£227.8 M across 841 projects from 2014 - 2023	Yes	Yes	Yes[1]	Yes	Main projects supported by the Biodiversity Challenge Funds are required to generate half-year reports, annual reports and final report. Half-year reports are not publicly available. All except half-year reports are published on the project websites (Shah et al. 2022). The

							guidance specifically asks projects to report on outputs, outcomes and impacts.
European Development Fund in the Biodiversity and Protected Areas Management (BIOPAMA)	Multilateral (EU)	10.7M € across 108 projects from 2017 - 2021	Yes	No	Yes[1]	Partially	Projects funded by BIOPAMA are required to produce monitoring reports every 3-, 6- or 12 months depending on the specific grant type, as well as a final project report (BIOPAMA 2020). Monitoring reports are based on pre-established common indicators on governance and management. The specific monitoring and final reporting documents are not publicly available, however, beneficiaries are required to communicate the project results (BIOPAMA 2021).
US Fish and Wildlife Service (USFWS)	National government	18.8B $ across 39,670 projects from 2014 - 2023	Yes	No	Yes[1]	No	Projects funded by the USFWS require performance reports every 3-12 months which provide details of accomplishments based on specific program objectives, indicators or targets. Regulation requires the agency review project performance to document lessons learned, improve program outcomes, and encourage the adoption of promising practices (2 C.F.R. § 200.301 (2023)). Performance reporting and evaluations are not required to be publicly accessible. Projects funded by the USFWS also require implementation evaluation (2 C.F.R. § 200.329 (2023)).
Bezos Earth Fund	Private Philanthropy	570M $ across 41 projects	Yes	No	Unknown	Unknown	The Bezos Earth Fund provides a list of the conservation grants they have funded, but they do not disclose the necessary reporting requirements or offer any technical documentation on their website. It is unclear whether beneficiaries are required to report progress or conduct evaluations.

[1] The use of the term evaluation differs. The terminology used in most funder documents leans towards standard monitoring evaluation with a focus on implementation evaluation rather than impact evaluation relative at to some sort of counterfactual. Some use the term impact evaluation, but with a lack of detail of what is meant by this.