

RESEARCH ARTICLE

Public participation in decision-making on conservation translocations: the importance and limitations of a legislative framework

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Conservation translocations are a frequently used management tool applied by nature conservationists. Many conservation translocations have a low success rate, which is caused by various biological and societal factors. While conservation translocations are often set in human-dominated landscapes, they tend to be poorly embedded in social-ecological systems. Indeed, the primacy of biological aspects in translocation processes seems to undercut attention for societal dimensions. A key societal dimension is public participation. In this article, we identified and analyzed processes that affect the implementation of public participation. In addition, we considered whether, and under which circumstances, a legislative framework enables meaningful public participation. We used a Policy Arrangement Approach to grasp the processes at play. Sixteen semi-structured interviews were conducted with key-actors involved in the design and planning of conservation translocations in Scotland. Interviewees argued that inclusive decision-making was either unintentionally or deliberately neglected. Underlying causes related to regularly witnessed barriers such as traditional expert-driven approaches, entrenched power relations, and uncertainties on how to deliver open and inclusive public participation practices. Moreover, there was a mismatch between conservationists' expectations on how public participation should be implemented and recognized fundamentals of public participation, e.g. transparency and dialogue. The results demonstrate that while a legislative framework raises awareness and provides guidance, it is unable to take away current barriers. Due to the uncertainties around democratic decision-making, it is unrealistic to expect that a mere legislative framework alone would solve current challenges. Yet, conversely the absence of one may increase current challenges.

Key words: citizens, ecological restoration, legitimacy, participatory governance, rewilding, social-ecological systems

Implications for Practice

- Public participation promotes the success rate of conservation translocations by addressing societal aspects and enhancing legitimate decision-making and consensus.
- Advanced public participation appears difficult to achieve; dialogue and two-way interaction is key but informing methods are often seen to be sufficient.
- A participatory process should be organized as early as possible, it should be open, transparent, power relations should be managed and knowledge integration should be promoted.
- A legislative framework provides guidance and awareness, but does not take away current barriers to meaningful participation.
- Clarity in procedural aspects and norms is crucial and a legislative framework can help with that, a change in conservationists' attitudes toward the use of interactive public participation is even more important.

Introduction

Conservation translocations are a frequently used management tool for nature conservationists around the world. Many conservation translocations have a low success rate, which is often

seen to relate to biological risk factors such as poor habitat quality and limited gene pools (Seddon & Armstrong 2019). Societal aspects such as public acceptance or public attitudes are proven to affect the success of a translocation (Pettorelli et al. 2019; Seddon & Armstrong 2019), but a dominant focus on biological aspects frequently leads to negligence of societal elements involved (Butler et al. 2019).

Conservation translocations are often set in human-dominated landscapes (Pettorelli et al. 2019; Svenning

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et al. 2019) with diverging interests and perceptions of actors involved, adding to the complexity of a successful implementation (Coz & Young 2020). Perhaps more so than with many other nature conservation interventions, if not carefully managed, a translocation may rapidly become (more) controversial (Coz & Young 2020). To be successful, translocations need to be embedded in social-ecological systems (Pettorelli et al. 2019; Svenning et al. 2019), which underscores the importance of addressing societal dimensions when designing and planning translocations (Butler et al. 2019). A key societal dimension is public participation in the decision-making on translocations. Public participation practices tend to help a translocation by reducing resistance and enhancing acceptance (Svenning et al. 2019), providing consensus-based solutions, increasing mutual learning (De Vente et al. 2016) and legitimizing decision-making (Fung 2015). Indeed, driven by a shift toward inclusive decision-making in nature conservation (López-Bao et al. 2017), public participation is increasingly put forward as a crucial component of the process (Butler et al. 2019; Pettorelli et al. 2019).

However, whether current translocations pay enough heed to these insights is questionable. And, even when public participation is encouraged and implemented, numerous barriers may hinder the extent to which meaningful public participation is developed (Turnhout et al. 2010), including: (1) *Procedural uncertainties*, e.g. uncertainty about whom to involve (López-Bao et al. 2017); (2) *Resource constraints*, as participatory processes are time-consuming and costly (Jami & Walsh 2014); (3) *Distorted power dynamics*, e.g. symbolic participatory processes in which public input cannot affect the decisions made (Redpath et al. 2014); and (4) *Issues of communication*, particularly when related to translations between knowledge and discourses of experts versus the general public (Arts et al. 2019). Such barriers may in some cases even mask that old power relations remain in place while decentralized governance is promoted (Arts et al. 2014).

Public participation practices should be ‘meaningful’ to establish an inclusive setting in which the public can get involved in decision-making. A decision-making process without meaningful opportunities to participate could backfire and lead to perceived illegitimacy or even resistance (López-Bao et al. 2017). This may lead to human-human conflict over wildlife (Redpath et al. 2014) and harm the original objectives of the intervention.

Following Creighton (2005) and Fung (2015), we describe *meaningful* public participation practices as those based on a dialogue or two-way interaction between the public and facilitators and in which public input is sincerely considered in the decision-making process. The public could be local members of the public, representatives of groups of citizens but also the wider public (Uittenbroek et al. 2019). Moreover, several fundamental requirements should be met to create a social environment in which public participation can reach its full potential. Examples of such requirements are timeliness, transparency, inclusivity, trust, and knowledge integration (Sinclair et al. 2015; De Vente et al. 2016; Cote et al. 2021; Hagerman & Kozak 2021).

Facilitators—the organizers of public participation—can choose from various participatory designs, each with their own degree of citizen empowerment (Fung 2015). The variety of forms can be understood as a spectrum that ranges from one-way communication and informing types, to empowering forms in which the public can make the final decisions (IAP2 2018). The more interactive a participatory practice, the more it enables citizens to exert influence, provided that their input is considered by decision-makers (Fung 2015).

A facilitator may take several procedural aspects into account when designing a participatory practice: *who* to involve, *during what stage(s)* and how to specify the *degree of influence* (Uittenbroek et al. 2019). However, these aspects relate to the design and organization of participation practices in general. Project characteristics differ between species’ translocations. Five types of conservation translocations can be distinguished: reintroductions, reinforcements of existing populations, ecological replacements, assisted colonization, and community construction (Seddon 2010). Reinforcements attract less attention than reintroducing a long-absent species, as the public is familiar with occurring species (Seddon & Armstrong 2019). The translocation of a native plant species is likely to score low on societal opposition compared to a translocation of a mammal (Seddon & Armstrong 2019). Even between mammals there are differences in estimated impacts. These variables are likely to affect how and why public participation is organized, and add further complexity when designing a participatory process.

Guidance on, and requirements for, meaningful public participation could be institutionalized by means of legislative frameworks. However, few examples exist of such frameworks regarding translocations. And if available, it is unknown whether they help to overcome current barriers and enable ‘meaningful’ public participation.

The objective of this study is to identify and create an understanding of processes that affect the implementation of public participation in decision-making on conservation translocations. We used three subaims to achieve this objective: (1) to identify main forms of public participation used in decision-making on conservation translocations in Scotland; (2) to identify processes that affect the implementation of public participation in conservation translocations in Scotland; (3) to understand the effect of a legislative framework on the implementation of public participation in conservation translocations in Scotland.

Methods

Case Study Design

We focused on Scotland as a variety of conservation translocations have been carried out here (e.g. red kites [*Milvus milvus*], white-tailed eagles [*Haliaeetus albicilla*], beaver [*Castor fiber*]) or are planned such as wildcat (*Felis silvestris grampia*) reinforcement. There is also a lively discussion on other potential translocations, like the Eurasian lynx (*Lynx lynx*) (e.g. Hawkins et al. 2020). The Scottish government aims to promote inclusive, transparent decision-making practices. To strengthen the voice of the public in planning processes, it has issued several

strategies or acts, such as the Community Empowerment Act 2015 and the Land Reform Act 2016. In addition, the third Land Use Strategy is currently in consultation (Scottish Government 2021). The government's aim to strive toward inclusive decision-making also trickles down to the conservation sector through the establishment of a legislative framework, the Scottish Code for Conservation Translocations (National Species Reintroduction Forum 2014). It is one of the few legislative frameworks worldwide that promotes inclusive decision-making processes on conservation translocations. This context provides the opportunity to explore the impact of a legislative framework on public participation practices.

Four conservation translocations were investigated. Reintroductions or translocations primarily motivated by recreational or commercial objectives are not considered as a conservation translocation (Seddon 2010), and thus not included in this study. The cases were selected to ensure a spread in taxa, biological and socioeconomic impacts as perceived by decision-makers (either policy-makers or conservationists), and familiarity of the public with the species. The four cases are: (1) the reintroduction and recent reinforcements of Eurasian beaver (*C. fiber*); (2) the latest stage of red kite (*M. milvus*) translocation in Aberdeenshire; (3) the pine hoverfly (*Blera fallax*) translocation in Cairngorms National Park (Inshriach); and (4) the translocation of small cow-wheat (*Melampyrum sylvaticum*) in Cairngorms National Park and Glen Affric.

Public participation in plant translocations is often limited to post-release activities such as volunteering activities (e.g. Maschinski et al. 2012). Guidelines on plant translocations do not explicitly mention the use of public participation other than keeping stakeholders informed (Maschinski & Albrecht 2017), while research on plant translocations often fails to—or only narrowly considers societal elements (Hagerman & Kozak 2021). The plant translocation was added to understand why public participation is considered to be less important in the decision-making phase (Research aim 1).

See Supporting Information for background information on procedures regarding public participation in conservation translocations in Scotland (Supplement S1) and the four cases (Supplement S2).

Data Collection

A preliminary investigation of existing literature was conducted. Both scientific and gray literature (policy documents, management reports, news articles) were explored. We used elements of a systematic review by following a limited set of questions on the background of respective translocations such as objectives, potential impacts, perceptions, and the forms of public participation used. Data were found using Google, LexisNexis, Google Scholar, and Scopus. The preliminary investigation served as input for the primary research methodology (semi-structured interviews) and within-methods triangulation (Flick 2018). For example, the preliminary investigation on the red kite translocation indicated that local members of the public (other than landowners) were only informed after the birds were released. Such findings were incorporated in the specific

interview guide to enable a discussion on the reasons why the organizing actor had chosen this approach.

Semi-structured interviews were conducted with representatives of organizations involved in conservation translocations, both governmental bodies and NGOs (see Supplement S3 for a list of organizations and interviewee numbers). Representatives included conservation directors, community engagement officers, project officers, ecologists, policy makers, and representatives of interest groups. Interviewees were selected on involvement in the four cases. Some interviews included references to other conservation translocations. Therefore, follow-up interviews were scheduled with specialists who were involved in other translocations that came up in the initial interviews, e.g. the potential reintroduction of lynx, the reintroduction of white-tailed eagle, and the translocation of the freshwater pearl mussel (*Margaritifera margaritifera*) and several plant species and lichen. Interviewees were contacted directly, sometimes following a snowball sampling method (Bernard 2011). Sixteen interviews were conducted, ranging from 30 min to 2 h, recorded and transcribed verbatim. For one interview the interview guide was sent and filled in due to scheduling complications. The interviews were conducted in line with the ethical guidelines of Wageningen University and Research. All data were treated anonymously to ensure a safe environment and to keep socially desirable answers to a minimum (Bernard 2011). An interview guide (Supplement S4) with predesigned topics and questions was used which was tailored toward the role of the representative, the translocation his/her organization worked on, and findings of the preliminary investigation.

Finally, we would like to emphasize that we collected data on the perspective of conservationists, as they are the prime facilitators of public participation in decision-making processes on translocations and therefore have a direct impact on how public participation is organized (Research aim 2). Other actors such as the Scottish Farmers Union were not interviewed due to resource limitations. The data, and the results found in this study, are therefore applicable to facilitators of public participation processes, while other actors could express different concerns, struggles, or solutions.

Data Analysis

We used the 'policy arrangement approach' (hereafter: PAA) to structure part of the data analysis. The PAA combines insights from sociology, political sciences, and public administration sciences (Arts et al. 2006). It offers an analytical tool to understand and explain processes that affect and shape conservation policy domains (e.g. Anyango-van Zwieten et al. 2015; Ochieng et al. 2018). Conservation translocations are ideally embedded in complex social-ecological systems that consist of multiple interrelated dimensions such as legal, social, or political dimensions (Lieberink 2006; Pettorelli et al. 2019). The PAA provides an analysis format based on four pillars and their interactions: (1) *actors and coalitions*, e.g. who are (supposed to be) involved; (2) *discourses*, e.g. views of actors related to norms, values, problem definitions; (3) *power and influence*,

e.g. resources; and (4) *rules of the game*, formal and informal rules (adapted from Liefferink 2006). Compared to other approaches that focus on one dimension, the PAA helps create an overview of all processes in a policy domain. In addition, it helps to clarify the impact of a legislative framework in a setting where a large variety of processes are at play. Therefore, the four pillars enable a structured approach to understand how and why public participation practices are applied (in relation to the legislative framework), to what extent fundamental requirements are met by current practices, what processes are at play, and it provides the opportunity to identify potential policy interventions (Arts et al. 2006) to strengthen current practices.

Interview data were analyzed by applying a thematic analysis in AtlasTI (version v.8.2.32–8.2.33). This approach was used to identify recurring features within qualitative data—transcripts of semi-structured interviews (Bernard 2011). Two distinct

coding strategies were integrated in a multi-step analysis design (Fig. 1). First, a deductive approach was used to identify the main forms of public participation used in each case (Research aim 1). Pre-determined sets of codes were used as a guidance to identify themes (Saldaña 2015). These codes were based on the different forms of public participation (IAP2 2018). To create an initial understanding of the use of these main forms, we identified project characteristics that directly affected the decision on the degree of participation by using an inductive approach (Bernard 2011). Finally, the processes affecting the use of meaningful public participation were identified by employing a categories-of-categories approach (Saldaña 2015) (Research aim 2). Step 3A in Figure 1 comprised a deductive approach. The four pillars of the policy arrangement approach were used to provide a first step in structuring the results. Data were categorized in broad themes related to each of the four pillars: (1) actors; (2) discourses; (3) power and influence, and

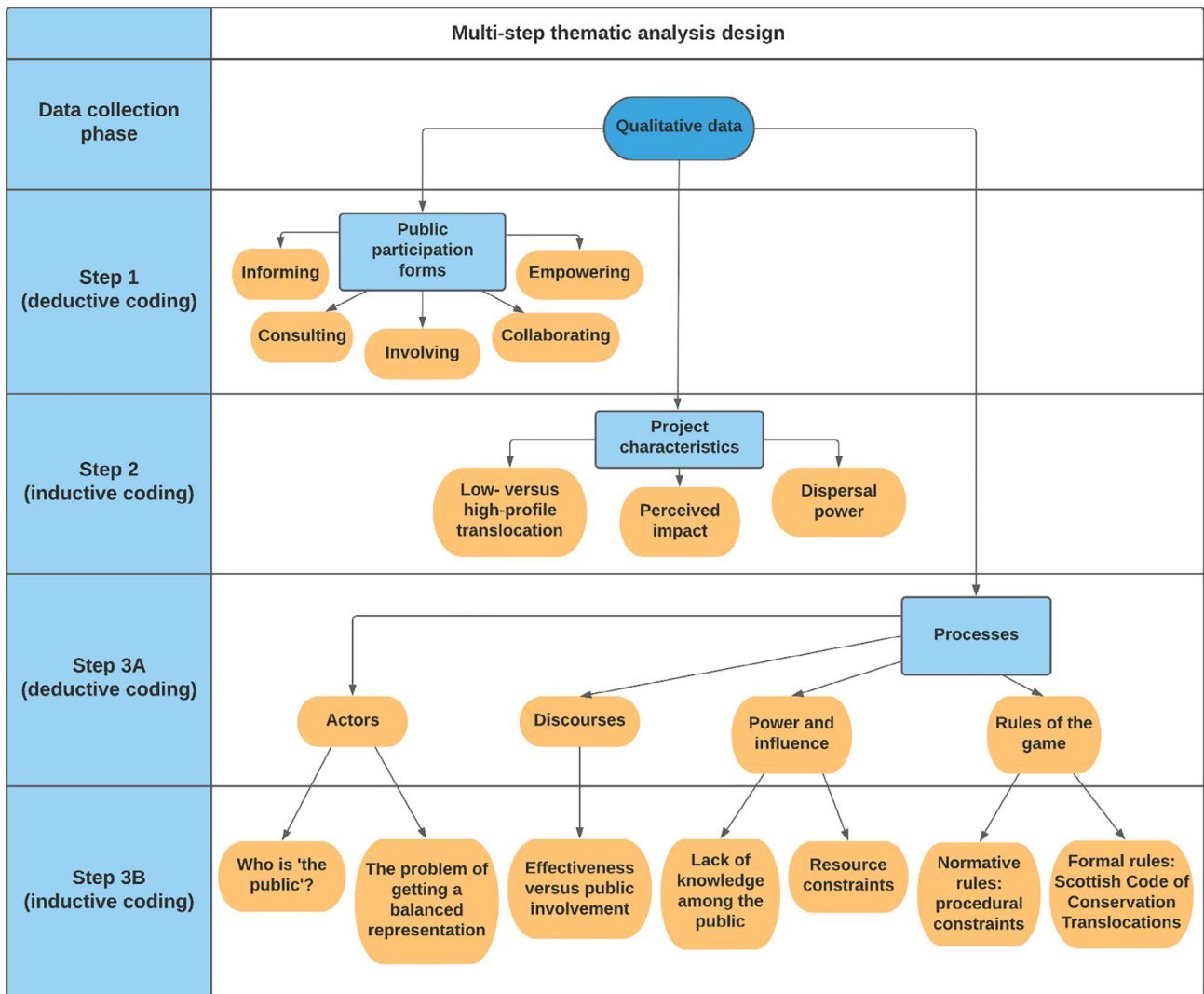


Figure 1. Multiple-step thematic coding design used to analyze the data.

(4) rules of the game. Step 3B comprised of two rounds of inductive coding to identify, distinguish, and refine specific processes per pillar. The list of codes and coding frequencies is presented in Supplement S5.

Results

Forms and the Degree of Public Participation

The importance of public participation in decision-making on conservation translocations was explicitly emphasized by ten of the sixteen interviewees. These interviewees stated that public participation could help build trust and support for the benefit of the translocation. As well as this, it could e.g. address concerns toward potential effects on farmers' enterprises or fisheries regarding beaver activity. Five interviewees therefore expected a gradual change toward more public participation in decision-making processes, but also questioned the extent to which the public is meaningfully involved in running translocations. The field of conservation traditionally focused on expert-driven approaches and interviewees argued that inclusive decision-making was either unintentionally or deliberately neglected in the past. Interviewees asserted a change in mindset is still needed. This was reflected in the main forms of public participation found in the different cases (Table 1).

Interviewees generally considered the degree of public participation to be dependent on the 'risk perception' of conservationists and its three indicators: (1) *Low-profile* versus *high-profile* translocation. Sometimes phrased as microfauna versus megafauna or mammals versus other taxa; (2) *Perceived impact* (biological or societal); and (3) *Dispersal power* in combination with the *scale* of the translocation. Ten interviewees indicated that high-profile or potentially conflict-prone translocations should lead to more opportunities for public participation and a higher degree of (public) influence. Three interviewees mentioned that low-risk translocations of microfauna or plants could potentially lead to public participation in bottom-up initiatives,

as such translocations are easier to manage. However, according to the interviewees, such bottom-up initiatives are rarely implemented in practice.

Both high-risk and low-risk translocations could *theoretically* lead to an increased level of public participation. Yet, this was not found in the case studies as participation is hindered by a variety of processes. This was underscored by 5 of the 10 interviewees who were supportive toward public participation but who explicitly mentioned that meaningful public participation is an ideal and impossible to achieve. Seven hindering processes are described in the remainder of this Results section.

Processes Hindering Public Participation

The processes in the following paragraph are structured along the four pillars of the PAA.

Actors. *Who Is 'the Public'?* The interviewees expressed a variety of definitions on who 'the public' is. This ranged from neighboring landowners to, theoretically, the whole Scottish society. Interviewees who used the narrow definition indicated the importance of involving local neighboring landowners or anyone that is considered to be important for the success of a project, but not necessarily other local members of the public. This was seen in several plant translocations such as the alpine sow thistle (*Cicerbita alpina*): local landowners were consulted and local members of the public would be informed by using interpretation boards during the implementation phase. Two interviewees pointed out that there is a danger in this narrow definition as interviewees witnessed unintentional mistakes which led to the exclusion of specific actors: actors who were not necessarily classified as being affected, but who wanted to be involved nonetheless. This resulted in dissatisfaction toward the facilitator, the specific translocation and projects later on:

Table 1. Overview of the main forms used during different phases of a translocation, adapted from Arts et al. (2014) and National Species Reintroduction Forum (2014). *Post-release activities were beyond the scope of the study, but are included in the table to provide a complete overview on all phases of a conservation translocation.

	<i>Beaver</i>	<i>Red kite</i>	<i>Pine hoverfly</i>	<i>Small cow-wheat</i>
Initial appraisal				
Design phase: Feasibility/ desirability studies— socioeconomic and legal requirements	National and local consultations			
Planning and preparation phase	Local consultations/ informing methods			Small-scale consultation (Dundreggan)/none in Cairngorms NP
Release phase	Local consultations/ informing methods	Informing (neighboring landowners); local public informed after release phase	Informing	Informing
Post-release activities*				

So the local staff consulted with the local land owners and they were quite content. But they did not speak to the local angling group ... I think they don't mind [the release], but there was the perception that they weren't consulted ... that sort of bad experiences always demonstrate the value of public participation and that it is important to speak to more people than fewer. I am pretty sure we wouldn't have had a problem if we had been speaking to them before, but they felt neglected and it was very rude. And it did cost quite some time to repair that developed trust again. (Interviewee 14—translocation of freshwater pearl mussel)

The most popular definition of 'the public' concerned the local community near the release site. But this still gave rise to many uncertainties, especially with regard to species with a strong dispersal ability as impacts on areas beyond the release area needed to be considered:

When you release [species with poor dispersal powers] in an area you know that basically they are going to stay in that area and might not spread at all and have no impacts outwith the release area. In other words, neighboring communities will not be affected. But with the beaver, neighboring communities could be affected so which community do you ask to vote? How far do you need to go, and how do you consider and weigh the different interests of different communities? (Interviewee 12—beaver reintroduction)

Two other interviewees asked similar questions but none could provide a straightforward answer. This uncertainty on who to involve was identified as one of the main problems of public participation by these interviewees.

The Problem of Getting Balanced Representation. Interviewees found it challenging to reach out and involve the entire public spectrum. Eight interviewees mentioned that a lack of public interest affected the inclusion of a variety of views. This was seen to be a problem in all translocations, but to a lesser extent for (charismatic) vertebrate translocations.

Three interviewees also considered information availability and the accessibility of discussions:

I think that there are lots of examples where people do not get involved because they do not know what they should be saying. Or when they do get involved, it is so superficial because they cannot get engaged at that level everyone is talking about. So it might put them off. (Interviewee 1—translocation of pine hoverfly)

Conservationists thus found it difficult to move from "the usual suspects"—members of the public who wish to be involved as

they have a certain basis of knowledge, interest, or background—to a wider public. Five interviewees perceived that these usual suspects often have a certain, perhaps hidden, agenda. It was felt that some members of the public or interest groups used consultations to forcefully express their opinions and pursue their own interests. These agendas were sometimes thought to be a reason to think twice about organizing public participation as these could have a polarizing effect, especially in high-profile translocations. It was seen to be hard, if not impossible, yet essential to involve "neutral" members of the public. The interviewees indicated that several agencies preferred to merely inform the public to avoid such polarized consultations.

Discourses. *Effectiveness Versus Public Participation.* Five interviewees felt that a trade-off should be made between public participation and the effectiveness of the translocation. Two types of trade-offs were described by interviewees.

The first concerned a trade-off between short life cycles of species such as invertebrates and meaningful involvement. A consultation was sometimes considered to be a bureaucratic and time-consuming process that hindered effective translocations, especially with regard to microfauna such as the pine hoverfly. As mentioned by one interviewee, a proper consultation would take 2 to 3 years and the pine hoverfly could go extinct during this timeframe. Another interviewee suggested that the long timeframe of a consultation could discourage the use of participatory methods and could even lead to illegal releases:

There may be a danger that if you insist [on consultations], you may actually put some projects off... [...] extra work is forced upon [the project staff] in terms of consultations. They might stop and throw some out of the window and let them [species] go on with it. And I think there are instances of not entirely legal reintroductions. And I think the more stringent the legislation becomes, there is a greater danger that you push people in that direction. (Interviewee 13—translocation of pine hoverfly)

The second trade-off relates to disturbances versus meaningful participation. Public awareness was seen to threaten the success of translocations as it could induce disturbances. In the case of the freshwater pearl mussel, local communities were not informed as there were suspicions that some members of local communities were involved in illegal pearl fishing. The release site of red kites in Aberdeenshire was kept on a low-profile to minimize potential disturbances.

The use of informing methods at a late stage were in these instances considered to be a win-win solution as it increased public awareness during or after the release phase, the public was 'involved' and the potential for disturbances was minimized.

Power and Influence. *Lack of Knowledge Among the Public.* Many interviewees felt that the public are not able to provide useful input. It was asserted that an expert knowledge basis is needed to provide meaningful input. Twelve out of sixteen interviewees mentioned that (a lack of) expert knowledge affected the usability of public input. Eight of these twelve interviewees emphasized this was primarily a problem for invertebrate and plant translocations as these involved many technicalities:

Looking at a plant reintroduction, I think it is difficult given that we've usually got a well-designed scientific approach and planting areas are restricted to very specific requirements such as native habitats, soil type, deer density, fencing, et cetera. (Interviewee 5—translocation of small cow wheat)

But, this perceived lack of knowledge was found to exist for all taxa. One of the interviewees pointed out that members of the public supported conservation action for red deer (*Cervus elaphus*), which is controlled by deer management in Scotland.

You can take a look at the Scottish Biodiversity List: members of the public were engaged with in a survey and were asked to make a list of species they found most important in terms of conservation. They came up with species that in reality do not have to have a priority at all. The red deer species came up as the nr. 1 animal species that should be protected, which is rubbish ... So do you listen to such input or not? And waste precious resources on this? (Interviewee 9—general notion)

Five interviewees indicated that public input is only useful to decide on general matters, due to this very notion of a lack of expertise on species and the fundamentals of conservation management. Three interviewees indicated that the public could also help fine-tune pre-designed plans. In the latter case, local knowledge was sometimes seen to be a valuable addition to adapt a plan to a local setting or to incorporate local interests or concerns.

Resource Constraints. Six interviewees explicitly mentioned the effect of resources constraints, that is, budget, staff, and time. These interviewees admitted that it costs a considerable amount of resources to organize participation practices.

It tends to be about telling people what we are doing ... But I'd be interested to hear about their view, it might be a half-day process to get the same endpoint. By the end of it, people are more informed, they understand it, they are bought into it and able to defend it. By investing time you gain a better understanding and appreciation and maybe even get ambassadors for what you are trying to do. But it is about investing time and more often than not we go for the quick option. (Interviewee 7—general notion)

Decreasing financial resources lead to trade-offs between the resources needed to organize public participation practices and the impact in terms of actual involvement. Some interviewees implicitly mentioned that, when considering the lack of interest among many of the public or the need for education to ensure usable input, resources might better be spent on other aspects of the project.

Rules of the Game. *Normative Rules: Procedural Uncertainties.* Interviewees expressed concerns towards procedural aspects of public participation: e.g. when or how. Eleven interviewees considered informing methods in the post-release phase sufficient to establish support. Interviewees argued this preference is widespread among conservationists. The use of informing methods was explicitly countered by three interviewees who thought that public participation should be about engagement:

Some people think a consultation is you go somewhere and say to the local people that you have this great idea of a project, this is how we design it, this is how we are going to do it, are there any questions. It is almost like a presentation or a lecture. It very much should be engagement. (Interviewee 12—general notion)

If participatory methods were considered, uncertainties for interviewees on when and how arose. Two broad options were considered by interviewees: (1) public participation during an early phase, but this was regularly seen to be hindered by a lack of participant expertise; (2) fine-tuning the design. However, by this stage the final decision is (implicitly) taken and interviewees suggested that the public would not be able to exert a large amount of influence nor would it lead to cancellation of a plan.

Interviewees also witnessed processes which lacked openness or a neutral stance of the facilitator. Two interviewees expressed concerns toward conservationists who were seen to discourage the public from delivering input by using expert language. Two interviewees felt consultations were sometimes used as a "checkbox" process to conform with legal requirements without offering meaningful participation, e.g. by merely talking to a NGO's local supporters. Other interviewees gave examples of facilitators being "economical with the truth":

You should always be wary of giving information, but also on the extent to which information is properly provided. But to what extent is information always given for a 100%? Project leaders are often quite passionate people who want to get a project running, not to say that they would keep information deliberately back but in a way it has an effect on the info provisioned. (Interviewee 4—general notion)

Interviewees wondered how public input is, and could be, used in such settings. This deliberation also extended to the

consideration of public input when final decisions were being made. Two interviewees argued more openness and transparency throughout the process is required, not only for the public but also for conservationists involved. Four other interviewees argued that transparency could also (be felt to) harm the translocation's objectives, e.g. as it could induce risks that led to the disappearance of the specific species in the first place, such as illegal fishing.

Formal Rules: Scottish Code for Conservation Translocations.

The Scottish Code promotes early involvement, transparent decision-making processes and an open atmosphere (National Species Reintroduction Forum 2014). Six interviewees mentioned that the Scottish Code, established in 2014, provides a form of guidance and, in some cases, a requirement for conservationists to involve the public during the decision-making on conservation translocations. These interviewees argued that the Code therefore contributes to increased levels of public participation. Adhering to this legislative framework could lead to a refusal of future license applications if stakeholders do not agree on the translocation, which is seen to be a break with translocations carried out before the implementation of the Code. The Scottish Code aims to guide the shift toward interactive decision-making by involving citizens:

I would say that if for each well-designed translocation type, the ideal is that local citizens are allowed to be involved in the design ... I think that if we had a proposal in which an idea was put forward but they have not spoken to anybody and made it in isolation, the alarm bells would ring ... even if there were no socio-economic risks and such. (Interviewee 12—plant translocations)

One interviewee also indicated that the Scottish Code offers opportunities for an adaptive, case-by-case approach. This offers the facilitator the opportunity and freedom to tailor a participatory procedure toward the risk of the translocation at hand.

Despite optimism on overall stakeholder participation, four interviewees were unaware of the Code's guidance on public participation and expressed concerns regarding involvement of members of the public. Two other interviewees felt that some conservationists considered public participation to be a procedural hurdle to conform with legal requirements. These interviewees questioned the meaningfulness of public participation in practice.

Discussion

The current use of public participation in decision-making on conservation translocations has sparked optimism among several interviewees who believe in the importance of inclusive decision-making processes. Yet, our results show that practices remain flawed as a result of fundamental problems, uncertainties and misunderstandings. We first discuss three broad issues, derived from the results, before discussing the interviewees' perceptions and current practices in relation to the legislative framework. Finally, we consider why the existing legislative

framework is unable to take away current barriers to public participation.

First, the importance of organizing public participation at various and early stages of a decision-making trajectory is rarely thought of or acknowledged in practice. Several interviewees argued that conservationists are increasingly aware of this importance. However, our results suggest otherwise. Most interviewees showed a tendency to (unintentionally) switch from public participation in the planning and decision-making phase to public participation as volunteers in the post-release phase. Interviewees also showed a preference toward informing methods. These preferences are in part induced by trade-offs between effectiveness and participatory practices that were considered to cause increased disturbances or delays by lengthy consultations. The latter was found to be a trade-off for invertebrates with a short lifecycle like pine hoverfly in this study, but it appears to be more a widespread trade-off in translocations in general (Coz & Young 2020). The preference toward informing methods is common in nature conservation in the United Kingdom, and beyond, in which public participation is often limited to post facto participation and citizen science monitoring. However, such practices lack the power to shape the content of the project (Paloniemi et al. 2015).

Second, the results demonstrate a deeply rooted use of expertise-driven approaches. Other types of knowledge or perceptions are often disregarded or deemed useless. This feeds into uncertainties on how public input could be used, or public input is deliberately ignored in the decision-making process. This is recognized in interviewees' examples on input delivered by the public on the Scottish Biodiversity List and the lack of knowledge regarding plant or invertebrate translocations. Broadening the scope to include other perspectives or other forms of knowledge, e.g. local or traditional ecological knowledge (Gann et al. 2019), is sometimes felt unnecessary by conservationists (Doyle-Capitman et al. 2018). This was recognized in the attitude of many interviewees of this study. It is acknowledged that professional knowledge forms the foundation of a successful translocation (Baker & Eckerberg 2016), but a focus on professional knowledge corresponds to a traditional focus on biological aspects of a translocation. This leads to the (unintentional) exclusion of actors, such as the public, with other sets of knowledge. It also reinforces existing thinking patterns on problem definitions and solutions (Hagerman & Kozak 2021), neglecting or misinterpreting current drivers for a species' decline. The social-ecological systems in which translocations are set emphasizes the need of knowledge integration to limit conflicts and to ensure informed, legitimate (Ainsworth et al. 2020), consensus-based decision-making processes (De Vente et al. 2016). Whereas steps are set toward a guiding framework on knowledge co-production and integration (Ainsworth et al. 2020), the actual integration of various forms of knowledge is still hindered by expert-driven approaches.

Third, interviewees were uncertain about who to define as 'the public'. This uncertainty was recognized in the wide-ranging definitions given by interviewees. These definitions correspond with two broad views toward the concept of 'the

public' in scientific literature (Uittenbroek et al. 2019). The definition that is adopted affects who is targeted by facilitators. The narrow definition emphasizes the inclusion of members of the public who are likely to be affected. However, interviewees regularly faced uncertainties on how to decide who will be affected, especially when a translocation could have widespread impacts. This could induce exclusion of members of the public who assume they have an interest, while a decision-maker assumes they do not (Uittenbroek et al. 2019). This was experienced by an interviewee whose organization did not identify all groups of members of the public who wanted to deliver input. This resulted in a sense of exclusion and mistrust towards the facilitator and the decision-making process on the respective translocation. Therefore, some interviewees emphasized it is important to also include members of the public who are not directly affected. Several interviewees mentioned that members of the public who are affected do not necessarily represent the interests of other locals or the wider public, as in line with the concept "tyranny by the minority" (López-Bao et al. 2017). These interviewees argued that broadening the scope could, in theory, solve this and increase representativeness. Nevertheless, these interviewees also argued it is the "usual suspects" who are involved as they have the resources (availability and knowledge) to do so. Interviewees argued that if no broader representation could be achieved, if current representation leads to polarized consultations, and as conservationists' resources to organize participatory processes are restricted, it would be better to scale down toward informing methods and to save precious resources for other aspects of the translocation.

The three abovementioned issues appear to indicate a mismatch between conservationists' expectations on how public participation should be used and the fundamentals of public participation. Some interviewees expected that a legislative framework, such as the Scottish Code on Conservation Translocations, could address the earlier-mentioned issues and provide a first step toward meaningful public participation. These interviewees indicated that the legislative framework raises awareness while providing guidance and legislative requirements. It therefore could have a positive effect on meaningful public participation.

On the other hand, there were several interviewees who explicitly questioned its effect on participation practices. Interviewees provided examples of symbolic practices to meet legal requirements, such as consultations organized by a specific NGO with its local supporters as the target audience. Interviewees also described public participation practices which arose voluntarily and independent of any legislative framework, like collaborative workshops in which the public could decide on the final design of a plan. These two scenarios demonstrate two dimensions: legal institutionalization does not ensure meaningful public participation and a legislative framework is not a requirement for meaningful public participation either. This is in line with the findings of Papadopoulos and Warin (2007) who argue that public participation may be deeply institutionalized but could still lead to symbolic public participation and vice versa.

Collectively, the three earlier mentioned issues correspond with several fundamental and regularly (unintentionally)

neglected aspects, including timeliness, transparency, openness and inclusion (cf. Creighton, 2005; Sinclair et al. 2015; Reed et al. 2018) which are elements promoted by the Scottish Code. This raises the question as to whether a legislative framework can take away current barriers. Indeed, as of yet, few practices meet earlier mentioned fundamental requirements. The hindering processes described in the results are well-known barriers in the field of public participation and, despite all good intentions, the Scottish Code seems unable to take away these barriers.

The implementation of a legislative framework is subject to uncertainties on the stringency of requirements involved. Several barriers could be taken away by more stringent legislation, such as transparency of decision-making processes or how public input is used in the final decision. But a participatory process should be adapted to the timescale and spatial scale of the issue at play (Reed et al. 2018) and interviewees indicated that each translocation requires a case-by-case approach. A stringent legislative framework could hinder such adaptive approaches (DeCaro et al. 2017), which was indeed discouraged by an interviewee who fears illegal translocations to avoid stringent requirements on participation.

However, the nonbinding character that enables a tailored approach also creates dilemmas and raises uncertainties on normative rules, values and who to involve, as found in the results. As several interviewees indicated, a paradigm shift is still needed, normative uncertainties should be solved and conservationists should create an understanding of the mechanisms of public participation. This also requires conservationists to deal with values other than their own to avoid the pitfall of superficial involvement (Gamborg et al. 2019). Such a pitfall was observed in interviewees' preference toward informing methods, despite the legislative framework, indicating that these dilemmas cannot be solved by legislation alone.

Ultimately, the who, what, when, where and why of public participation are some of the most fundamental questions on the democratic content of decision-making in translocations, and in nature conservation more broadly. Answering these questions through a practical translocations project thus requires at least an implicit ethical positioning by facilitators regarding organizational decision-making models (e.g. administrative, incremental, garbage can model [cf. Tarter & Hoy 1998]) and broader theories of democracy (responsive, participatory, deliberative [cf. Teorell 2006]). Of course, this positioning correlates with the level of importance a facilitator assigns to a legislative framework.

Given the fundamental character of these questions around democratic content, it is by no means surprising that many facilitators struggle with the implementation of public participation principles and mechanisms. These facilitators often end up adopting an ecological approach (e.g. based on informing practices, as found in this study) instead of a management approach based on shared decision-making (Cote et al. 2021). It is arguably unrealistic to expect that a legislative framework alone would solve such challenges. But a framework may act as a basis to work from, and a reminder that—as for any democratic nation-state—democratic principles require constant work and

dedication. Common notions under the banners of ‘process-efficiency’, ‘cost-effectiveness’, ‘primacy of expert knowledge over lay knowledge’, and ‘urgency of quick and decisive conservation action’ signify forces that will inadvertently erode democratic content of decision-making.

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Supporting Information

The following information may be found in the online version of this article:

- Supplement S1.** Conservation translocations in Scotland—a background.
- Supplement S2.** Introduction to the conservation translocations which are chosen for the case study.
- Supplement S3.** List of organizations interviewed and the corresponding interviewee number.
- Supplement S4.** Interview guide.
- Supplement S5.** List of codes and coding frequencies.

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