

# Public participation in conservation translocations in Scotland

Striving towards democratic decision-making in nature conservation

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MSc Thesis



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## Foreword

Before you lies the MSc thesis 'Public participation in conservation translocations in Scotland. Striving towards democratic decision-making in nature conservation'. The aim of this thesis was to identify and analyse processes which affect the use of public participation. These processes were compared to the societal objectives of public participation to assess the effectiveness of the concept. This study has been conducted from August 2017 till February 2018 as part of the master's programme Forest and Nature Conservation at the Wageningen University and Research (WUR), the Netherlands.

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## **Abstract**

Conservation translocations are an increasingly popular management tool among nature conservationists. However, the success rate of conservation translocations is low. It has been argued that this is in part caused by neglecting societal aspects of conservation translocations. Public participation in the decision-making phase on a conservation translocation is used to address such societal aspects. An effective or meaningful public participation process should meet several requirements, such as two-way interaction, input which is being considered in the decision-making process, transparency and timeliness. The effectiveness of public participation practices is regularly questioned. However, this has barely been studied in the light of conservation translocations. The aim of this study was to identify processes which affect the (effective) functioning of public participation. Processes which have been identified have been compared to the societal objectives of public participation to determine to what extent these objectives are achieved. The achievement of such societal objectives could make decision-making processes more democratic as democracy and participation are fundamentally intertwined. The development of both the participatory and deliberative democracy model shows an increased awareness of the importance of interactive decision-making, in which members of the public are given the opportunity to participate. The shift from a steering and hierarchical type of government to interactive and society-centric governance underlines this increased importance. Such shift to governance should lead to an increased use of effective public participation methods. The policy arrangement approach, and its four driving forces, has been used to determine which processes affect the functioning of public participation. This study has focussed on conservation translocations in Scotland. A case study has been used in which four conservation translocations were analysed. Data was collected by conducting semi-structured interviews with specialists in the field of nature conservation in Scotland. These semi-structured interviews were also used to collect data on the use of public participation in other conservation translocations and on public participation processes in general. The results show that mainly informing and consultative forms of public participation are used. There are several processes which (often negatively) affect the functioning of public participation. Examples of such processes are: distorted power relations, a perceived lack of interest and knowledge among the public and uncertainty on how to organise meaningful public participation practices. Under current conditions, public participation in conservation translocations in Scotland is seen to fail. The objectives on meeting legislative requirements and increasing awareness of conservation translocations are seen to be met by the current practices. However, broader underlying objectives such as citizen empowerment, establishing and increasing legitimacy of decision-making processes and several good governance principles such as inclusiveness or transparency are not met. This makes decision-making processes on conservation translocations in Scotland less democratic compared to a situation in which effective or meaningful public participation practices are used. It is recommended to conduct further research on: 1. The perspective of the public: to create an understanding on why the public rarely makes use of opportunities to get involved. Such understanding can be used to address deficiencies in the design of public participation practices; 2. The different phases in which meaningful public participation could be implemented, to alleviate uncertainties on the timeliness of public participation. 3. Public participation and power relations: A study on enhancing the design and evaluation of participatory processes could be used to create a setting which leads to a more meaningful consideration and weighing of the input of the public in an arena with different power relations at play.

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## 1. Introduction

Conservation translocations are an increasingly popular management tool used by nature conservationists in Europe and in other parts of the world (Clark et al., 2002; Seddon, 2010; Seddon et al., 2007; Torres et al., 2016). The rise of non-governmental organisations (NGOs) specialised in conservation translocations such as Rewilding Europe as well as an increased focus on conservation translocations by existing NGOs and governmental organisations such as the LIFE programme of the European Union show this increasing popularity. A translocation can be defined as 'the intentional movement of living organisms from one area to another area' (IUCN, 1987; as cited in Seddon, 2010, p. 796). Conservation translocations encompasses multiple types of translocations, ranging from reintroductions to assisted colonisations (Seddon, 2010). Conservation translocations are in this study divided into two broad categories: reintroductions and translocations. A reintroduction can be defined as "an attempt to establish a species ... in an area that was once part of its historical range, but from which it has been extirpated or become extinct" (Clark et al., 2002, p. 1). The second category, broadly defined as translocations, includes all other conservation translocations such as reinforcements or assisted colonisations.

Conservation translocations can serve two broad types of objectives. The first type focusses on species conservation (Seddon et al., 2014) such as the reintroduction of a once native species (Nilsen et al., 2007), reinforcement or assisted colonisation (Seddon et al., 2014). The second type is often called rewilding, with a main focus on ecosystem restoration (Seddon et al., 2014). Ecosystem restoration is regularly needed as natural recruitment or dispersal is seldom sufficient to restore species populations (Seddon, 2010) due to human-induced pressures such as habitat loss, habitat fragmentation, diseases or overexploitation (Clark et al., 2002; Muths et al., 2014; Seddon, 2010; Torres et al., 2016). Reintroductions or translocations primarily motivated by recreational or commercial objectives are not considered as a conservation translocation (Seddon, 2010). However, conservation translocations can involve secondary non-ecological objectives such building public awareness, to increase governmental - or financial support (Ewen et al., 2014) or the establishment of nature-based tourism to create associated incomes and jobs (Brown et al., 2011).

Planning, management and evaluations of conservation translocations are often mainly focussed on ecological aspects (for example: Armstrong & Seddon, 2008; Muths et al., 2014). However, such management tools are more interdisciplinary than often acknowledged as there are also societal aspects involved (Jacobson & Duff, 1998). Examples are human-wildlife conflicts, policies, communication and public support (Jacobson & Duff, 1998; O'Rourke, 2014). Many conservation translocations are shown to have a low success rate (Armstrong & Seddon, 2008; Seddon et al., 2014; White et al., 2015). It has been argued that such low rate of success is in part caused by disregarding societal aspects in the design or the decision-making process on conservation translocation (Converse et al., 2013; Reading & Kellert, 1993).

The dominance of ecological aspects of conservation translocations can also be seen in scientific literature. Challenges on how to deal with multiple and conflicting management objectives or societal aspects which affect outcomes are less often studied (Converse et al., 2013). One of these societal aspects is the establishment of public support (Lauber & Knuth, 2000). Public participation needs to be considered as a factor which influences the success of a conservation translocation, as some values or outcomes such as public support are merely achieved by involving the public in decision-making processes. Public participation is a concept which appears difficult to define as definitions are often conflicting (Glucker et al., 2013). This is further hindered by several terms which are used interchangeably in scientific literature. Examples are 'public engagement', 'community

engagement' (Day, 2017), 'public involvement' (Depoe et al., 2004) or 'citizen participation' (Innes & Booher, 2004). A definition has been formulated to give scope to this thesis: Effective or meaningful public participation is any organised form of two-way interaction or dialogue between decision-makers on conservation translocations and members of the public, in which the input of members is considered in the decision-making process (adapted from: Creighton, 2005; Kohler-Koch, 2012). Examples of additional requirements for effective public participation are: timeliness (Doelle & Sinclair, 2006), transparency (Booth & Halseth, 2011), which includes transparency on how the input of the public is considered in the decision-making process (Lockwood et al., 2010) and a level playing field in terms of power relations (Booth & Halseth, 2011). Decision-makers can be public authorities and private organisations.

Offering the opportunity to be actively involved as a citizen is often a legal requirement in decisionmaking in many sectors (Vermeulen & Wiering, 2007). Within Europe, the Aarhus Convention aims to set minimum standards on the facilitation of public participation in decision-making processes by public authorities (United Nations, 2014) and it is ratified by European countries and several countries in the Middle-East (United Nations, 2017). Moreover, IUCN Guidelines on Reintroductions and Translocations (from here: IUCN guidelines) specifically emphasise the importance of including public participation in decision-making processes (IUCN & SSC, 2013). On the other hand, opportunities for public participation are also increasingly demanded by society (Gibbons, 1999). But specific requirements and forms used may vary per country, type of organization and activity (Glucker et al., 2013; Lawrence et al., 2001; United Nations, 2014). The use of public participation is often characterised by a variety objectives, to enhance simplicity these are broadly defined as societal objectives. These societal objectives can be defined in terms of democracy, such as the establishment of legitimacy of the decision-making process, or as citizen empowerment (Glucker et al., 2013; IUCN & SSC, 2013; United Nations, 2014). It can also be a moral imperative to involve the public decision-making on conservation translocations. For example to create a sense of stewardship (Light, 2006). (A more extensive list of societal objectives of public participation can be found in Appendix A.)

However, an increased awareness of the importance of interactive decision-making processes by using public participation does not necessarily mean such methods are seen to be effective. Public participation is often considered to be hampered by several barriers or processes which are related to either the practitioners (i.e. facilitating agencies), participants, procedures or outcomes (Laurian & Shaw, 2009). The actual purpose behind the implementation may not always cohere with societal objectives. This suggests a gap between societal objectives defined in legislative frameworks or scientific literature and the actual implementation, which affects the effectiveness or the functioning of public participation (Conrad et al., 2011b). Instead of meaningful participation, it sometimes can be called symbolic, tokenistic (Morrison & Dearden, 2013) or fake participation (Conrad et al., 2011b). In such case public participation may have a low priority in the decision-making process and it may simply be organised to conform with legislation (Conrad et al., 2011b), whereas the input of the public is not considered as the decision is already made or would be made anyway (Morrison & Dearden, 2013). Or the input is overruled due to the power of other actors such as influential private actors or government officials (Conrad et al., 2011b) indicating a lack of shifting power relations when (more) decentralised governance is promoted (Arts et al., 2014).

A decision-making process which does not involve meaningful opportunities to participate may lead to a (by the public) perceived illegitimate decision-making process or a lack of trust of the public in agencies involved (Booth & Halseth, 2011). Such failure may be a consequence of one-way participation programmes where citizens are merely informed, whereas more interactive forms are

preferred (Martín-López et al., 2009). The preference to implement a certain form of public participation may be influenced by several conditions such as resource availability, but perhaps also on the type of species introduced (Stankey & Shindler, 2006). However few studies exist on this matter. Moreover, public participation is often organised during the implementation phase (release phase) of a project, denying members of the public the opportunity to exert meaningful influence on the decision or design (Reed, 2008). Ideally public participation is organised as early as possible, thus in the design - or even in the project identification phase (Doelle & Sinclair, 2006; Reed, 2008). A perceived illegitimacy may negatively affect the success of a conservation translocation. For example due to continued hunting or other types of resistance as discussed with the author by J. van Valkenburg, staff of the Iberian Lynx Reintroduction Programme in Portugal (Personal Communication, 2017) or as for example described by O'Rourke (2014).

The processes underlying the implementation of public participation have rarely been studied in the light of conservation translocations (Conrad et al., 2011b). The aim of this thesis was to study the underlying processes which affect the implementation of (effective) public participation in the decision-making processes guiding conservation translocations. These processes can be studied from different perspectives, such as from the perspective of the public or from the perspective of the decision-maker and facilitator of public participation. To narrow down the scope, it has been chosen to focus on decision-makers and facilitators as these are the actors who organise public participation practices or who impose requirements on public participation. The underlying processes give an insight in why public participation does or does not lead to the achievement of the societal objectives the concept ought to serve. Mapping these different underlying processes, which either support or hinder effective public participation, can be seen as a first step to improve the design and implementation of public participation. More effective public participation may increase public understanding, legitimacy and support for future conservation translocations. From a scientific point of view this study has made a start with filling up the void which exists on societal aspects of conservation translocations and on the processes which affect the implementation of effective public participation in this field of expertise.

The following research question has been answered in this thesis:

To what extent does the implementation of public participation in decision-making on conservation translocations achieve the societal objectives which citizen participation ought to serve?

This question has been answered by the following sub-questions:

- 1. What main forms of public participation are being implemented by decision-makers as part of conservation translocations in Scotland?
- 2. What project characteristics determine the choice for specific forms of public participation by decision-makers in conservation translocations in Scotland?
- 3. What underlying processes and trade-offs affect the implementation of meaningful public participation by decision-makers in Scotland?
- 4. How do these underlying processes conform with the conceptual societal objectives of and intentional societal objectives of (advisory) regulations on public participation in the European Union?

The focus of this thesis was narrowed down to conservation translocations in Scotland to ensure the feasibility of this study. Scotland has been chosen as several reintroductions and translocations have been carried out in the past and present. Analysing conservation translocations which are carried out in the same country has a few advantages. Legislation and policies are the generally the same. This means that there are no different starting grounds which could have an effect on the analysis of the use of public participation and the underlying processes. The same applies to cultures and different legislative and governmental systems. Another advantage of Scotland is the amount of expertise and experience on conservation translocations compared to most other countries within for example the European Union.

The main focus of the thesis was on the third and fourth sub-question. The first two sub-questions have been used to create an overview of the degree of influence the public was given in reality and to determine which project characteristics have an effect on the use of public participation. The data collected for the first and second sub-question has been used as input for data collection methods for sub-question three. It also served as a check-up on the reliability of data collected for this sub-question. The data collected for sub-question three formed an input for sub-question four. This data has been compared with the societal goals as summarised in *Appendix A*.

The thesis is structured as follows. In Chapter 2, the theories which form the basis of this thesis are elaborated upon. It also explains the conceptual model. In Chapter 3, the case study and methods on data collection and analysis are explained. Chapter 4 describes the results on sub-question 1 - 3. These results are placed into the context of scientific literature in Chapter 5. It also has been used to give an answer on sub-question 4. This chapter also takes a critical look at the conceptual model and the methodology used. Lastly, the conclusions as well as recommendations for future research are explained in Chapter 6.

## 2. Theoretical Framework

In this chapter the most important theories and concepts which have defined the scope of this study will be explained and discussed.

#### Democratic principles and governance

Public participation can be seen as a crucial element of a democratic society. Participation and democracy are fundamentally intertwined as 'democracy means a form of government in which, ..., the people rule' (Pratchett, 1999, p. 616), either directly or indirectly by elected representatives (Teorell, 2006). Effective and equal opportunities to participate are a requirement for a democracy along with civil liberties such as freedom of expression and, depending on a direct or an indirect form of democracy, free elections and elected officials (Berg-Schlosser, 2004; Kjaer, 2012). The expected role and implementation of public participation is dependent on the normative model of democracy in a country (Biegelbauer & Hansen, 2011). The normative model determines how citizens can influence decision-making (Teorell, 2006) and what is perceived to be democratically legitimate (Biegelbauer & Hansen, 2011). The most basic model, the liberal or representative model of democracy, gives citizens the opportunity to exert (indirect) influence on decision-making by voting on representatives of the government (Teorell, 2006). Instead of an opportunity, it might also be seen as a duty or a moral responsibility in terms of citizenship (Light, 2006). More influence can be enacted in a responsive democracy, but again few direct opportunities on participation are given as influence is mostly enacted by interest groups (Teorell, 2006). Two models of democracy in which citizen participation plays a more substantial or even a vital role are the participatory democracy and the deliberative democracy. In these models public participation is an instrument which can be used to strengthen democracy by citizen inclusion and an enhanced legitimacy of decision-making (Michels & De Graaf, 2010). Whereas both models aim for public participation, there are several differences in terms of why and how participation should be achieved. A participatory democracy aims for inclusion, openness of participatory processes and representativeness. A deliberative democracy is seen to move away from such principles by an increased focus on the consideration of the input of the public in participatory processes (Papadopoulos & Warin, 2007). These two models are, due to the emphasis on participatory activities, seen as a 'strong democracy' compared to the other democratic models (Berg-Schlosser, 2004). However, they are also seen to symbolise a tradeoff between inclusion and influence on the decision-making process. A deliberative model is seen to work best in small circles, with less members of the public involved. The participatory model is seen to work in larger circles, but the public has less opportunities to meaningfully exert influence on the decision-making process (Papadopoulos & Warin, 2007).

These two democratic models elaborate on the 'classic' notion of citizenship in which (passive) citizenship or being a good citizen is achieved by voting. Such as in the representative model of democracy (Brooks, 2014; Light, 2006). The participatory and deliberative model of democracy can be related to 'ethical citizenship', which assumes that citizens are being good citizens by active participation and engagement (Brooks, 2014; Light, 2006). Here, citizenship includes moral obligations or responsibilities towards other citizens in a community or a society. Such 'ethical citizenship' can be expanded towards 'ecological citizenship' by including an ecological aspect to these moral obligations. 'Ecological citizenship' includes both moral obligations or responsibilities towards the local community or society and towards the natural environment (Light, 2006). Considering this 'ecological citizenship', public participation can be used as an instrument to strive

towards both moral obligations by involving the public in decision-making processes on issues related to nature conservation. From this point of view, it is thus important to offer opportunities to the public to participate in decision-making processes on conservation translocations. Not just to make decision-making processes better and more legitimate, but also to give citizens the opportunity to achieve such moral obligations.

The form of governance is also of influence on the degree of inclusion and the prioritization of public - and stakeholder involvement in a decision-making process. Governance may be described as the type or mode used to govern a society (Lange et al., 2013) or 'the process of decision-making and the process by which decisions are implemented (or not implemented)' (UNESCAP, 2002, p. 1). Since the 1990s a shift has been witnessed in the type of governance used by public administrations (Smismans, 2008). From a top-down, state-centric and hierarchical type of governance (Lange et al., 2013; Leroy & Driessen, 2007) related to a representative democracy (Biegelbauer & Hansen, 2011), to more society-centric, interactive, non-hierarchical types of governance (Lange et al., 2013; Leroy & Driessen, 2007). Such society-centric and interactive type of governance is related to direct democracy models: the participatory - and deliberative democracy models (Biegelbauer & Hansen, 2011). The latter form of governance is about creating horizontal linkages to enhance the inclusion of multiple actors, underlining its participatory nature (Smismans, 2008). This interactive form of governance, or new governance, implies a stronger democratic character than the steering type of governance.

The shift from old to new governance had multiple causes. One is the acknowledgement that members of the public, private - and public organisations are needed within the decision-making process as it would increase support and lead to a shared responsibility (Vermeulen & Wiering, 2007). There is also an increasing demand for more opportunities to participate arising from processes such as globalisation and individualisation (Leroy & Driessen, 2007). Non-participatory decision-making processes are increasingly seen as illegitimate (Bulkeley & Mol, 2003). It is argued that it is difficult to say that one form of governance is better than another form of governance, as this is dependent on the situation and each of these modes has its advantages and disadvantages (Leroy & Driessen, 2007). An often mentioned advantage of a more state-centric type is that these are more effective and efficient in implementing policies and reaching (its own developed) objectives (Runhaar & Driessen, 2007). In this case, the dependence of the state on other actors is not acknowledged. The more interactive forms recognise this dependence and focus on consensus-building between actors with different views (Driessen et al., 2007).

Decision-makers concerned with conservation translocations face a complex situation with more than one objective (Converse et al., 2013), a multi-objective problem. Decision-making can be defined as making a choice between alternatives to reach the preferred goal or objective (Conroy & Peterson, 2013). It can be seen as solving a problem by making a decision (Kangas et al., 2008). Multiple aspects need to be considered when making a decision. As conservation translocations occur in - and interact with political and social spheres, instead of merely a scientific or an ecological sphere (Light & Higgs, 1996), one of these aspects is the presence of different actors and the presence of multiple, possibly competing, objectives or interests. Decision-makers have to make trade-offs between these different objectives or interests (Converse et al., 2013). Objectives or interests related to conservation translocations can be sub-divided into many categories such as species objectives, broader ecological objectives, technical objectives (Ewen et al., 2014), social objectives, policy objectives (Mendoza & Prabhu, 2000) and financial objectives (Converse et al., 2013). The complex situation which arises from the presence of different actors and the variety of objectives would seem to lead to more conflicts when using a state-centric instead of an interactive

governance type. This suggests that a more interactive governance form is more suitable in the case of decision-making on conservation translocations.

#### Good governance

New governance can be divided into two types of governance: positive new governance and negative new governance. The positive type assumes that societal actors can positively influence and shape policy processes, making these processes more democratic. The negative type assumes that these societal actors can and may use their resources to resist governmentally steered processes leading to less effective policy processes or eventually a governance failure (Arnouts & Arts, 2009).

One of the most popular forms of interactive governance and democratic norms (Griffin, 2010) is the concept of good governance. This concept can be connected to positive new governance (Arnouts & Arts, 2009). Developed by the United Nations, this concept underlines eight criteria or characteristics of governance which should be met to achieve 'good' governance (UNESCAP, 2002) and to strengthen democracy (Griffin, 2010). Good governance for example means that corruption is minimized and minorities and other voices from society are heard in decision-making processes (UNESCAP, 2002). The eight criteria of good governance are: consensus-oriented, accountable, transparent, responsive, equitable and inclusive, efficient and effective, follows the rule of law and participatory (UNESCAP, 2002). These principles cohere with the participatory and deliberative models of democracy. The criteria participation, responsiveness, consensus-oriented and transparency give rise to the more interactive and multi-actor form of new governance in decision-making. Meeting these criteria builds and enhances legitimacy (Keping, 2011; Smith, 2009).

Enhancing legitimacy is one of the ultimate aims of good governance and, theoretically, can be achieved by public participation (Fung, 2015). It is important to make a distinction between different types of legitimacy. There are three types of legitimacy, each serving different goals. Input-oriented legitimacy focusses on criteria such as openness, inclusiveness, participation opportunities for members of the public and the representation of their preferences in the decision-making process. Its goal is to make the decision-making process more democratic. Output-oriented legitimacy focusses on accountability, effectiveness and responsiveness. It is more result-oriented (Bekkers et al., 2007; Lieberherr, 2013). Tensions arise between these types of legitimacy, which leads to a democratic dilemma. When output-oriented legitimacy is pursued, a democratic deficit may arise due to a lack of citizen inclusion (Lieberherr, 2013). Effectiveness is no instrument which can be used to compensate for perceived illegitimacy which may arise due to this lack of inclusion (Heard-Lauréote, 2010). On the other hand, when input-oriented legitimacy is pursued, this may lead to a lower effectiveness or ineffectiveness due to for example time-consuming participation processes (Lieberherr, 2013). This shows that effectiveness and legitimacy are often seen as a trade-off and as conflicting principles.

However, this is a consequence of the focus on either political institutions (and legitimacy) and political outputs (effectiveness). A solution would be to focus on the political processes (Sørensen & Torfing, 2016). This can be achieved by using a combination of both forms of legitimacy: the throughput-oriented legitimacy. This form tries to combine the two outer ends of legitimacy by focussing on criteria such as the quality and degree of public participation and the interactions between the public and decision-makers (Bekkers et al., 2007; Lieberherr, 2013). Or in terms of good governance principles, it tries to increase the fairness of the decision-making process (Keulartz & Leistra, 2007). To increase democratic legitimacy, political processes should be reformed to enhance inclusiveness (Sørensen & Torfing, 2016). Inclusiveness could improve the quality of interactions

between the public and decision-makers, which should lead to a higher-quality policy outcomes or an increased effectiveness (Heard-Lauréote, 2010; Sørensen & Torfing, 2016). Public participation leads to higher-quality policy outcomes as the public may hold certain knowledge, such as knowledge on the local area in case of a conservation translocation, which is not known among experts or decision-makers (Fung, 2006). It may also improve accountability. In turn, this enhances democratic legitimacy (Sørensen & Torfing, 2016) by a complementary role or perhaps even a mutually reinforcing role of effectiveness, inclusiveness and participation (Heard-Lauréote, 2010; Sørensen & Torfing, 2016).

Inclusiveness, achieved when each member of the public gets his or her fair chance to actively participate, also enhances social justice and equality. Inequality may arise due to differences in resources, among many others. Equal and fair opportunities to participate may enhance equality, strengthening this pillar of democracy by either giving a platform for protest when (perceived) illegitimate decisions are taken. Or by offering an equal opportunity to take part in a decision-making process and to be able to exert influence on decision-making (Fung, 2006). Equal opportunities to take part in (transparent) decision-making processes may again lead to an increased effectiveness. In addition, the decision-maker should be responsive and should use the input of the public in the decision-making process. It is argued that both responsiveness and inclusiveness are mutually reinforcing mechanisms (Hickey & Mohan, 2004) which if enhanced may enhance accountability (Heard-Lauréote, 2010).

The pursuit of a certain type of procedural legitimacy (Keulartz & Leistra, 2007) conforms to the objective to which good governance is pursued. Good governance can be used as an end-result or as an instrument to meet societal objectives (Agere, 2000). The same applies for the rationale behind the use of public participation. When it is used as an end-result it may be used as a check-box list, wherein public participation is given an instrumental (Alemanno, 2013) or symbolic role (Morrison & Dearden, 2013) to achieve an output-oriented legitimacy (Alemanno, 2013). This instrumental role may have consequences for democratic principles pursued by 'good governance'. If the input of the public is not meaningfully considered in the decision-making process, the use of public participation may backfire and this may have consequences in terms of accountability (Alemanno, 2013) and legitimacy in the eyes of citizens (Fung, 2015). In order to comply with the democratic principles public participation should serve, it should be used as an instrument or a means to an end to aim for societal objectives such as social justice and inclusiveness (Agere, 2000) or other societal objectives as listed in *Appendix A*.

#### Policy arrangement approach

As mentioned, negative new governance or a transition to governance, may lead to governance failures (Arnouts & Arts, 2009; Griffin, 2010). This can also be seen in the light of public participation and its functioning, the corresponding underlying processes and the amount of influence exerted by members of the public on decision-making. Possible reasons for a governance failure can be analysed by using the policy arrangement approach. This approach gives the opportunity to analyse the content and design of a policy domain. Temporary stability due to institutionalisation and changes in four interrelated dimensions or driving forces (Liefferink, 2006) are at the heart of this analysis. The following four domains or driving forces influence the outcomes of a policy arrangement: actors and coalitions, policy discourses, power and influence, rules of the game (Arnouts & Arts, 2009; Arts et al., 2006). Examples of hindering processes which affects the functioning of new governance forms, or the functioning public participation, may be power struggles (Arnouts & Arts, 2009), omitted changes in power (Arts et al., 2014) or unclear rules (Arnouts & Arts, 2009; Arts et al., 2014). As these different dimensions are interrelated, a (lack of) change in one dimension is likely to result in changes

in the other dimensions. It may lead to non-consistent policy arrangements when one of the other dimensions fails to change (Liefferink, 2006). This may have an effect on the functioning of public participation. However, if the four driving forces lead to new internally consistent policy arrangements it may enhance democratic potentials (Alemanno, 2013) as well as the functioning or effectiveness of public participation.

#### Public participation in its different forms

A more interactive form of governance theoretically increases opportunities for public participation (Rauschmayer et al., 2009). However, it does not automatically mean that the public can exert a high level of influence as there are multiple forms of participation, each with different degrees of influence. Five aspects of public participation give rise to these different forms (Dietz & Stern, 2008). These are:

- Who is involved? These may be organized groups or individuals who have a direct interest or are directly affected by the decision. But these may also be members of the general and wider public who are not directly affected;
- 2. During what stage of the decision-making process the public is involved;
- 3. The *intensity* of participation: in terms of effort of members of the public to stay involved and in terms of effort of facilitating agencies to get and keep the public involved;
- 4. The degree of influence the public can exert;
- 5. The *goals and reasons* underlying the decision of members of the public to get involved.

Over the last decades, several schematic representations have been developed which distinguish different forms of public participation. The distinction has often been based on differences in the amount of influence the public can exert. An often used representation of the different forms of public participation is the Ladder of citizen participation, developed by Arnstein (1969). In this ladder

eight forms of citizen participation or perceived citizen participation are distinguished, within three categories (Figure 1). The first category is non-participation, however sometimes perceived as participation as the public is being 'involved' in the decision-making process. Both Manipulation and Therapy corresponds to this category. The objective of the decision-maker is to educate, form or influence the perceptions of the public. The second category is tokenism, corresponding to the following forms: Informing, Consultation and Placation. The Consultation and Placation forms gives the public a voice in the decision-making process. The degree of influence is dependent on the form adopted, but the decision-maker still decides. The third category is citizen power, with Partnership, Delegated power and Citizen Control as main forms. Here the amount of influence ranges from being allowed to take part in negotiations to being in the position to take decisions (Arnstein, 1969). The Ladder is often called outdated as both new power relations and new participation goals of the public have emerged, new types of participation are not included and it does not consider entry requirements for the public (Tritter

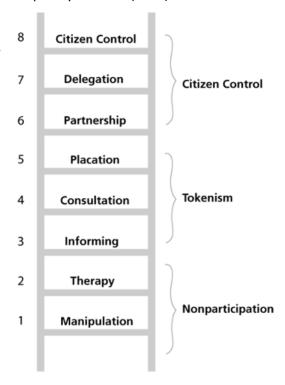


Figure 1: Ladder of citizen participation (by Arnstein, 1969)

& McCallum, 2006). Similarly, the Ladder depicts public participation as a linear and hierarchical process instead of a dynamic process (Tritter & McCallum, 2006).

A more recent representation has been developed by the International Association of Public Participation (IAP2): the spectrum of public participation. It is based on the Ladder of citizen participation developed by Arnstein (1969) (IAP2, 2014) but it shows the different public participation forms as a continuum (Creighton, 2005). The continuum ranges from one-way communication and informing types to giving the public the authority to make decisions, see *Figure 2 (middle)* (Creighton, 2005). The consulting type of public participation is a form of procedural public participation. A decision-maker can claim openness and in a way legitimacy by implementing this type of participation (Creighton, 2005). The spectrum does not consider the non-participatory forms of the Ladder of citizen participation, even though these may still be considered as 'participation' forms by decision-makers.

This continuum of public participation has been expanded by including examples on participation forms and characteristics related to the degree of influence of the public in the decision-making process (Neumann, 2012) Here, the informing type corresponds to press releases or informational meetings, whereas there is no influence of the public in the decision-making process. On the other end of the continuum Empowerment corresponds to negotiated decision-making facilitated by governments or other agencies. The actual decision-making is done by the public, without direct involvement of the government (*Figure 2*) (Neumann, 2012). These examples of forms are few of the extensive variety of forms which can be applied (Rowe & Frewer, 2004).

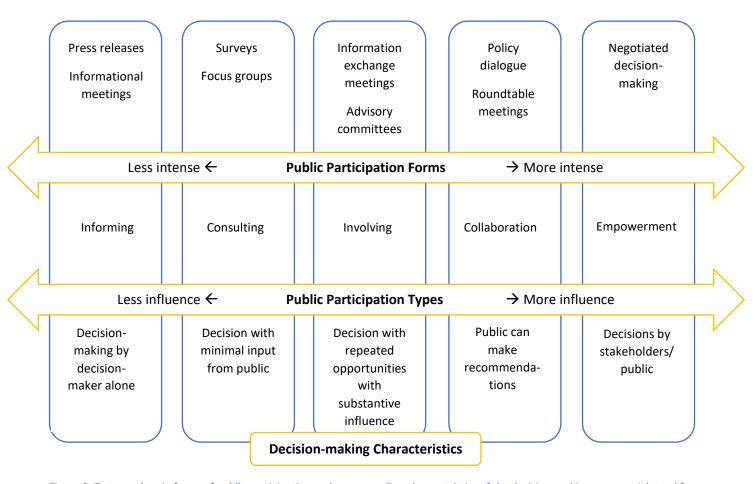


Figure 2: Types and main forms of public participation and corresponding characteristics of the decision-making process. Adapted from Neumann (2012) and Creighton (2005).

It is sometimes argued that each form of public participation may be appropriate depending on the objectives of the decision-maker, the characteristics of the situation and the desirable amount of influence of the public (Lauber & Knuth, 2000) and some forms are more appropriate in certain situations than others (Fung, 2006). However, it should lead to a 'good' or legitimate decision-making process in the eyes of the public by granting citizens the opportunity to exert influence and to deliver input which is considered in the decision-making process (Kohler-Koch, 2012). More interactive and influential forms are in such case more desirable. The extent to which citizens are empowered and involved is important in terms of legitimacy. The more interactive a participation form is, the more it is seen to enhance the legitimacy of the decision-making process. Provided that the input delivered by the public is meaningfully considered in the decision-making process (Fung, 2015).

#### Conceptual model

The theories and concepts explained above have been used to develop the conceptual model which is used to analyse the effectiveness of public participation (Figure 3, p. 12). The European shift to new and more interactive governance forms, including requirements on public participation, has or should theoretically lead to changes in the four dimensions or driving forces. These four driving forces are interrelated and influence each other as shown by the arrows connecting each of these driving forces to the other driving forces. The (lack of) changes in the driver forces have an influence on the effectiveness of the concept of public participation. The underlying processes analysed for this study are part of these different driving forces. Examples of processes which are related to the different driving forces can be found in Appendix B. To analyse whether these underlying processes positively or negatively affect the effectiveness of public participation, these processes are compared to the societal objectives it should serve. The different forms of public participation can be seen as an outcome of the different processes. For example, simply complying with regulations may lead to informative or consultative forms. Whereas the purpose to actually involve citizens may lead to more involving or collaborative forms. However, the main form implemented cannot be used to analyse the effectiveness of public participation. For example, an involving form does not guarantee that the input of the public is considered in the decision-making process (Andersson et al., 2003). In such scenario public participation is seen to be fake (Conrad et al., 2011b) and ineffective.

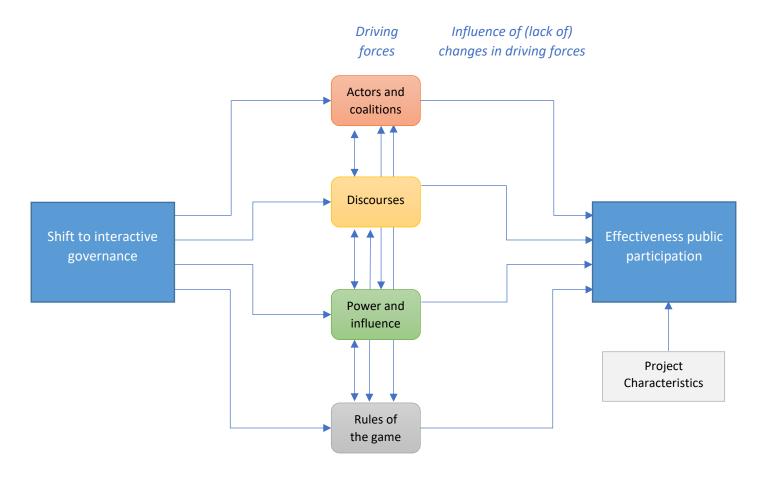


Figure 3: Conceptual model. Adapted from policy arrangement approach by Arnouts and Arts (2009).

## 3. Methodology

Before introducing the methodology used for the data collection and analysis, a closer look will be taken at the character of the study. This character had an impact on how the acquired data has been used and analysed. Secondly, the case study and the cases will be introduced. Finally, the methodology used for the data collection and the analysis will be explained.

The study had an evaluative character overall. The main objective of this study was to determine whether public participation is used to achieve the societal objectives it aims to serve or whether other purposes underlie the use of public participation, such as political or legislative purposes. Two other characters can be distinguished in the sub-questions. The first sub-question had a descriptive character as it was used to describe the different main forms of public participation found in the case study. The second sub-question had an explorative character as the purpose of this question was to identify project characteristics which affect the decision to use a certain form of public participation. The third and fourth sub-question had an evaluative character. The third had been used to evaluate the processes underlying the use of public participation. The fourth had been used to compare these processes, or underlying reasonings and purposes, with the societal objectives of public participation. This data has been used to answer the main research question of this study, to determine and evaluate the effectiveness of public participation in decision-making on conservation translocations.

#### 3.1. Case study

To narrow down the scope and to be able to conduct a detailed analysis within the timeframe of the study, it was chosen to conduct a case study. As indicated in Chapter 1, the cases consisted of several conservation translocations which are or have been implemented in Scotland. The cases are selected on: 1. Taxonomic group; 2. The (un)familiarity of the species, meaning that both charismatic species which are more known among members of the public and species which are not or less known have been chosen (high versus low); 3. the year in which the decision-making process on the conservation translocation has been initiated. As the Aarhus Convention is adopted in 1998 (ratified in 2006) and the first IUCN guidelines have been established in 1998, it has been chosen to look into conservation translocations which were not initiated until the mid-1990s to ensure a starting ground in which legislative requirements for public participation are more or less equal; 4. The level of decisionmaking and interests (local versus country); 5. The degree of perceived impacts on the societal sphere; 6. The presence of perceived conflicting interests as estimated by the decision-maker. There are two types of decision-makers: A decision-maker is an actor who proposes, designs and implements a translocation. This decision-maker organises public participation methods as part of the decision-making process on this translocation. The decision-maker can also be the licensing authority when a license is required. In such case, the licensing authority sets requirements and decides on the approval or rejection of the license application (if this decision is not passed onto the government as explained later). This licensing authority can be called the final decision-maker. Before the cases are introduced, a short overview of the decision-making process, corresponding legislation and actors will be given.

#### Conservation translocations in Scotland, the procedure

The National Species Reintroduction Forum of Scotland (NSRF) and Scottish Natural Heritage (SNH) have introduced a framework as part of the Scottish Code for Conservation Translocations (from

here: Scottish Code) which should be followed in the planning and implementation of a conservation translocation (National Species Reintroduction Forum, 2014; Smith et al., 2015). This framework is based on the IUCN Guidelines on Reintroductions, nevertheless it is emphasised both should be used. It applies to all phases of a conservation translocation, for both animal - and plant species. (A summary of the Scottish Code can be found in *Appendix C*.)

A conservation translocation consists of four general phases, ranging from the decision on whether a reintroduction is needed to post-release activities such as monitoring and ongoing management. When a conservation translocation is deemed necessary, the applicant has to design a detailed plan which includes feasibility studies and biological - and societal risk assessments. From this moment, stakeholders such as the public need to be involved in the decision-making process (National Species Reintroduction Forum, 2014). For example as part of a stakeholder consultation (Smith et al., 2015). Applicants should inform and consult stakeholders on possible consequences of the reintroduction or translocation. And it is advised to design the translocation plan in close contact with these stakeholders. Dialogue is advised but not mandatory. The decision on the degree of participation is based on the judgement of the applicant and is perceived to be dependent on the complexity of the translocation process (National Species Reintroduction Forum, 2014; Smith et al., 2015).

The Scottish Code makes a distinction between conservation translocations which require a license and conservation translocations which do not require a license. Conservation translocations which need a license are required to obtain a license from the licensing authority. The Wildlife and Countryside Act 1981 is the most relevant legislation for the protection of species as well as the Conservation Regulations 1994 (National Species Reintroduction Forum, 2014). The Wildlife and Countryside Act 1981 includes legislation with regards to which authorities are designated as licensing authorities. In Scotland, these are the SNH (HMSO, 1981; Smith et al., 2015) and local authorities. However, local authorities are only able to be a licensing authority on specific cases unrelated to translocation processes (HMSO, 1981), making the SNH the only licensing authority. The requirements laid down in the Scottish Code are assessed by the SNH as part of the final licensing application (National Species Reintroduction Forum, 2014). With regard to high-risk conservation translocations, the SNH will report to the Scottish Government when the requirements have been met and the Government will make the final decision on granting the license (Gaywood et al., 2015; Scottish Beaver Trial, 2009). For conservation translocations which do not require a license it is considered to be a 'best practice' to follow the steps as outlined in the Scottish Code (National Species Reintroduction Forum, 2014).

#### The cases

The following four cases have been chosen: the Eurasian beaver, red kite, pine hoverfly and the small cow-wheat. The first three cases concern animal species, the last concerns a plant species. A plant species has been chosen as the debate on conservation translocations mainly focusses on animal species. However, there is an increasing trend with reintroductions or reinforcements of plant species. Public participation is often used in plant translocation programmes as part of post-release activities such as public involvement in monitoring activities. It appeared to be an interesting normative question on how public participation is used before such translocation is implemented, and why it is (not) used. This normative question has been answered by using the data collected during the interviews on the small cow-wheat case and by using a fictive scenario on a translocation of a plant species (see Chapter 3.2 on the use of semi-structured interviews and scenarios). A short introduction will be given on each of the chosen cases. Afterwards, the characteristics of the different cases have been summarised in Table 1, p. 16.

#### 1. Eurasian beaver (Castor fiber)

It is believed that the Eurasian beaver went extinct in the late 1700s as a result of hunting and habitat loss. In 1995, the SNH started investigating possibilities for the reintroduction of the beaver. In 2008, a permit for a trial reintroduction was successfully obtained by the Scottish Wildlife Trust (SWT) and the Royal Zoological Society of Scotland (RZSS), leading to the first release of beavers in 2009 in Knapdale Forest - Argyll. Both support, resistance and reservations have been expressed towards the release of the beaver (Gaywood et al., 2015). Reservations have been expressed by the agricultural sector (Gaywood et al., 2015) as well as by salmonid fisheries as beavers may affect salmonid stocks and migrations (Beaver Salmonid Working Group, 2015). This is still a matter of concern as different studies have been conducted on the impact of beavers on salmonid stocks and conclusions are often non-consistent (Scottish Wild Beavers Org, n.d.). The trial period has ended in 2014 (Scottish Wildlife Trust, 2016). Assessments of potential costs and benefits as seen by land owners in the area of an unlicensed population show that several land owners, who have not been affected by the beaver, think there might be future economic benefits. However, many land owners reported damages and have concerns on future costs. This assessment has been made to support the decision on further reintroductions of the beaver in Scotland after the Knapdale Forest trial has ended (Tayside Beaver Study Group, 2015). In 2016, the Scottish government announced it is minded to recognize the beaver as a native species despite many concerns. This meant that both the Argyll as the Tayside populations will not be removed and the Argyll population may be reinforced (Scottish Wildlife Trust, 2016).

#### 2. Red kite (Milvus milvus)

The red kite was thought to be extinct as a breeding species since the late 1880s as a result of sports hunting, trade and the collecting of eggs. From the 1989s and onwards, the Royal Society for the Protection of Birds (RSPB) Scotland and the SNH established multiple local reintroduction projects across Scotland. Starting with a reintroduction programme on the Black Isle near Inverness to programmes in central and south Scotland. The latest programme has been implemented in the area near Aberdeen, with translocations taking place between 2007 and 2009. While being little to no threat to local land uses, illegal activities such as poisoning still remains a threat to the red kite (Orr-Ewing, n.d.). These threats are seen to have a high influence on the population growth rates in northern Scotland (Smart et al., 2010). IUCN criteria have been important as reintroductions would only take place if these were met (RSPB, n.d.). The main focus will be on the decision-making process guiding the local reintroductions in Aberdeenshire. However, it might be worthwhile to look into the complications in northern Scotland as well to compare the use of public participation between these two reintroduction programmes and the possible influence on citizen awareness and support.

#### 3. Pine hoverfly (Blera fallax)

The pine hoverfly is an insect species of which the population occurrence is restricted to 2 sites in the Highlands (Rotheray & MacGowan, 2015). The species is perceived to being threatened by extinction. It is prioritized as one of the most threatened animal species in Scotland (Royal Zoological Society of Scotland, n.d.) In 2009, 2010 and 2011 reintroductions have taken place after suitable habitat had been created in several forests and estates in the Cairngorms National Park. The creation of suitable habitat consisted of creating rot-holes in stumps to mimic rotting processes and the encouragement of retaining the dead woody biomass in forests. This project has been a collaboration between the SNH, RSPB, the Malloch Society. The FSC was added to this collaboration as one of the release sites is managed by the FSC (Rotheray & MacGowan, 2015).

#### 4. Small cow-wheat (Melampyrum sylvaticum)

This plant species has suffered major declines within the whole of the United Kingdom. Its occurring is now restricted to no more than 20 sites in the Highlands, of which three are situated in the Cairngorms National Park. These sites are often small and isolated due to habitat fragmentation and habitat loss as a result of land use changes, timber production and habitat degradation (Cairngorms Rare Plants Project, 2011; Dalrymple et al., 2016). Chances on natural recolonization are low or none-existent as the seed dispersal agent, the wood ant, is rare (Cairngorms Rare Plants Project, 2011) making it vulnerable to extinction (Dalrymple et al., 2016). This vulnerability is reinforced a low genetic diversity within the current populations (Cairngorms Rare Plants Project, 2011). In 2010, seeds have been collected from occurring sites and planted in unoccupied plots in the Cairngorms National Park as part of the Cairngorms Rare Plants Project and in Glen Affric as part of the Trees for Life restoration programme (Cairngorms Rare Plants Project, 2011; Dalrymple et al., 2016). Habitat management is recommended, including the prevention of encroachment of species such as the rhododendron and prevention of heavy grazing. Restoration of suitable woodland by planting or regeneration is recommended (Dalrymple et al., 2016).

Table 1: Cases and their characteristics.

	Taxonomic group (class or kingdom)	Familiarity among public (H/L)	Level of decision- making and interests	Degree of influence on human dimension	Conflicting interests as estimated by decision-maker (Y/N)
Eurasian beaver	Mammal	Н	Country	Intermediate	Υ
Red kite	Bird	Н	Local	Low	N
Pine hoverfly	Insect	L	Local	None	N
Small Cow-wheat	Plant	L	Local	None	N

#### 3.2. Data collection

This section has been divided into three paragraphs which explain the different methods which were used to collect data.

#### Literature research

Data was primarily collected by the use of semi-structured interviews. However, a literature study has been used for two purposes: 1. As an input for the interviews and the interview guides; 2. As an input for a consistency check with data collected during the interviews.

The data collected during the literature study has been used as an input for the interviews as documentation on the societal aspects of conservation translocations, and more specifically public participation, were often neglectable. The only notable exception was one high-profile reintroduction (beaver) for which data was more or less readily available. As a result, the emphasis was placed on collected data by conducting semi-structured interviews. Other reasons which had let to the use of semi-structured interviews are explained later. The data collected during the literature study has also been used as a consistency check for these semi-structured interviews. Firstly, as

socially desirable answers were expected and such consistency check did provide the opportunity to ask further. But it was also used to enhance triangulation: to be able to confront interviewees with details which were not mentioned by the interviewee. This provided the opportunity to reveal more details on underlying purposes or reasonings behind the use of public participation.

Both grey and scientific literature has been used. Data has been found by using Google, Google Scholar and Scopus. The first search engine gave results on both organisations working on conservation translocations and on websites or documents on conservation translocations. Databases of for example the SNH, Scottish Wildlife Trust and the RPSB were used to acquire additional data. Official policy documents such as reports on progress and management plans, whenever available, have been analysed on the forms of participation used and on hints of the resulting effects on public perceptions. The latter two search engines gave results for scientific studies carried out on conservation translocations. Both scientific and grey literature often had an ecological scope. A snowball method has been used to find more literature on societal aspects by using the references. This snowball method has also been applied to relevant websites found.

Moreover, newspaper articles and other types of media such as movies or social media have been used. These were found by using Google and LexisNexis. The following keywords were used, in combination with the names of the different cases: reintroduction, translocation, public participation, public engagement, citizen engagement, citizen participation, community, protest, engagement, meeting, collaboration, support, decision, government, names of the decision-making parties, release.

The second objective of this method was to acquire more data on the Aarhus Convention as it proved to be difficult to arrange an interview with instances behind the Aarhus Convention. This interview would have been used to discuss the results found in Scotland and to collect data on how these results relate to societal objectives of public participation. Google Scholar, Scopus and Google have been used to collect data originating from both scientific studies as well as UN and EU reports on the Aarhus Convention. Keywords used were, in combination with Aarhus Convention: implementation, democracy, society, societal objectives, societal goals and the different good governance principles. This data has been used to compare the results of the case study with the use of these principles.

#### Semi-structured interviews

The use of semi-structured interviews was the primary method for data collection. The use of semi-structured interviews was preferred over structured surveys as this gave the opportunity to go into depth when answers are unclear or to explain questions when needed. It also gave the opportunity to observe the (initial) reaction to a question or statement, i.e. in body language or hesitations.

Semi-structured interviews have been conducted with several representatives of organisations involved in conservation translocations. The interviewees represented both governmental organisations and NGOs serving ecological or societal interests. The interviews have been conducted during a 3.5 week period of fieldwork in Scotland, in October and November 2017. Nine interviews have been conducted. The length of the interviews ranged from 30 minutes to 2 hours. The interviews have been recorded and transcribed in verbatim. Personal data or data off-topic has been left out. One of the interviews did not follow this procedure and the interview guide was sent and filled in due to complications with scheduling the interview. The data has been used anonymously to ensure a safe environment when talking about sensitive issues and to keep chances on socially desirable answers to a minimum. To ensure such a safe environment, an informed consent form has

been used to inform the interviewee about his or her rights and on the confidentiality of the acquired data.

The representatives have been contacted by using the official contact addresses found on the website of an organisation and by using a snowball sampling method when contact was established with a representative. To prevent interviewees from giving socially desirable answers or from declining an interview, the exact details on the purpose of the interview (identifying underlying reasoning and purposes) had not be given.

These semi-structured interviews were used to acquire data on the first, second and third sub-question, with an emphasis on the third sub-question. The interviews were initially arranged to collect data on the four cases of the case study. However, many other examples of conservation translocations and the use of participation methods were discussed. The data on conservation translocations other than the four cases outlined in Chapter 3.1 was included in the analysis and the results.

The interviews were conducted by using interview guides which generally followed a similar outline of topics and questions. This outline had been adapted to the casus and to the role the interviewee, i.e. final decision-maker (licensing authority), decision-maker (implementer public participation) or NGO. The data collected as part of the literature study served as an input to adapt the general interview guide to an interviewee-specific and case-specific interview guide. This means that for each interview a customised interview guide was used. The input was used to create relevant and case-specific questions. The following general outline of topics has been used as a basis for the customised interview guides:

- Introductory questions, role of the interviewee.
- Scenarios: two fictional scenarios have been explained to the interviewee. These scenarios were
  used during interviews with representatives of organisations involved in the decision-making
  process of a casus. The use of the scenarios was also dependent on the availability of the
  interviewee.

The first scenario describes the use of an interactive type of decision-making in the planning-phase of a fictional translocation of a butterfly species. The other scenario was used to test for opinions on the use of public participation in a fictional plant translocation. The aim of these scenarios was to start a discussion on conservation translocations involving invertebrate - and plant species to acquire additional data. It was perceived by the author that it would be difficult schedule interviews with organisations involved in such translocations. This proved to be true when contacting several organisations which work on plant translocations. Whereas the scenarios often provoked an in-depth discussion, several questions were used to keep lead and to steer these discussions when needed. These questions concerned the feasibility of using an interactive type of public involvement such as described in the scenario, how members of the public could contribute to such a process and how. Or, in case of the plant species, what differences there would be when there is no habitat restoration needed. The questions were also used to expand the discussion to translocations of vertebrates to check for possible differences in processes underlying the use of public participation in either vertebrate - or invertebrate -/ plant translocations. The scenarios can be found in *Appendix D* 

- Discussion on the case: the discussion on the scenarios has been linked to the decisions made on public participation in the decision-making process on the specific conservation translocation the interviewee or the organisation was involved in.

- Discussion on IUCN guidelines and Aarhus Convention: This topic concerns questions related to the societal goals of public participation as depicted in the Aarhus Convention and IUCN guidelines. However, these were often asked throughout the interview and as a response to a statement made by an interviewee. It was found that the Aarhus Convention was often not known among the interviewees, which led to a shift of focus to the IUCN guidelines. Data was also collected on (the success of) the enforcement of using public participation by the Aarhus Convention and the IUCN guidelines. This would have been used as input for interviews with both the IUCN and with organisations involved in the Aarhus Convention. However, no interviews could be arranged.

This order of topics had been chosen to work towards in-depth questions on public participation, to prevent a social desirability effect (Russell Bernard, 2011). However, there were two interviews in which this order had been adapted to prevent overly steering as it was felt that steering would negatively affect the amount of data to be collected.

#### Informal talks and observations

As it was not possible to arrange a personal interview with the IUCN SSC Reintroduction Specialist Group to record a direct reaction on the results of the Scottish case study, the author attended a public talk of different specialists on reintroductions and translocations. This public talk was organised by the IUCN SSC Reintroduction Specialist Group and Zoological Society of London on the use of the IUCN guidelines on Translocations on the 28<sup>th</sup> of November, 2017. The attitude towards the use of participation methods in conservation translocations was observed by the use of informal talks and direct observations of the different plenary talks and discussions. As one of the public talks was specifically about stakeholder engagement in translocations in Scotland, this was an opportunity to indirectly record reactions on the Scottish approach. Data was recorded by the use of (descriptive) fieldnotes. This data was used as an input for the results on the underlying processes.

#### 3.3. Data analysis

The data which has been collected during the literature study has been analysed by using the IAP2 scale of public participation. The focus was on the amount of influence for the public and the type of participation. Data on (hints of) underlying purposes were taken into account as well. Both types of data have been used as direct input for the customised interview guides, as mentioned in Chapter 3.2. As the semi-structured interviews were the main method of data collection, the remainder of this paragraph will explain the analysis of the data acquired during the interviews.

The analysis of the transcripts has been done by hand. Both the data acquired by discussing the scenarios and the data acquired during the remainder of an interview has been analysed by using the following methods. The IAP2 scale of public participation and the policy arrangement approach have been used as a guideline to derive the different underlying processes and rationales. Whenever possible the different participation methods and the underlying processes have been related to the project characteristics.

First, an initial and superficial analysis has been carried out to distinguish explicit processes related to either of the four driving forces. The processes found in this initial analysis were recorded in a table. This first analysis had in part started when the interviews were transcribed. Keywords or phrases

have been highlighted which gave an indication of underlying processes. Comments were added to relate such keywords and phrases to the different processes which were recorded in the table. These keywords or phrases have been linked to the corresponding driving force or project characteristics as explained in the conceptual model. The different examples accompanying the conceptual model were the first focus. Processes which were not considered as examples but which were clearly mentioned during the interviews have been added to the table during this phase as well. This initial analysis has been carried out once, to get a glimpse on the different processes which are clearly at play.

This superficial analysis was followed by a detailed analysis. This detailed analysis was carried out by using the table which was built as part of the first analysis. Each of the transcripts was analysed again to distinguish the processes which were already added to the framework. Again, keywords and phrases have been highlighted and comments have been added to be able to find the relevant data when writing the results. Also, possible quotes have been highlighted which at that point were considered to be relevant to support the results. These quotes have been added to the relevant processes in the table. The detailed analysis was repeated for each of the transcripts when an unidentified process was found.

The data acquired during the public talk was also analysed by hand. As there was less detailed data acquired compared to the interviews in Scotland (due to the use of fieldnotes instead of recordings), there was only one in-depth analysis. The arguments for the importance of public participation methods were analysed and marked by keywords and phrases. The same was done with opinions of speakers or the public on the Scottish Code and with strategies mentioned for the use of public participation.

## 4. Results

The Results are structured as follows. Chapter 4.1 will shortly elaborate on the main forms of public participation found in the case study. Also a closer look will be taken at the project characteristics of a reintroduction or translocation which are seen to be influence on the degree of public involvement in the design -, planning - and decision-making phase. Chapter 4.2 elaborates on the underlying processes and trade-offs which affect the decision on whether and how to involve the public during these phases. These are categorised alongside the four driving forces of the conceptual model (*Figure 3, p. 12*).

### 4.1. Main forms and project characteristics affecting public participation

It is important to get an idea of the main forms of public participation used in conservation translocations. These main forms give an indication of how public participation is used on the ground. The same applies to the project characteristics which indirectly affect the degree of public involvement. These characteristics are related to and of influence on the driving forces which are discussed in Chapter 4.2.

#### Main forms

The results are shown in *Table 2* (*p. 22*). The table is structured alongside the different phases of a translocation. These phases are adapted from Arts et al. (2014) and National Species Reintroduction Forum (2014). The post-release phase has been included to give a complete overview of the different phases of a translocation. Activities related to public participation which were implemented during this phase, such as volunteering activities for monitoring purposes, are not recorded into the table as this was beyond the scope of the study. The remainder of this paragraph will shortly elaborate on the different main forms found per case.

Several consultative methods were used as part of the beaver reintroduction. These ranged from national consultations to local consultations at Knapdale. The national consultations were carried out in the form of surveys and stakeholder groups. The local consultations consisted of meetings with local stakeholders, among which local members of the public. Roundtable meetings were organised with key-stakeholders in Tayside. Local members of the public were not mentioned as a stakeholder here. These roundtable meetings are not recorded into the table as an interactive setting with such key-stakeholders (and no public) has not been the focus of this study. No meaningful opportunities for public involvement were offered in Tayside. However, there were informing and minimal consultative methods used which involved local landowners and the Scottish Wild Beaver Group, which was formed of several members of the public. The Scottish Wild Beaver Group tried to engage with the local community in Tayside on their own initiative.

The red kite reintroduction project in Aberdeenshire did not involve any public participation methods during the planning - and decision-making phase. Neighbouring landowners were informed during the release phase. The local community was informed at a later stage to minimise possible disturbances which could be caused by the public in the release area.

In case of the pine hoverfly translocations, there were no consultations mentioned which involved the public prior to the release. Informing methods were used. This is also the case for the small cowwheat project in the Cairngorms NP. Informing methods were used to raise public awareness of the

project. The small cow-wheat project on the Dundreggan Estate involved a small-scale consultation with one of the local residents. The alpine sow-thistle translocation involved consultations with key-stakeholders such as landowners. Local communities are informed by means of information boards.

Looking beyond the case study, the interviewees mentioned several other projects which often involved either an informing or a consultative form of public participation. No examples were given on more influential types of public involvement, such as involving types or collaborations, except for one project. This project is a butterfly (pearl-bordered fritillary) translocation project, which has been initiated by a NGO. The team consists of volunteers, among which members of the public. As noted by the interviewee, this does not necessarily mean the wider public is involved. But it does show that there are possibilities for such bottom-up initiatives which gives members of the public the opportunity to get involved in the design, planning of - or decision-making on translocations. This project has not been added to *Table 2*, as it was not part of the case study. However, it would have been classified as a form of collaboration, with a higher degree of influence for members of the public involved compared to consultative and informing forms.

Table 2: Overview of the main forms used during different phases of a translocation.

	Beaver	Red kite	Pine hoverfly	Small cow-wheat
Initial appraisal				
Design phase: Feasibility / desirability studies - Socio-economic 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 (neighbouring landowners)	Informing	Informing
Post-release activities (monitoring, etc)				

#### Project characteristics affecting the use of public participation

In terms of characteristics of a translocation, the most important driver of differences in the degree of public involvement is seen to be dependent on the risk perception.

The risk perception is used as a guidance in the Scottish Code to distinguish several degrees of public involvement. These degrees of public involvement are related to three levels of perceived risk. For the first category, the no - / low risk category, it is emphasised to conduct a small scale consultation with landowners or members of a local community. For the high risk category it is seen to be important to use more extensive forms of engagement (National Species Reintroduction Forum, 2014). It is mentioned that such risks can comprise biological and societal risks. A risk assessment

needs to be conducted of the expected public perception of the reintroduction or translocation concerned.

Several indicators were mentioned by interviewees which are seen to be connected to and have an influence on the risk perception. Broadly categorised, these are:

- 1. Low-profile versus high-profile translocation. By some interviewees interchangeably phrased as microfauna versus megafauna; mammals versus other taxa; and sometimes, however not often, as predator versus non-predator;
- 2. Perceived (biological or societal) impact;
- 3. *Dispersal* power in combination with the *scale* of the translocation.

The combination of these three indicators, which are interrelated with each other, are seen to lead to a certain risk perception of a translocation.

#### Effect of risk perceptions on the degree of participation offered

It is acknowledged that risk perceptions are not the sole driver of using public participation practices in decision-making processes. Some interviewees related the use of public participation to societal objectives such as conflict resolution or the establishment of support among local communities. However, it was noticed that there is a tendency to relate the use of public participation to risks and possible impacts. This is also established in legislation such as the Scottish Code. The different indicators, which lead to a certain risk perception, are seen to have an effect on the degree and type of public involvement offered. However, there was no agreement among interviewees on how this risk perception should affect the degree of public involvement as several lines of thinking were found.

The general line of thinking witnessed among interviewees indicates that high-profile translocations or translocations with high impacts (e.g. high risk perceptions) should lead to more opportunities for public involvement and a higher degree of influence on the decision-making process. This may be recognised in the beaver project in which various participation methods were offered to the public. Such argumentation is also recognised in the Scottish Code (National Species Reintroduction Forum, 2014). This general line of thinking also emphasizes that translocations of microfauna or plant species - in combination with a low dispersal power and/ or local scale impacts - may lead to less opportunities for members of the public to get involved due to lower risk perceptions. One example was given on a twinflower translocation in Glen Affric, when comparing it to reintroductions of megafauna:

There was no involvement with the public there. I guess the reason of the rationale is, as far as most people are concerned with the scale of plants, there is not likely to be any negative impact or any kind of controversy, like talking about beaver reintroductions for instance or lynx.

Two interviewees disagreed with this line of thinking. They mentioned that care should be taken when making such a distinction as translocations of microfauna are not always without risk. Both interviewees did admit that the idea that translocations of microfauna are without risk are probably widespread among the public. Which is seen to have an effect on the amount of people getting involved when participation methods for such translocations are organised. But such risk perception on translocations of microfauna is also witnessed among experts involved:

On the National Species Reintroduction Forum... there is a lot of talk about sea eagles, about lynx, about beaver. Some of the people who are interested in this megafauna.. you know when you say 'what about reintroducing this snail' it is like 'oh you don't need to worry about that, just do it'. And when you say 'well, this snail is a vector of liver fluke, it is going to kill cattle' they react like 'oh well, maybe'. You know, when it is small it doesn't mean it is controversial. But there is a perception that megafauna need to be dealt with differently compared to microfauna ... when it is small it doesn't mean it is controversial.

However, when discussing the scenarios a second line of thinking was found. This second line of thinking could potentially lead to more public involvement in low-profile translocations, such as translocations of microfauna or plant species, as part of bottom-up approaches. No - / low risk perceptions associated with a translocation could or should lead to more public involvement. Here, members of the public or communities could play a prominent role in the design of the project. Several interviewees did think such bottom-up approaches would be interesting and worthwhile to use. An actual bottom-up approach in which communities play a dominant role in the design and planning of a translocation is not seen in Scotland. But it reminded one interviewee of an example seen elsewhere which could be seen as an interesting approach:

I remember speaking to somebody here and he was saying that it got to the point that most of the conservation translocations proposals were coming from community-led initiatives rather than from higher level government, as in the other way around. That was interesting. I think that if that kind of approach came about in Scotland, where a community comes together and says that they want to reintroduce a species, with the biological aspect build in. And if the species does not have a wide-scale impact, I could imagine this would be an interesting and positive thing to do.

The earlier mentioned translocation of the pearl-bordered fritillary could be considered as an example of a step in such direction in which members of the public, however not a community, are meaningfully involved during one of the earliest phases of a translocation.

These two lines of thinking, both associated with risk perceptions, show that both high-risk - and low-risk perceptions could theoretically lead to an increased level of public participation. Theoretically, as there are multiple underlying processes which have an effect on whether such increased levels of public participation are actually considered and successfully achieved, as explained in the Chapter 4.2. The risk perception of a translocation feeds into these underlying processes, indirectly affecting the use of public participation.

## 4.2. Processes affecting the functioning of public participation

This subchapter is categorised alongside the driving forces of the conceptual model. The processes found in the analysis are summarised in *Table 3*. These processes are elaborated upon in the remainder of this subchapter.

Table 3: Overview of the different processes affecting the functioning of public participation.

Driving Force		Process
<b>Ak</b>		Who is the public?
Actors		Engaging the public, a balanced representation?
Discourses	Supportive	Fundamental for success
	Hindering	From 'Nature Despite People' to 'Nature and People'?
		Lack of interest
		Lack of knowledge
		Effectiveness versus public involvement
Power and influence		Distorted power relations between public and other actors
		Resource constraints
Rules of the game	Formal	UNECE Aarhus Convention
		IUCN Guidelines for Reintroductions and Other Conservation Translocations
		Scottish Code for Conservation Translocations
	Normative	Uncertainty on how to involve the public
		Uncertainty on decision on the amount of influence given to the public
		Transparency and fairness of both the final decision-making process and participation methods

### 4.2.1. Actors

Two aspects related to this driving force are seen to affect the effectiveness of public participation. These aspects are considered to have an effect on whether the public is entirely and correctly given the opportunity to get involved. First, there is uncertainty on who to define as the public and who to involve. The second aspect relates to the difficulty to involve and consider all different views which exist among the public.

#### Who is the public?

While not often explicitly expressed as a concern or dilemma by the interviewees, it was observed that each interviewee had a different view on who the public is or which part of the public should be

involved. Uncertainty or differing perceptions on who is or should be considered as a member of the public affects the opportunities on involvement offered by a facilitator (e.g. nature conservationist working on the project and organising public participation methods). Definitions of who should be considered as the public ranged from local neighbouring landowners to, theoretically, the wider public in terms of the whole Scottish society. These differing definitions have implications for who is targeted when public participation practices are set up, especially when a narrow definition is used. The use of a narrow definition, by leaving out a local community and involving local neighbouring landowners/ residents, may imply that certain members of the local public are left out of the scope on who to give the opportunity to get involved. Or, when informing methods are used, who are directly and actively informed on the implementation of a project. This was seen in the alpine sowthistle translocation where local landowners were consulted. It was mentioned that other local members of the public will be (passively) informed by using information boards during the implementation phase of the project, together with other visitors of the area. The initial definition of the public, with a focus on neighbouring landowners, excludes other members of the public from the process and prevents them from exerting an influence during the decision-making phase. A similar strategy was found in the case on the red kite translocation. However, no members of the public had the opportunity to deliver input during the decision-making phase. During the release phase neighbouring landowners were informed, but other members of the local public were not. Again, leading to the exclusion of several members of the public.

The most popular (and workable) definition witnessed among interviewees concerns engaging with a local community near the release site. This still gives rise to many uncertainties, especially in terms of vertebrates due to their dispersal power. An example was mentioned when comparing the beaver reintroduction with translocations of invertebrate - or plant species. In case of the beaver, and its dispersal power, impacts on areas outwith the release area do need to be considered. This gave rise to the following question: Which communities do you ask to get engaged, and which communities not? As one interviewee mentioned:

If you are doing it in a discrete small geographic area, it might have implications for a much wider area. Ultimately, people would have no say in that local decision so that would be a risk ... It strikes me as unfair to ignore the views of others outwith the release site.

This uncertainty was followed by the next question: how far should a facilitator go with offering opportunities to the public to get involved? Such a decision is seen to be easier when it involves invertebrate - or plant species. But it is also seen to be dependent on the mindset of the facilitator involved: who is considered to be the public in her or his opinion.

#### Engaging the public, the problem of a getting a balanced representation

Ideally, public participation should be used to consider all views (or costs and benefits) existing among members of the public. However, an often mentioned uncertainty concerns how to involve the public and how to get a balanced representation of all these views in the decision-making process. Either in the form of a balanced representation when talking about a local community or when talking about the wider public, depending on the mindset of the interviewee.

Different arguments were given on how certain processes lead to the involvement of a small part of the public, in either consultations or in any other forms of public participation organised. These different arguments have been merged in this category on (the problem of) achieving a balanced representation, which affects the functioning of the concept of public participation.

The (lack of) interest of members of the public in nature conservation is seen to play an important role in whether the public is and can be involved or not. Five out of nine interviewees mentioned that levels of interest - either phrased by the amount of interest or the presence of an active community - highly affects the level of involvement of members of the public. This also affects the potential to involve a diverse public to be able to consider all different views. This is seen to be a problem which is at play in all conservation translocations. It was sometimes seen that this is less of a problem when it concerns translocations of charismatic (vertebrate) species. But also in such translocations this process is seen to have an effect on the functioning of public participation.

Two interviewees also described other processes which may result in less public involvement. These processes are seen to be influenced by either the organiser of the translocation, or by the mindset or past experiences of members of the public. One of these interviewees mentioned that the timing of public participation events should be properly considered when organising opportunities for involvement. Failure of doing so may result in less public involvement as for example people do not always have the opportunity to get involved, while they would have been interested to do so. The other interviewee tried to understand possible reasons for not getting involved by focussing on the point of view of the public. Either by considering the confidence levels of members of the public. And by considering how meetings are organised, the accessibility of the meeting itself as mentioned by the other interviewee, the accessibility of background information on the project and the accessibility of the discussions taking place at such meetings. As the interviewee said:

I think that there is lots of examples where people don't get involved because they don't know what they should be saying, or when they do get involved it is so superficial because they cannot get engaged on that level everyone is talking about. So it might put them off.

Continuing on these confidence levels, prior involvement in volunteering projects is seen to lead to an increase in (essential) knowledge and confidence to get involved in consultations on the design of similar projects. Examples have been given of habitat restoration projects and translocations of invertebrates which had seen more public involvement due to a higher baseline of existing knowledge. But it is emphasised that citizens involved in volunteering projects are also members of the public who are interested in nature conservation in the first place.

Such processes as outlined above result in a challenge for nature conservationists who wish to involve the whole spectrum of the public, with all its different interests, backgrounds, levels of education, etcetera. It is seen to be difficult to move on from members of the public who want to be engaged as they have a certain basis of knowledge or background, or as it affects them. As one interviewee said:

I think the big problem with public participation is getting away from the usual suspects, the people who would always be involved anyway because they are interested and engaged.

As it is difficult to get a balanced representation of views or interests of the public, several interviewees mentioned they are concerned about possible hidden agendas. Those who get involved are seen as main movers: members of the public who have time and availability to get involved. But it was also perceived that these main movers often have a certain agenda. While acknowledging that this agenda may either be positive or negative for a project, it was seen to be hard but essential to get members of the public involved who hold a neutral view. The question arises how a consultation, or a setting with a higher degree of influence for members of the public, could be organised democratically when only part of the interests of a society is represented.

One of the interviewees gave the following example. As translocations and reintroductions tend to take place in areas with a low density of people, the interviewee raised the concern on the possibility that gamekeepers get involved in organised meetings who might merely think about the impacts on their own businesses. While the general local public, other local people who do not have a direct stake in the process, do not get engaged. Such hidden agendas are seen as a major challenge and these are sometimes seen to be a reason to think twice about organising public participation practices.

Another concern related to a balanced representation is whether it is really possible and workable to get a wide array of actors involved who are in the position to influence the process at the same time. This would be even more difficult when a balanced representation would be achieved, meaning that even more actors would be involved. As mentioned by one interviewee:

I don't think there is much scope for public involvement in practice because how many people can you get around a table.

Such constraint is seen to be affected by organisational practicalities and by the effort and time it would take to consider the (increased amount of) input of the public. This is seen to be a bigger constraint in high-profile translocations such as the beaver reintroduction than in plant- or invertebrate translocations as in the latter case there are less members of the public interested or affected.

#### 4.2.2. Discourses

The discourses have been categorised into two main groups. The first group consists of a discourse which is supportive towards public involvement in the planning - and decision-making phase. The second group consists of discourses which may possibly hinder meaningful public involvement, either deliberately or unintentionally. This implies that such discourses also were witnessed among interviewees who are supportive towards public involvement. The discourses are applicable to the perspective and mindset of nature conservationists.

#### Supportive discourse

#### Fundamental for success

Four out of nine interviewees explicitly mentioned the importance of involving the public in the decision-making phase, arguing that the success of a translocation in part depends on public involvement:

I think in order to get a successful project, you must have the agencies, the landowners and the public, all in concentric circles, emitting in the middle of it to provide delivery.

All four interviewees feel it is highly important to use public involvement to build interest and support or to address any type of concern or existing resistance. Especially when it concerns high-profile translocations, where it is seen that opposition often comes from local landowners and sometimes from other members of the public:

Therefore it becomes even more essential that they are fully informed and fully involved before anything happens becomes increasingly important to ensure success if the local community is aware and involved.

Public participation is also seen as an instrument which can be used to build upon and increase benefits (and indirectly support) for a local community. It was frequently felt that there is a tendency to focus on negative aspects of a reintroduction or translocation, sometimes as a result of the power and resources of certain actors involved (see Chapter 4.2.3), while positive aspects are forgotten or overlooked. Several interviewees emphasised that there are often both benefits and costs within one community and both aspects must be considered by the decision-maker. Examples of such positive aspects were mostly mentioned as part of high-profile conservation translocations such as tourism boosts for local communities providing jobs and incomes, as witnessed after reintroducing the white-tailed eagle or the beaver.

Despite being in favour of the use of public participation methods, three of these four interviewees mentioned effective public participation is an ideal and impossible to achieve as it is hindered by various processes as explained in this chapter. These interviewees often initially mentioned the importance of public involvement, but immediately switched to argue why public involvement does not work in reality.

#### Hindering discourses

#### From 'Nature despite People' to 'People and Nature'?

One more or less evolving discourse is the discourse witnessed among nature conservationists who either unintentionally or deliberately neglect considering societal aspects of conservation translocations in the decision-making process. While this discourse has gradually evolved in such a way that interests of other stakeholders are considered, this does not necessarily mean that members of the public are seen as a stakeholder. This paragraph is arranged by using this shift from a stakeholder-exclusive view to a more stakeholder-inclusive view and by considering the role of the public in such a stakeholder-inclusive or interactive setting.

Two reintroductions in which this shift can be seen are the white-tailed eagle project and the red kite project. During the initial reintroduction of the red kite on the Black Isle between 1989 and 1994 (Orr-Ewing, n.d.), no consultations had been carried out as it was perceived to be an uncontroversial species. In case of the different phases (from 1970s - 2000) of the reintroduction of the white-tailed eagle in West-Scotland (Stevenson & Evans, 2015) it was argued that no proper consultations were carried out. In this project, conflict management was seen to evolve as an ex-post process instead of considering other interests than those of nature conservationists when designing the project.

Looking at the latest stage of both projects, it seems that a (slight) shift in this discourse has taken place. As part of the red kite project in Aberdeenshire it was mentioned that consultations had been carried out during the design-phase. Stakeholders who were involved were the SNH, representatives of councils and nature conservationists. However, local members of the public, or neighbouring landowners, were not part of these consultations. It was told that these neighbouring landowners were informed when the project was underway, when the birds were in the release area. Local members of the public, for example from local communities, were not informed before or during the initial stages of the release to minimise possible disturbances. As certain stakeholders were consulted this could be considered as a shift to a more interactive type of decision-making. However, such shift is hampered by disregarding the use of public involvement in the actual planning - and decision-making phase of this project.

The latest stage (2007-2012) of the white-tailed eagle project (Stevenson & Evans, 2015), the reintroduction of white-tailed eagles in East-Scotland, included consultations with stakeholders such as local farmers. Compared to a situation without consultations, this can be seen as a step forward. However, it was felt that these consultations were not carried out properly. These were more or less

seen as a process to acquire a license instead of meaningfully considering other interests. This might imply that other interests were still considered to be less important than the interests of nature conservationists involved.

Of the other cases analysed, only the beaver project showed clear engagement with the public. The other cases showed informing forms of public participation. All interviewees mentioned the importance of keeping the public on sight but it was argued that a focus on biological aspects is still deeply persistent among nature conservationists:

You know, you need to find out what the environmental benefits and impacts might be, the financial etc and also the social. And it is that social aspect which I think that is often overlooked in reintroduction proposals. It focuses on the environmental stuff.

One important reason mentioned by several interviewees is that most of the nature conservationists working on reintroductions have a background in biology or ecology. This is considered to be a hindrance in changing to a decision-making process in which societal aspects are increasingly considered. One of the interviewees mentioned:

I think the thing about conservation and translocations is that there is quite a wide range of skills to bring in. And I think traditionally, it has come from more the conservation and biological sciences but it needs a lot more than that. Especially for the high-profile ones, maybe less for the lower-profile and local level ones.

Interviewees mentioned that the Scottish Code is a tool which tries to guide this change in mindset towards a more interactive type of planning and decision-making. Whether the requirements to involve other stakeholders, and the flexibility it is seen to give when a translocation does not require a license, results in a change in mindset was not always regarded positively. An actual change in mindset was seen to be needed to make public participation practices more effective.

#### Lack of interest among the public

The perceived (lack of) interest of members of the public to get involved has been described as a process which causes the difficulty to achieve a balanced representation of views in the process (*Chapter 4.2.1*). The lack of interest is also classified as a discourse, as interviewees often said that public participation is an interesting theoretical model, but it does not work in reality as members of the public do not want to get involved. This line of thinking may have implications for the organisation of meaningful public participation methods and for underlying reasoning on why and when these should (not) be organised.

A majority of the interviewees mentioned it is difficult to get members of the public involved as people are not interested in (getting involved) in nature conservation issues. Several arguments were given for such disinterest, among which:

Citizens are more worried about soaps on TV or football. I think a large proportion of citizens are not interested.

It was also sometimes indicated that members of the public do not get involved even though they might be interested in - and have an affinity with nature. Such lack of involvement gave rise to uncertainties on how to connect with these members of the public (see Chapter 4.2.4). The perceived lack of interest in nature conservation or in getting involved often led to the question whether to and how to organise public participation practices. Especially as levels of interest and potential impacts are seen to be related:

How do you engage with people who are not interested in wildlife and nature conservation. That is always the big key. It is only when something affects them ... then they would get engaged. But not just to do something.

If we say it is part of a bigger project which involves for instance a change in land use to young forest then there is a lot of interest locally, partly because of the deer issues again but also because of the changes in land and land uses and what is perceived as the traditional use of the land. So that does create interest. And if there is a plant translocation as part of that, then I think potentially there would be more interest.

It was mentioned that consultations organised by several agencies are focussed on stakeholders who are likely to be affected. This is seen to be a discrepancy with the perception of several interviewees, who would like to encourage that everyone is given the opportunity to get involved. This also includes members of the public who are not affected. This would lead to more opportunities for public involvement in translocations with a low risk perception. But such aims are seen to be hindered by the lack of interest.

#### Lack of knowledge among the public

Seven out of nine interviewees mentioned that knowledge, skills and local expertise is a factor which affects their opinion on the workability and usability of public participation. This discourse tends to focus on public involvement in translocations of invertebrates or plants. Four interviewees explicitly mentioned that a lack of professional knowledge may lead to less opportunities for public involvement as there is less valuable input expected. These interviewees have been or are currently involved in translocations of plant - and invertebrate species or did react on the scenario of the plant species translocation. As mentioned by one of the interviewees:

Looking at the 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, etcetera.

This was emphasised by three other interviewees. One interviewee merely saw opportunities to involve members of the public who are part of botany groups due to their knowledge. However, such opinions were seen to be an initial reaction. When continuing on such statements, three of these interviewees mentioned that local knowledge on an area may be useful. Or that members of the public who do not have professional knowledge on such matters may be given the chance to help decide on more general matters instead of technicalities. For example by asking which plant species they would like to see reintroduced in an area or which area should be considered first in terms of restoration. Several interviewees also felt there are more opportunities for public participation when a low-profile translocation is part of a landscape restoration project. In such case members of the public could help decide on general aspects (e.g. non-expertise driven aspects) of a design.

The plant scenario was also used to probe for opinions on the use of bottom-up approaches in which members of the public, with all types of expertise and skills including some expertise on botany, could put forward a proposal for a translocation. One interviewee mentioned that such a translocation, which is not perceived to be contagious, could theoretically lead to more public involvement than current consultations as long as risks are assessed and are perceived to be minimal or non-existent. As mentioned, the scenario on the butterfly translocation reminded an interviewee on a current project which was initiated by volunteers of a NGO. In terms of professional knowledge, the developer of the plan had experience and expertise in nature conservation. But the other volunteers introduced other types of skills and knowledge. This shows that you do need professional

knowledge, but that members of the public are also welcome to participate as they bring in other valuable skills.

One interviewee also emphasised that in such plant - and invertebrate translocations professional knowledge can be brought into the process by experts, but that members of the public can still be involved in fine-tuning the design. One example was given on the organisation of workshops in which scenarios were used to give members of the public the opportunity to decide on the final design of a project. Professional knowledge was used to build the different scenarios. These scenarios were used to give members of the public, who do not necessarily have professional knowledge, the opportunity to make an informed decision or to deliver informed input on how to finetune the design of a project. It was said that local knowledge was seen to be a valuable addition in such setting.

None of the interviewees mentioned the role of (a lack of) knowledge when discussing translocations of vertebrates. It was suggested by one interviewee that the role of knowledge may be less important in such high(er)-profile projects compared to translocations of invertebrate - or plant species as there are less technicalities involved. It was suggested that more general aspects could be discussed without requiring professional knowledge.

#### Effectiveness versus public involvement

In some cases a trade-off was seen to be made by interviewees between the effectiveness of a conservation translocation and public participation. Such two objectives, either achieving the ecological objectives of a translocation or the objective on public participation, are seen to be conflicting due to several reasons.

One interviewee argued sometimes a trade-off needs to be made between preventing extinction of an invertebrate species and meaningful engagement. The pine hoverfly project was taken as an example, as it is a species which is still highly threatened. It was argued that it would take too much time to do a full-blown consultation, estimating that organising a proper consultation and considering the input would take two to three years. Such species could go extinct during this timeframe. The time it takes to properly involve the public is seen to be an important hinderance in such conservation translocations.

A different argument for such trade-off was noticed in the red kite project in Aberdeenshire. Here, it was argued that no consultations with members of the public had taken place as the organisers wanted to keep the project and the location of the birds on a low-profile during the early stages of the release (2007-2009), preventing any disturbances by the public as mentioned before. Here it was argued that public involvement and public awareness of the project could negatively affect the success or the effectiveness.

#### 4.2.3. Power and influence

Processes related to an excessive influence by different stakeholders and unequal resource availability are seen to have an effect on the usability of public participation.

# Distorted power relations between the public and other actors

Several interviewees felt that the input of the public is not always properly considered due to the presence of several powerful actors, such as landowners or the farming sector. This implies that there are distorted power relations and power is used to exert an influence on the decision-making process. Which in turn is seen to affect the consideration and weighing of the input of members of the public when a decision is made on a translocation.

The interviewees showed different opinions on how much weight should be given to the input of powerful sectors, such as the landowners, compared to the input of the public. Some interviewees had a tendency to favour the views of landowners over the views of the public, as landowners are more likely to be affected. As a considerable amount of the land in Scotland is privately owned, other interviewees mentioned this to be an important hindrance for conservation translocations and for public involvement. In the process of consulting (neighbouring) landowners and the public, several interviewees felt that landowners have a stronger voice in the process than members of the public. This led to the question on how well the input of members of the public is considered and weighed compared to the input of landowners. As one interviewee said:

The public are not hugely involved and it is all about people owning the land basically ... in principle it all sounds great and if we could somehow bring that public view and use it. It still doesn't get you around the problem that a small number of people own the land and dictate what happens on it.

An opinion which is shared by several other interviewees, who would rather see more meaningful public involvement in such projects. Such power relations gave rise to the feeling that conservation translocations are a political process. Especially in the context of vertebrates and their perceived impact, as mentioned by one of the interviewees:

Point is, the invertebrates are much easier to work on in terms of politics ... Landowners aren't really worried about them.

An objective view on the perceived impacts is hampered as negative impacts are often easier to express in financial terms than positive impacts, which regularly have non-use values. However, it was also felt that even if these positive impacts were to be expressed in financial terms, there would still be a focus on negative impacts due to the political power of landowners or the farming sector:

Occasional holes in a riverbank or a few potatoes gone or a few trees in the grand scheme of landownership, that is not a huge financial thing. But it is up there politically, it is about perceptions.

Examples of such political processes were clearly mentioned when discussing the beaver reintroduction. But these were also witnessed in other projects such as the white-tailed eagle reintroduction and in discussions on a possible lynx reintroduction in Scotland.

To continue with the beaver project, two interviewees felt that political reasons had led to the refusal of the first license application by the government. Whereas the SNH normally is the licensing authority, this decision is taken by the government in case of a very high-profile reintroduction such as the beaver reintroduction. In such situation, the SNH is to provide objective information to enable the government to make this decision. The official reason for the refusal of the license was that culling as an exit strategy was not acceptable and the impacts on Natura 2000 habitats could either be positive or negative. It was perceived that the risks were too high to take. But interviewees felt it was more politically motivated as they felt that some government officials did not want to let the trial happen due to other reasons. One of the interviewees argued the government was in favour of landowners, the farming sector and their lobby groups, while there was reasonable support among the wider public:

I think for a long time the government was listening more to the lobbying groups of farmers and landowners. We felt that. And they were listening less to the strong wishes of the broader public. Who after all, while it is true they don't own the land, but they pay for it. And this is something a lot of people don't think about. All

landowners receive subsidies, well nearly all. And in terms of what happens on the land, the urban people need to be listen to as well as the rural landowners.

Looking at the second license application, and the license issued at that time, it was felt that the farming sector had over lobbied. But it was also noted that certain government officials had changed. Both factors were seen to have a notable influence on the decision to grant the license. One of the interviewees noted that all pieces of the puzzle, among which the political context, should fall into place at the right time:

I think that a lot of these things are about timing. The right political timing, the right stakeholder timing and as well as the habitats. But the reasons for which it was originally objected still existed but the second license was accepted.

Such examples gave rise to concerns among interviewees on how the input of the public is considered and how these are weighed in relation to the input and interests of other stakeholders in the decision-making process. As the official reasons which led to the refusal of the first license were still present, and several interviewees felt the second license application was accepted because of changing government officials and lobbying practices, it raises questions on how other input such as input from the public or science-based input is or can be used. On top of these concerns it was perceived by two interviewees that influential landowners are (in)directly linked to politicians, which may ease such lobbying practices.

Additionally, when relating back to concerns on the earlier mentioned hidden agendas (see Chapter 4.2.1.), such hidden agendas may also be related to nature conservationists themselves when other interests are not properly considered. This may be facilitated by distorted power relations when the nature conservationist is in the position to hinder or neglect a meaningful consideration of the input of the public. This was suggested to be seen in several projects among which the white-tailed eagle project.

A different concern on power relations mentioned by some interviewees is related to the position of the SNH in a decision-making process. It was emphasized by these interviewees that public participation should not threaten the authority and position of the SNH as the final decision-maker. Extensive public participation practices were seen to undermine the authority of the SNH, threatening the legal framework in which the SNH operates.

#### Resource constraints

Four of the interviewees mentioned resources constraints, i.e. budget, staff and time, which affect the degree of public involvement. The view on resources is two-sided. On the one hand, various interviewees admitted that it costs a considerable amount of resources when public involvement practices are carried out properly.

It is a challenge really, these kinds of processes take up a lot of time and energy if you really want to do it properly and engage with people realistically. It is time consuming and the reality it is, with decreasing resources, it is difficult to do that.

Such declining (governmental) resources were mentioned as a reason which might lead to less meaningful public involvement. Such resource constraints led to trade-offs when comparing the amount of resources needed to organise public involvement practices and the impact it has in terms of members of the public actually getting involved. Implicitly mentioning that, when considering the lack of interest among a large part of the public, resources might better be spend on other aspects of the project. One interviewee said that the idea of investing time or budget to get the public involved might put nature conservationists off in the first place.

There is often a reluctance to move out to a wider circle of citizens. One can see what goes through peoples' minds that if we widen this out, they are going to ask a lot of questions. It will probably take a lot of effort to get the public involved.

Moreover, it has been argued that especially in the case of plant - and invertebrate translocations awareness raising and education should play a large role and this should be done on a case by case basis. Such educational activities are seen to be important to enable members of the public to deliver valuable input due to an increased level of knowledge. Such educational activities are negatively affected by resource availability.

Resources were also discussed as part of the scenarios. Several interviewees perceived bottom-up initiatives to be a welcome change as less resources would be needed from the different NGOs or governmental organisations which were represented by the interviewees. In combination with a meaningful involvement of the public in the design and planning of a project such initiatives were perceived to be a win-win situation. One interviewee mentioned that if you involve the public in the design, you will build support and interest among local communities which may carry on with the project during the post-release phase, e.g. by monitoring. This in turn should lead to less resources being needed:

It is often the post-release phase - you do all that hard work, you prepare it and get it ready, do the release, maybe do some initial post-monitoring and then off it goes. You don't really know what happens beyond that, resources sort of dry up. But the whole point of getting the local people involved and interested and supportive. They are there on the ground and they would still be interested, and they may actually be an important legacy. They can actually help and support it, act as a sort of warden if things go wrong.

It should be noted that not all interviewees agreed with such idea as it was also perceived that such small scale projects might be discontinued or might be pushed into the direction of illegal translocations as these simply do not have the resources to organise proper consultations. Which still need to be organised, despite being a bottom-up initiative.

### 4.2.4. Rules of the game

This paragraph has been divided into formal - and normative rules of the game. The section on the formal rules takes an explicit look at the Aarhus Convention<sup>1</sup>, the IUCN guidelines and the Scottish Code. Other legislation does affect these formal rules of the game, but this has not been the focus of this study and these are therefore not mentioned. The section on the normative rules of the game looks into implicit rules on good practice of public participation. These are not necessarily embedded in legislation or guidelines.

<sup>1</sup> The Aarhus Convention has not been part of the data collection and thus not of the analysis. To give a complete overview of legislation and guidelines used to make a comparison with societal objectives and to test for the effectiveness of public participation, it has been chosen to shortly mention the Aarhus Convention as part of this paragraph.

#### Formal

### **UNECE Aarhus Convention**

The Aarhus Convention, ratified by the United Kingdom in 2005 (United Nations, 2017), has established the obligation of public authorities, in its broadest sense, to enable the public to participate in consultations on environmental decision-making on projects, plans or proposals relating to environmental issues. Consideration of the input delivered by the public should be ensured and information on the final decision, including the argumentation, should be published (United Nations, 2014). The Aarhus Convention sets out different criteria which should be met when the public is given the opportunity to participate. Public participation practices 'should be timely, effective, adequate and formal, and contain information, consideration, notification, dialogue, consideration and response' (De Santo, 2016, p. 93) to ensure accountability, transparency and openness of decision-making processes (United Nations, 2014).

### **IUCN Guidelines for Reintroductions and Other Conservation Translocations**

The IUCN guidelines are not mandatory to follow, but these are classified as formal rules as it is a framework which is often mentioned and advised to adhere to during the design - and planning phase of conservation translocation.

All four projects of the case study were carried out when the first version of the IUCN Guidelines for Re-introductions (1998) was available. The phrase "A thorough assessment of attitudes of local people to the proposed project is necessary to ensure long term protection of the re-introduced population, especially if the cause of species' decline was due to human factors (e.g. overhunting, over-collection, loss or alteration of habitat). The programme should be fully understood, accepted and supported by local communities" (IUCN, 1998, p. 9) gives an idea of an informing element which should be considered during the planning-phase of a project. The red kite project in Aberdeen used the IUCN guidelines as a guidance, but it was also mentioned that the local community (except for neighbouring landowners) was not informed. The tendency of nature conservationists to focus on biological aspects as well as the voluntary character of the guidelines may have contributed to such decision on limited informing activities. As said by one of the interviewees:

Well, of course back in the days when I read it.. being a keen ecologist, I've also only been looking at the biological aspects. We are just obsessed with that. And all the public stuff, we'll just ignore it. And that is the problem.

The latest version (2013) is seen to be an improvement as it gives more guidance on the societal aspect. On the other hand, several interviewees mention these guidelines still could or should put more emphasis on these societal aspects. One example given relates to the ecosystem services approach, with its four aspects:

The one that is always forgotten about is the cultural aspect. And that again is the societal one. They should have an equal standing. But thinking of ecosystem services, we always think of what is the value to us. And we never think of what the cultural and the societal value is. There is a lot of focus on the environmental aspects of the application of a reintroduction. And so much less on the other aspects. And they should probably have equal weight.

This focus on biological aspects was also noticed at a public talk of the IUCN SSC Reintroduction Specialist Group on 28<sup>th</sup> November 2017. All speakers mentioned the importance of the societal aspects and emphasised on engaging with relevant stakeholders when asked about or when related to their topic. However, the wider public or local communities were not explicitly mentioned as

relevant stakeholders. Also, no ideas were given on how to engage, in what kind of setting and how much influence should be given to the public. As one attendee of the public talk said:

They seem to understand the importance, but they also seem to do not know how to do this.

### Scottish Code for Conservation Translocations

Both the interviewees and the IUCN perceived the Scottish Code (2014) to be an improvement compared to the IUCN guidelines. The IUCN guidelines were used as an example for this Scottish Code. It was elaborated upon in terms of guidance, while being adapted to the Scottish context.

The Scottish Code provides a legal framework which is used to check whether an application meets the requirements posed by the licensing authority (SNH). It gives the agency or nature conservationist filing the application a structured approach to think about and assess (potential) biological and societal risks. Completion of the accompanying application form is mandatory for conservation translocations which require a license from the SNH, e.g. when it involves a protected species, a species is released outside of its native range or when individuals of a species are taken from outside of the United Kingdom (Personal Communication, 2017). It is encouraged to use the Scottish Code for all other conservation translocations as part of a 'best practice strategy' (National Species Reintroduction Forum, 2014). This distinction between translocations which requires a license and translocations which do not require a license is seen to give rise to differences in requirements for public involvement. It was noted that requirements as part of a license application more or less apply to vertebrates, as invertebrates are less often protected by legislation. As an example, one of the interviewees said the following:

'You only need a license for species that are protected under legislation. There are rules on importing animals, but there is nothing stopping me from getting a few beetles from another area in Scotland to release here. I don't think that is illegal. As long as it is in their natural range'.

When talking to interviewees currently involved in such translocations it is mentioned they are not aware of any real requirements on public involvement. As one interviewee said when talking about the application form:

'So I'll do the bit in there about socio-economic aspects. But the form does not really say anything about public involvement'.

Differences in requirements in the Scottish Code due to different risk perceptions, and no explicit guidance, lead to different perceptions among interviewees about which standards in terms of public involvement should be met. One interviewee mentions:

I would say that if for each well-designed reintroduction or translocation type, the ideal is that local citizens are allowed to be involved in the design ... we are generally trying to work and develop a way that people on the ground do get the chance to have their say and have some influence ... I think that if we had a proposal in which an idea was put forward but they haven't spoken to anybody and made it in isolation, the alarm bells would ring. Even if it looks like a fairly good plan. Even if there were no socio-economic risks and such.

Others mention it is good practice to engage with relevant agencies and landowners, not necessarily mentioning members of the public. Although the Scottish Code mentions some type of public involvement is required, irrespective of risk perceptions or the locality of a project. The public is here

described as landowners, but also as local residents or interest groups (National Species Reintroduction Forum, 2014).

When asking whether the Scottish Code works in the eyes of the interviewees, most interviewees react positively. This was mostly seen in terms of high-profile translocations, such as the latest reinforcement of the beaver population in Knapdale and the current golden eagle project in the south of Scotland. The Scottish Code is seen to contribute to increased levels of public involvement in the planning phases of these projects. It was also perceived that proposals for future high-risk reintroductions such as predator reintroductions could be declined, which is a seen to be a break with the past according to several interviewees:

We've got all these people wanting to do reintroductions and we need a framework to control it, quite rightly. And to ensure adequate consultation of stakeholders. And now they have got that Code, you might find that reintroductions of some species won't go ahead because there is adequate consultation now.

This may be perceived as a downside considering the objectives and interests of nature conservationists. But several interviewees considered it to be an improvement democratically as interests of other stakeholders are or are aimed to be considered when a decision is made.

On the other hand, one interviewee also heard of nature conservationists who considered the procedure to be paperwork and a procedural hurdle to be taken to acquire a license. Not necessarily considering the importance of the process of involving the public. Some interviewees also do have concerns on how the framework actually works out when looking at effective public participation specifically, raising the following concern:

How that is actually delivered, happens on the ground and how real that is, I am not sure.

This difference between optimism about the Scottish Code and such concerns is seen to be a result of differing definitions of the public and differing objectives on why to use the Scottish Code. The optimism stems from the overall inclusion and consideration of interests of stakeholders, not necessarily the public and meaningful public participation practices. Whereas the concerns are directly related to effective public participation and the different concerns on how to make it work on the ground, such as how to consider the input meaningfully and how to get people involved.

#### Normative

There are three broad categories of concerns or uncertainties which are seen to have an effect on effective and proper public involvement.

### Uncertainty on how and when to involve the public

It was noticed that there were several uncertainties among interviewees which relate to the role of the public. These were often seen to be related to deciding on how and when to involve them:

I think it is essential we know how clearly what the role of citizens is and what they can bring to a project. I think we should be quite clear on that. And also we should be quite clear on when it is the best time to have them involved.

Opinions are seen to differ on what role to give to the public. When asking about the role of public involvement in conservation translocations, most interviewees had a tendency to (unintentionally) switch from public involvement in the planning- and decision-making phase to involving members of the public as volunteers in the post-release phase. When public involvement during the decision-

making phase was considered, the uncertainty on how and when arose. Several options were considered by interviewees: Involve the public from the beginning, which was often seen as impossible due to a lack of expertise. Or public involvement to consider their input to finetune the design. But at such stage the final decision on the translocation is already (implicitly) taken. One interviewee took the beaver reintroduction as an example, wondering how much impact the input of the public had on the final decision. It was questioned whether the reintroduction would have been carried out anyway, with perhaps a few modifications to the final design:

I think the beaver trial and the consultation that went on before that, it showed that there is a place of consulting with the public. Whether it changes the result of the reintroduction, I don't think so.

Uncertainty on the role of the public is related to uncertainties on how to connect with the public. How to reach out to members of the public, get them interested in the issues at play and to get them actually involved are seen to be major difficulties which impair the workability of public participation practices:

My difficulty is how to engage effectively and bring their views to the table ... I think it is partly because it is the difficulty of communicating with the public when this is going on. So connecting with people is difficult.

More guidance or more stringent legislation is not always seen as a solution. It is seen that more requirements might put organisations or people off as small scale bottom-up initiatives might not be able to meet more stringent requirements.

### <u>Uncertainty on how to decide on the amount of influence given to the public</u>

A second difficulty is the decision on the degree of influence given to the public during a decision-making process. The Scottish Code encourages consultations and dialogue with stakeholders. It also encourages public involvement by giving the public the opportunity to exert influence on the design of a project. It became clear that each interviewee had his or her own view on how much influence the public should have. Several interviewees preferred an informing form of public participation:

What you would want to do is your landowners, your neighbours adjacent to any work you are going to undertake, to tell them about the changes and the rationale for that. But it is not necessarily to seek their views and their agreement to that, but it is to keep them informed of what is going on.

Such an idea of public participation was countered by one interviewee who gave the following example:

I think 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.

Such differing opinions also were seen in the case study and when the scenarios were discussed. The beaver reintroduction involved several opportunities to get involved. There was no public consultation prior to the release-phase of the red kite project in Aberdeenshire. Which meant that the public could not exert influence on the design of the project. In case of the pine hoverfly projects, it was hard to get people involved in the first place due to a lack of interest from the local community but it was also found that there was a reluctance on involving the public in such a project due to a lack of professional knowledge. The same results were found for the different plant translocations,

where it was perceived that the (local) public would not be interested or does not have the required knowledge to be able to deliver valuable input.

When discussing the scenarios, it was noticed that several interviewees moved from a consulting type of public involvement to informing the public. Especially the plant scenario was often seen to be too interactive. Some interviewees mentioned they would inform the public on such project as it was perceived to be most important to establish support and an informing type was perceived to be sufficient in such case:

If you are putting something back in an area.. No as well from a perspective of getting people more connected back with nature, I think that it could just be information giving rather than engagement.

It is all about keeping the local community on sight. I would think that, what do you use the public for? We use the public to be there as an essential element to support the work we are doing With their pressure through local councillors, local politicians. We use them as our eyes and ears ... to make sure that nobody else is going on picking the plants or do anything else ... It may not necessarily always be in the design and con-specification of the project itself.

One interviewee supported the degree of involvement suggested in the plant scenario, but it was also mentioned that local expertise is required in such case. A lack of professional knowledge would prevent members of the public to deliver valuable input in the planning - and decision-making phase of a project. This was found during the interviews on plant translocations as well. Whereas the focus of public participation was on the use of informing methods in the different projects analysed.

### Transparency and fairness of both the final decision-making process and participation methods

Concerns were often expressed on how the input of members of the public is used in the end. This concern was discussed in relation to power relations as explained in Chapter 4.2.3 and in terms of transparency. One interviewee mentioned concerns on the procedure after submitting the application form as it remained unclear to the interviewee how the input is used and how the final decision is taken:

Does this thing go to a group of professors in a smoke-filled room or do they bring in members of the public and say what do you think of this? ... The final decision may be taken away in a closed room.

The interviewee demonstrated concerns on the transparency of the final decision-making process, in terms of argumentations underlying the final decision, how the input of the public is taken into account and how much weight is given to this input. Such concerns were underlined by other interviewees.

However, not only the decision-making process and the consideration of the input when making the final decision should be transparent and fair. The process of the consultation itself (or any other form used) should also be transparent and fair. The same applies for a neutral stance of a facilitating agency towards the input of the public. Several interviewees mentioned they have seen consultations in which the consultations have been applied in such a manner that it would or could give a positive spin to the input delivered by the public. This can be related to hidden agendas and power relations. One example was given on a current project in which public consultations were used without giving proper options to answer to the consultation.

As with doing the public consultation, if you don't reply we will take that as a consent, so that is the line that was being set. So if we didn't reply to say that we weren't happy, they would consider it as 'in support'.

Other examples were given on facilitators being 'economical with the truth', downplaying potential negative impacts when questions were asked in a consultation. It was also mentioned that it was felt that consultations could be and also sometimes were used as a 'tick het box' or checklist process:

(Public involvement, red.) could be talking to a local Scottish Wildlife Trust group, who have actually done that, or it could be a full blown public consultation.

Such checklist processes, or 'hollow' forms of public participation, were seen to be used to conform with requirements posed by the SNH to acquire a license. But in such setting no attempt is made to meaningfully involve the local public. Interviewees indicated that more guidance on this aspect could be desirable.

# 5. Discussion

This Discussion is divided in three subchapters. Chapter 5.1 consists of a reflection on the results found in this study. The different processes identified as part of the driving forces are bundled into several broadly defined categories which either hamper or support the achievement of effective public participation. Each of these categories are related to one of the driving forces of the conceptual model. These processes have been placed and discussed within the context of relevant literature and the theoretical framework used (*Chapter 2*). They are also related and compared to the societal objectives of public participation to assess the effect of these processes on such objectives. The order of the reflection on the broader categories differs from the order of the driving forces in the conceptual model and the results. It has been chosen to change this order due to the different relations between the processes and categories. This way it was possible to build upon previous conclusions drawn on effects of processes on the effectiveness of public participation. For clarity, all processes and their effect on public participation are summarised in *Table 4A* and *4B* (*p. 55, 56*). Chapter 5.2 will elaborate upon the predictive power and validity of the conceptual model. Both similarities and improvements derived from the results are discussed. Lastly, the methodology used in this study is reflected upon in Chapter 5.3.

#### 5.1. Reflection on the results

Although there is some interest among nature conservationists to meaningfully involve the public in decision-making, the results have shown that there are several processes and uncertainties hindering effective public participation practices. Whether the use of public participation in Scotland achieves the societal objectives outlined in *Appendix A* remains the question. This question has been answered in this chapter.

Towards meaningful participation practices by legal institutionalisation?

As argued in the Theoretical Framework, democracy and participation are fundamentally intertwined. The development of the participatory and the deliberative democratic models show this increased awareness of the importance of participation in a democracy. This increased awareness is underlined by an often witnessed shift from a hierarchical, state-centric type of government to a society-centric, interactive type of governance (Lange et al., 2013; Leroy & Driessen, 2007). This is recognised in the aims of the Scottish government, which aims to strive towards a participatory democracy (Bonney, 2003). As participation is a key-requirement of interactive governance, this should lead to more opportunities for effective public participation (Rauschmayer et al., 2009). (For more background information, see Chapter 2. Theoretical Framework.)

Some interviewees argued that nature conservationists are increasingly aware of the importance of public participation in decision-making. This increased awareness should have led to a shift from 'Nature despite People' to 'Nature and People'. These two phases are adapted from Mace (2014), who developed a timeline with different phases and framings of nature conservation. Originally, 'Nature despite People' depicts a focus on the impact of mankind on nature as a consequence of overexploitation or habitat destruction (Mace, 2014). In the context of this study, 'Nature despite People' has been adapted to a phase in which interests of other actors are unequally considered or are excluded from projects initiated by nature conservationists. The 'Nature and People' phase

corresponds to the phase outlined by Mace (2014). Such phase depicts the use of an interdisciplinary approach in which both ecological and social sciences work together (Mace, 2014). This phase has been extended by including a focus on an equal consideration of interests of nature conservationists, stakeholders and the public in decision-making processes.

The call for such shift towards an interdisciplinary and interactive approach has been present for at least thirty years (Booth & Halseth, 2011). This is seen to be consistent with the broader debate on interactive types of governance. This debate arose in the late 1970s which urged for a shift towards society-centred governance (Driessen et al., 2012). As part of this debate on governance, several characteristics or criteria were established which (if achieved) should lead to 'good' governance. This concept of good governance became prominent around 1990 (Doornbos, 2001). As explained in Chapter 2, this concept of 'good governance' underlines eight characteristics, among which participation.

A (late) shift towards interactive decision-making may be reflected by the establishment of the legal framework on conservation translocations (the Scottish Code) in 2014. This shift did not take place at the same pace as the global call for a shift towards more interactive governance types which took place during the last two decades (Arts et al., 2014). However, the results do not show a clear change in rationale which should have led to more opportunities for meaningful public participation. The planning of the beaver reintroduction, initiated in mid-1990s, involved multiple opportunities for the public to get involved. On the other hand, there are also several examples of conservation translocations in which meaningful public involvement was neglected, such as the red kite reintroduction programme. This also applied to the latest phase (2007-2009) of this programme.

A legal requirement for using participatory methods is often seen to be a first step towards effective public participation. But it is often acknowledged that few aspects can be formalised into legislative requirements. The timing of involvement may be formalised in legislation. But other aspects should be dealt with on a case by case basis (Bryson et al., 2013). This is reflected in the broad requirements for public participation formulated in the Scottish Code whereas for example it is encouraged to use participatory methods as early as possible in the decision-making process, without further guidance. It is recognised by interviewees that it is difficult to make these requirements more stringent due to the different types and characteristics of conservation translocations. Whether such procedures on participation can be formalised effectively is therefore questionable (Bryson et al., 2013).

However, embedding public participation institutionally is not seen as the factor which could enforce meaningful participation methods on the ground (Papadopoulos & Warin, 2007). This was reflected upon by an interviewee who questioned whether the legal framework and its requirements actually leads to effective public involvement on the ground. Scientific literature shows that the use of participatory methods may be deeply institutionalised but such methods may still have a symbolic function. On the other hand, it may also not (or in part) be institutionalised whereas participation methods are implemented which are seen to be meaningful and effective (Papadopoulos & Warin, 2007). Both these outer ends were recognised in the examples given by the different interviewees. On the one hand, there were clear examples of symbolic public participation practices. For example, the use of consultations to meet legal requirements to be able to acquire a license. Or the organisation of public participation after decisions had been made. On the other hand, interviewees also mentioned examples of public involvement which arose voluntarily and independent of any legal institutionalisation of public participation. One example is the project on the pearl-bordered fritillary initiated by volunteers of a NGO, consisting of members of the public. It was questioned by the interviewee whether these initiators are representative for the wider public. But such example does show there are opportunities for members of the public to initiate their own ideas and to get

involved in the design of such a translocation at an early stage. Another example is the decision of a NGO to give the public the opportunity to help decide on finetuning the design of a project on habitat restoration. No license was required in second example. In such case it is up to the actors involved to decide on the degree of public involvement. This shows that, in line with the statements made by Papadopoulos and Warin (2007), legal institutionalisation does not ensure meaningful public participation nor that legal institutionalisation is required to organise meaningful participation methods.

A successful institutionalisation requires more than policy -, legislative - or procedural changes. A change in attitude and behaviour (Pimbert, 2004) of organisations and practitioners or a change in procedural norms (Parkins & Mitchell, 2005; Pimbert, 2004) is also needed. The examples given on both symbolic and meaningful public participation practices show that in some cases this change in attitude and behaviour has occurred. However, interviewees who gave the examples of meaningful public participation practices did emphasize they did not witness such practices regularly. The presence of the different hindering discourses among the interviewees underline such lack of a general change in attitude. The red kite project is an example which has shown that the attitude of nature conservationists towards public involvement has yet to change. But also the discussions on the fictive scenarios have shown that meaningful public participation is not part of the mindset of many nature conservationists. This became evident as the use of involving (or sometimes consultative) methods as suggested by the scenarios and researcher were often seen to be downplayed to the use of informing methods.

Also, the difficulty of legally institutionalising requirements on public participation suggests that procedural norms are increasingly important. These procedural norms should change to norms in favour of meaningful public participation practices (Pimbert, 2004) and these should be clear towards nature conservationists. However, interviewees mentioned uncertainties on when to involve the public or how to reach out to the public. This was added by an uncertainty on the degree of influence the public should have in the decision-making process. Two interviewees explicitly mentioned there should be more guidance and clarity on such issues. But, in line with the earlier mentioned difficulty to formalise procedures in legislation, they also emphasised this should not be achieved by establishing more legal requirements. This shows that changes and clarity in procedural norms is also of importance and these are still to be made.

As shown an actual shift towards interactive decision-making, public involvement and an equal consideration of interests of the public is not dependent on the legal framework. Procedural norms, as well as attitudes of nature conservationists, need to change before meaningful public participation practices can or will be organised. Such change in - and clarification of procedural norms still needs to occur. Whether a change in attitude, or rationale, has occurred or is occurring is elaborated upon in the next paragraph.

## Towards a change in rationale?

Recent literature shows the need for public involvement is increasingly acknowledged by life scientists such as ecologists (Varner, 2014). This should imply that a shift from '*Nature despite People*' to '*Nature and People*' has taken, or is taking place. For such shift to occur nature conservationists should acknowledge the importance of meaningful public involvement. Interestingly, more than half of the interviewees did not explicitly support the use of meaningful public participation and dialogue with the public. Only some interviewees recognised the importance of public involvement. Arguments which were supportive of the use of public involvement were

related to two different rationales: 1. the instrumental rationale, i.e. legitimising a decision and avoiding or solving conflicts; 2. the normative rationale, depicting the importance of including all views in the process (Wesselink et al., 2011). Arguments related to a legalistic rationale were not explicitly mentioned by interviewees. Such legalistic rationale depicts that public participation practices are used to meet legal requirements, The danger of such a rationale is that requirements are seen as a procedural hurdle. In such case, the input of the public is not necessarily considered in decision-making (Wesselink et al., 2011). It is uncertain whether such rationale was not explicitly mentioned due to socially acceptable answers or whether potential interviewees with such rationale did not respond to enquiries. However, interviewees gave several examples of public participation practices organised which may hint towards such legalistic rationale. One example concerns consultative meetings with merely local supporters of the organising agency. In such example, consultations have been carried out and legal requirements have been met. This gave rise to concerns on the openness and neutrality of the organising agency towards other (possibly negative) views which could be found among other members of the local public.

Most interviewees emphasised public participation is essentially about informing the public on projects. Information provisioning is a crucial element of public participation by enabling the public to make an informed judgement. However, it should be used as a stepping stone towards dialogue (Creighton, 2005) and therefore towards more meaningful forms of public participation. Looking back at Figure 2 (p. 10), this leads to the question whether informing methods should be shown as a public participation method. It is still considered on the different scales which are designed to indicate the different forms of public participation (such as: Creighton, 2005; IAP2, 2014). Considering informing methods on such scales may give rise to the idea that informing methods are a stand-alone method. This in turn may bring about the idea that using informing methods is sufficient to meet the ideal of public participation. This was recognised in the answers of several interviewees who felt they met requirements on public participation as they organised meetings to inform the public. It might be better to move on towards a scale which merely considers public participation methods which give the public the opportunity to actually to exert influence, e.g. two-way interaction. Meaningful or effective public participation should entail both an active role for the public in the process (Few et al., 2007) as well as a consideration of public interests, views and input in the decision-making process (Kohler-Koch, 2012). Both aspects play a crucial role when one wants to empower citizens (King et al., 1998; Reed, 2008). However, few interviewees acknowledged the importance of such active role for members of the public.

Consultative methods were also considered and employed by some interviewees. Such methods were organised during the decision-making phase on the beaver reintroduction. However, a majority of the interviewees questioned the use of these consultative methods. These interviewees mentioned concerns on the openness and fairness of such methods. But there were also concerns on the amount of influence given to the public and how their input is considered in the end. This can again be related to the example on merely inviting local supporters to a consultation. But also an example of a consultation in which concerns of the public were felt to be downplayed by the facilitator of the consultation underpin such procedural concerns of interviewees. It was sometimes mentioned that consultations could be or was seen to be used as a box-ticking exercise by colleagues. In line with such concerns, multiple studies and guidelines on public participation mention the danger of consultative methods. Several authors emphasise that consultative methods can also be used to legitimise an allegedly democratic decision-making process without giving the public the opportunity to exert influence on a decision (Creighton, 2005; Jones, 2011; Reilly et al., 2016). In such case consultative methods are perceived as 'procedural' public participation (Creighton, 2005) or as a box-ticking exercise (Reilly et al., 2016). Such box-ticking exercise was

recognised by one interviewee when discussing the requirement on organising consultations. The interviewee perceived that this requirement does not necessarily lead to meaningful involvement as it was sometimes organised according to the legalistic rationale: as a box-ticking exercise to meet legal requirements. This remark on box-ticking exercises also shows that dialogue and consultations (if not informational meetings) are not the same. The term dialogue is sometimes used to make consultative methods sound more interactive than these in reality are. This can be recognised in the examples on consulting local supporters or the downplay of potential impacts, which both do not demonstrate meaningful dialogue between a facilitating agency and the public. In such case consultative methods can be seen as a method to legitimise the decision-making process and decisions taken (Heath et al., 2006) while giving the public little influence on the complete design.

A shift towards meaningful public participation practices should imply that there are no concerns on whether meaningful dialogue and consultations differ or whether consultative methods are merely used to meet legal requirements. If such shift is to occur, the first change which should take place is the recognition and acknowledgement of the importance of interactive decision-making processes by nature conservationists. A legal framework such as the Scottish Code may raise awareness on the use of public participation, but such awareness does not automatically mean that this leads to meaningful public participation practices. Such difference in awareness and actual implementation is underlined by Varner (2014). It shows that changes in attitude are also required (Pimbert, 2004). However, such changes were rarely witnessed in the Scottish context. This was shown by the concerns raised by interviewees on the genuineness of consultations. But it is more striking that few interviewees explicitly support public involvement. Such lack of support towards public involvement is recognised in the often mentioned preference towards the use of informing methods. This is considered to be a 'passive' type of participation due to its lack of interaction (Few et al., 2007). And as argued, informing methods should be a stepping stone towards meaningful dialogue with the public. Such lack of support towards (interactive) participatory methods also indicates there is no equal consideration of different interests. This equal consideration is hindered as the public is unable to deliver input (e.g. views, interests or concerns) when informing methods are used. This implies that an actual shift from 'Nature despite People' to 'Nature and People' still has to occur.

## Honest and effective participation methods

Related to the concerns on 'procedural' public participation are concerns on how the input of the public is considered in a decision-making processes. Such concern is related to four fundamental factors which heavily influence the success of participatory methods: *transparency*, *honesty* (Booth & Halseth, 2011), in combination with *trust* in the *responsiveness* of a facilitating agency (Booth & Halseth, 2011; Halvorsen, 2003).

The earlier discussed preference of interviewees towards informing methods has implications for the legitimacy of decision-making processes. A lack of dialogue may lead to a decrease of democratic legitimacy (Warren, 2009). The same may hold true when more involving methods are used but the input is not (correctly) considered. Or when the process of such consideration of input is not transparent (Andersson et al., 2003). It should be clear, and transparent, which aspects of the input of the public have been considered in decision-making. This includes the justification and argumentation underlying such consideration (Lockwood et al., 2010; Petts, 2008). Several interviewees mentioned they are not sure what happens with the input delivered by the public, how this is weighted or what the procedure looks like when an application form has been submitted. If such procedures are unclear for professionals involved, this will not be any different for members of the public. The Scottish Code mentions a database with completed application forms, monitoring

data and any other published outputs of translocation projects. But such database was not found<sup>2</sup> and enquiries were left unanswered. These unclarities negatively affect the transparency of the procedure and therefore also have a negative effect on the functioning of public participation.

Another important aspect of effective participation is timeliness. The results have shown that some interviewees preferred the planning phase for public involvement. Other interviewees preferred the release - or post-release phase. It is considered to be most effective when public participation is employed as early as possible (Burton, 2009) to be able to give the public the opportunity to actually exert influence on a decision or a design (Conrad et al., 2011a). The beaver reintroduction is an example in which consultative methods have been used throughout most of the planning phase. But whether the public could actually exert meaningful influence was debatable according to some interviewees. These interviewees questioned whether such consultations, and the input of the public, could have led to a no-go decision. The red kite project is an example in which public participation was organised during the release-phase. Here, the planning and decision-process was deliberately kept off radar until the release-phase to minimise disturbances by the public. This can be seen as a trade-off between openness, accountability, transparency on the one hand and effectiveness on the other hand. The employment of public participation practices during a release-phase can be perceived as legitimising the decision on the translocation retroactively (Ohl et al., 2008), which in reality lacks legitimacy (Conrad et al., 2011a).

The amount of time it takes to organise proper public participation methods is also seen to be a major impairment in the usability of public participation in nature conservation. The time needed to organise and meaningfully involve members of the public in a decision-making process is seen to conflict with the conservation objectives of a translocation by several interviewees. The translocation of the pine hoverfly was mentioned as an example in which translocations were carried out to reinforce a highly threatened population. Time-consuming participation processes would negatively affect the conservation objectives in this case. Such dilemma is acknowledged by Ohl et al. (2008), who mention that public participation practices may lead to biodiversity loss. Again, this creates a trade-off between achieving several democratic principles such as transparency, inclusion and influence on the one side and effectiveness on the other side. Here, it should also be considered that processes following on such organisation of public participation lead to even more delay. Such processes include a proper consideration of the input and, as a consequence, the fine-tuning of a final design (Ohl et al., 2008). Several interviewees suggested that such delays might either lead to cancellations or to illegal translocations.

A different concern of interviewees relates to the openness and neutrality of either the public or nature conservationists involved. As one interviewee mentioned there is the danger of hidden agendas among the public. Hidden agendas among the public are not often discussed in literature, but when discussed these are often seen to relate to NIMBY-related concerns or to personal conflicts (Conrad et al., 2011b). However, such hidden agendas can also work the other way around. Whereas hidden agendas can also be witnessed among nature conservationists. Most literature on hidden agendas relate to either the neutrality and openness of the facilitating agency. Or to the organisation of symbolic participatory methods to meet legislative requirements and to pursue the objectives of the agency involved (such as: Booth & Halseth, 2011; Dalton, 2006; Heath et al., 2006; Reilly et al., 2016; Smith & McDonough, 2001). Interviewees mentioned it was seen that nature conservationists sometimes organise participatory practices with the intention to pursue their own goals and their own interests. In such cases the public did not get a proper opportunity to exert influence, it was

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<sup>&</sup>lt;sup>2</sup> See Chapter 5.3 for further remarks.

organised at a late stage or their input was not considered. Several interviewees mentioned that the Scottish Code could prevent such situations by, theoretically, giving other stakeholders the opportunity to participate effectively. Which in the end could lead to a no-go decision for a translocation or reintroduction which needs a license. But this excludes non-licensed translocations.

The organisation of meaningful participation methods is often seen to boil down to a trade-off between legitimacy (or underlying principles such as influence, transparency and inclusion) and effectiveness. As discussed in the Theoretical framework, a lack of inclusion of the public can lead to a democratic deficiency. Such trade-off between legitimacy and effectiveness is nothing new. It also shows that several good governance principles can be conflicting. It has been suggested that through-put legitimacy could be a solution to alleviate this conflict between effectiveness and legitimacy. Through-put legitimacy focusses on the quality and degree of public participation (Fenger et al., 2007; Lieberherr, 2013) However, the trade-off between effectiveness and legitimacy can also be seen as a still existing trade-off between the interests of nature conservationists and the interests of other actors. As there is no clear shift towards an equal consideration of different interests, it is also doubtful that a focus on through-put legitimacy could work in this case.

### Levelling the playing field

As discussed in the previous paragraph, through-put legitimacy is concerned with the procedural quality of participation processes. To enhance this quality and through-put legitimacy, there should be an equal consideration of different interests. As mentioned, such equal consideration is not clearly witnessed in the Scottish context. Such equal consideration is further impaired by distorted power relations. These distorted power relations are mainly seen to be caused by powerful agricultural - and landowning sectors which are able to exert a disproportionate amount of influence on a decision taken. A level playing field in terms of power relations is at heart of effective public participation (Booth & Halseth, 2011), whereas distorted power relations are seen to be an important impairment (Heath et al., 2006; Reed, 2008). The distorted power relations are in fact encouraged by some interviewees who argued that the interests of the landowners should be given more weight than the interests of the public. This was witnessed by other interviewees who were frustrated about these power relations, indicating that it is not clear how to they would be able use and give weight to the input of the public. It was also suggested that, due to these power relations, the input of the public does not seem to matter that much. Several interviewees argued that the amount of privately-owned land in Scotland is seen to reinforce such power relations, leading to less opportunities for public involvement.

Interviewees used the decision-making processes on the beaver reintroduction as an example of how such distorted power relations were seen to work. Firstly, the concerns focussed on the refusal of the first license application and the acceptance of the second license application. It was perceived that reasons which caused the initial refusal were still in place when the second license application was accepted. This caused concerns on other, political, processes which were seen to be at play. Changing government officials and (over)lobbying practices were seen to be important factors which led to the acceptance of the second license application. This processes led to questions on how much influence the input of the public would have in reality. The concern of one interviewee expressed on (in)direct linkages between landowners and politicians was seen to reinforce such power relations. The Aarhus Convention recommends to monitor and level out the influence of strong sectors or stakeholders who are seen to have a 'special' relationship with the decision-maker (United Nations, 2014). However, this is not seen to be done, or perhaps impossible, in the Scottish context. Concerns

of the interviewees on the role of the public in a public participation process without levelled power relations may be connected to the following quote of Arnstein (1969) which shows that such power relations are nothing new: 'participation without redistribution of power is an empty and frustrating process of the powerless' (Arnstein, 1969, p. 216 as cited in: Aarts & Leeuwis, 2010).

Such distorted power relations do not necessarily have to be related to powerful sectors such as the agricultural - or landowning sector. These might also relate to powerful members of the public due to inequality in resources (Jami & Walsh, 2014; Papadopoulos & Warin, 2007). Several interviewees mentioned it is important to move away from 'the usual suspects' who have a certain base of knowledge, time and availability to get involved. But some interviewees also mentioned it could be related to nature conservationists themselves. For example, when they are in the position to prioritize their own interests over other interests. Or when they are able to continue with a project without properly considering other interests, such as witnessed in the red kite - or white-tailed eagle reintroductions. Such practices are seen to be a result of an unwillingness to give up power or to reshape existing power relations (Few et al., 2007; lacuzzi et al., 2015). As well as due to the tension between legitimacy and effectiveness as discussed earlier.

A few interviewees warned that more interactive forms of participation may undermine the authority of the licensing authority and the legal framework in which it operates. It is indeed sometimes perceived as a disadvantage of public participation by practitioners (Jami & Walsh, 2014). However, a change towards a more interactive type of decision-making does not mean that the control over a final decision should be taken away from a licensing authority. Participation is fundamental in terms of good governance and democracy, but so is accountability (Creighton, 2005). Rather, such shift towards more interactive decision-making reflects changing relationships of an organisation with other actors and stakeholders (Driessen et al., 2007; Vermeulen & Wiering, 2007).

The distorted power relations sometimes led to questions on why to spend valuable resources on the organisation of public participation when it is evident that meaningful public participation is difficult to organise. Such concerns on resources are nothing new and these are seen to be an unresolved dilemma in the process of strengthening and enhancing democracy (Lowndes et al., 2001a). As resources constraints are seen as an unresolved dilemma, it is interesting that less than half of the interviewees explicitly mentioned resource constraints. As argued by these interviewees, it is seen to be a trade-off between efficiency and effectiveness. This is acknowledged by Jami and Walsh (2014) who mention that resources may be spent on (unsuccessful) public participation methods or on the project itself. Whereas failing public participation methods without any benefits to either the facilitator or the public result in legitimate arguments on why to spend and waste resources on such methods (Doelle & Sinclair, 2006).

#### Public 'apathy'

Such trade-off between efficiency and effectiveness is also seen to be influenced by the discourse on a lack of interest among the public. Interviewees perceived the lack of interest, sometimes called apathy, as one of the main impairments to effective participation practices. The amount of interest was seen to be dependent on the potential impact on the livelihood of the public. It was seen that this leads to less, but still occurring, problems of low levels of interest in high-profile translocations. It was perceived to have more impact on public participation in translocations of invertebrates or plants. Mainly interviewees involved in such low-profile translocations implicitly argued why to organise participatory practices when few members of the public will get involved. They explicitly made a trade-off between efforts made to get the public involved and the impacts of these efforts (in

terms of members of the public showing up). And in turn, expressing a preference towards the use of informing methods rather than consultative - or more involving methods. Public apathy is regularly mentioned in literature (Booth & Halseth, 2011; Fung, 2015; Lowndes et al., 2001b). However, if not adequately assessed it can also be a(n) (over)generalisation of different processes at play for members of the public. Members of the public who are not necessarily disinterested, but who might decide not to get involved due to various other reasons (Kidney, 2002; Turnhout et al., 2010). Yet these members of the public are seen display the same behaviour as disinterested people (Turnhout et al., 2010).

As several interviewees mentioned it is hard to connect to people, it is vital to consider such underlying processes. Two interviewees tried to consider the perspective of members of the public. Organisational factors, knowledge - or confidence levels were mentioned as possible reasons which could lead to less involvement. Such underlying processes are also found in scientific literature (Booth & Halseth, 2011; Day, 2017). As only two interviewees considered the perspective of the public, it can be seen that this perspective is overlooked. This is in line with the tendency of both practitioners and scientific literature to focus on the perspective of the organising agencies (Dalton, 2006; Doelle & Sinclair, 2006). It is acknowledged by the author that this focus is also recognisable in this study, as it was beyond the scope of this study to look into the perspectives of the public. However, studying the perspective of the public can provide useful insights which can be used to enhance the effectiveness of public participation (Dalton, 2006; Doelle & Sinclair, 2006).

### Integration of different sources of knowledge

However, when public involvement is achieved the next concern emerges: how to use the input of the public as this input does not contain any valuable data in terms of scientific data. This concern is in line with an often mentioned lack of (trust in) knowledge or competence of members of the public (e.g. Fung, 2015; lacuzzi et al., 2015; Parker, 2008; Petts & Leach, 2000).

Public participation practices are sometimes seen to conflict with a techno-rational or expertise-driven approach. Conflicts are seen to arise uninformed members of the public are expected to contribute with inaccurate views or misunderstandings which cannot be used as input (Petts & Leach, 2000). This is recognised in statements made by interviewees on the usability of the input delivered by the public. This was especially seen to be relevant for translocations of plant - and invertebrate species. Solely members of the public with specific knowledge, such as members of local botany groups, could be involved. The importance of the techno-rational approach was explicitly mentioned by several interviewees. It was emphasised by giving examples on expertise on soil types or genetics. Professional knowledge on the biological aspects forms the fundament of a successful translocation. This cannot be substituted by lay knowledge, as acknowledge in scientific literature. But this does not necessarily mean that members of the public cannot play a role (Janse & Konijnendijk, 2007; Parker, 2008). In fact, participation methods are in part developed to complement such expertise-driven approaches (Fung, 2006).

It should be kept in mind that there are multiple types of knowledge which should be considered in decision-making (Creighton, 2005). The consideration and integration of different types of knowledge is one of the main societal objectives of public participation (Laurian & Shaw, 2009). Such integration enhances the social robustness of the input for the design (Hage et al., 2010). The focus of the discourse 'lack of knowledge' lies entirely on professional knowledge, i.e. cognitive knowledge (Janse & Konijnendijk, 2007), as described above. However, experiential and value-based knowledge also needs to be considered (Janse & Konijnendijk, 2007). Also, the techno-rational approach might imply

that scientific knowledge is neutral. But it has been argued by several authors that research and project objectives such as conservation objectives underlying translocations are value- or aspiration driven (Giller et al., 2008). This can be recognised in the examples given on the white-tailed eagle - and the red kite reintroduction programmes. None of the interviewees mentioned the subjectivity of professional knowledge nor the value of integrating different types of knowledge by involving the public.

Still, some opportunities for public involvement came to mind when interviewees were asked to think about public input on other aspects than genetics or soil types. Examples are the use of knowledge on the local area. Or using public input to help decide on which area to focus on when restoration projects are being planned. It was also suggested that the public could be involved in deciding which (plant) species to reintroduce in an area. Such initiative gives the public the opportunity to get involved in one of the earliest phases of a project, which is encouraged by several authors (Doelle & Sinclair, 2006). However, this is not seen to be happening in actual projects. Also, the question arises if the public can help decide on whether a translocation should take place in the first place. When the public can exert influence on deciding which species to translocate, the decision on the need of a translocation is already seen to be made by nature conservationists involved. However, few interviewees did seem to be convinced such opportunities could be given. And some interviewees kept with their initial reaction which emphasized the lack of knowledge among the public.

Privileging professional knowledge over other sources of knowledge can be recognised as another distorted power relation (Bryson et al., 2013). This shows another distorted power relation between nature conservationists and the public. As one of the main objectives of public participation is the incorporation of different types of knowledge, it can be argued that such objective is seriously hampered by the focus of nature conservationists on professional knowledge.

It should also be noted that the usability of the input delivered by the public is dependent on the availability of information (Petts, 2008). A fundamental requirement for effective participation is the availability and accessibility of complete and unbiased information (Booth & Halseth, 2011; Creighton, 2005). The establishment of a shared base of knowledge, by information provision and by education, is one of the underlying rationales of citizen empowerment (King et al., 1998). However, actual educational activities are impaired by resource constraints (i.e. budget, staff and time) as mentioned by interviewees. But it is also dependent on the willingness of nature conservationists to provide data or organise such educational activities.

Interestingly, it was shown that bottom-up and small scale invertebrate - or plant translocations offered led to more opportunities to get meaningfully involved compared to high-profile and large scale projects. The distinction between large scale projects and small scale, bottom-up projects is also made in scientific literature. Bottom-up or small scale projects are seen to be better at enhancing democratic principles such as equity, effective participation and citizen empowerment (Parker, 2008). This is contrary to the perception that the public cannot be involved in such translocations due to a lack of (professional) knowledge. One example given by an interviewee concerned a habitat restoration project (not necessarily involving translocations and thus not mentioned in the results). In this project public participation was used to give members of the public a stronger voice in the planning phase and on design of the project. Data was collected, analysed and prepared by professionals. This data was used to build different scenarios. And in turn, the public was given the opportunity to decide between these different scenarios during workshops. It does not affect the overall design, but it gives members of the public the opportunity to get meaningfully involved in fine-tuning a plan. Such example shows that there are more opportunities to

meaningfully involve the public than merely the use of consultations or informational meetings. However, it also shows the tension between resources and effective participation. In this example more resources were needed to develop the different scenarios and to organise workshops.

Interestingly, both the Scottish Code as well as many interviewees emphasise the degree of public involvement should be related to risk perceptions. This should lead to more opportunities to exert influence in decision-making processes on high-risk or high-profile translocations. However, the example above shows that bottom-up initiatives provide more opportunities to members of the public to exert meaningful influence. The other side is that less members of the public are involved. Consultative methods, which are often used as part of high-risk translocations, may lead to more members of the public getting involved. But these members of the public can exert less influence on the design of the plan. This leads to double standards in terms of public involvement. Either it is chosen to involve many members of the public, but they are not in the position to actually exert meaningful influence on a design. Or few members of the public are involved but they have the opportunity to make a difference as they are able to exert meaningful influence.

It shows that there is a tension between striving towards meaningful influence or striving towards inclusion when designing a participation process (Kohler-Koch, 2012); Papadopoulos and Warin (2007). The degree of influence may be related to democratic principles such as fairness and equity (Papadopoulos & Warin, 2007). Such tension is also related to different forms of legitimacy: input-legitimacy and throughput-legitimacy. As input-legitimacy strives towards inclusion and openness, throughput-legitimacy strives towards procedural fairness and equity (Papadopoulos & Warin, 2007). This is a remarkable finding as tensions and trade-offs are often described between output - and input-legitimacy (see Theoretical framework). Or in other words, a trade-off between effectiveness and inclusion. Throughput-legitimacy is developed to bring these two types of legitimacy together and to reduce such tensions. However, the results show that it does not necessarily alleviate all tensions between democratic principles. It gives rise to new tensions between inclusion and openness on the one hand and fairness and equity on the other hand. These principles are all part of the concept of good governance. This raises concerns on whether all good governance principles can be equally considered in a decision-making process, or whether trade-offs are inevitable.

### Representativeness, necessary but an illusion?

Irrespective of the type of legitimacy strived for, the next question is how to get all views existing among the public represented in the decision-making process. This concern is related to uncertainties on who to entitle as 'the public'. Such uncertainty is seen to be a fundamental impairment of public participation in scientific literature (Few et al., 2006). Sometimes definitions are not given (Glucker et al., 2013) or definitions regularly change and are considered to differ under different circumstances (Creighton, 2005). This was also seen in the results, which showed wideranging definitions used by the different interviewees.

These wide-ranging definitions have been generalised into two definitions. The first (broad) definition emphasises the inclusion of the wider public. Some interviewees emphasised the importance of involving local members of the public who may not be directly affected but who do have an interest in the translocation. This definition was sometimes broadened to the wider public in terms of the whole Scottish society. Involving the wider public on the basis of interest, instead of on being affected, is considered by multiple studies (for example: Glucker et al., 2013; López-Bao et al., 2017). Several interviewees mentioned that local members of the public who get involved do not necessarily represent the interest of the wider public or of citizens who do not get involved. This is in

line with the concept 'tyranny by the minority', in which the interests of the local public or local interest groups may not always be representative for the interests of the wider public (López-Bao et al., 2017). The interviewees argued that using a broad definition could, in theory, solve this and increase the representativeness.

The second definition is a narrow definition which emphasizes the inclusion of members of the public who are likely to be affected by a decision. This definition is dependent on the risk perception and it is also seen to be used by the Scottish Code. Such definition is most commonly used when determining who should be defined as the public (Creighton, 2005). However, it did lead to uncertainties among interviewees on how to decide who will be affected. And when a translocation might have widespread impacts, the next question is which communities to involve. Uncertainties on who will be affected are complicated as it was seen that risk perceptions are sometimes different between nature conservationists and the public. This can be seen in the beaver - and white-tailed eagle reintroductions. Different risk perceptions between the public and experts are acknowledged in literature (Sjöberg, 1999; Slimak & Dietz, 2006). It is regularly assumed that this discrepancy is caused by differences in knowledge. Thus, educational activities are again needed to create a shared base of knowledge. But it is also seen to be related to different definitions of risk. Experts tend to look at probabilities and the public tends to think in terms of possible consequences (Sjöberg, 1999). These differences in risk perceptions were not always acknowledged or considered by interviewees. This might be related to the earlier discussed focus on a techno-rational approach by privileging professional knowledge over other types of knowledge. This might imply that other types of reasoning on which risk perceptions may be based, such as thinking in terms of consequences, are not always considered.

A brief search on Scopus showed that differing risk perceptions between experts and the public are most often studied. However, interviewees also noted that risk perceptions differ between nature conservationists themselves. The example on the risk perception of invertebrate translocations clearly showed such difference. One interviewee explained that concerns on possible risks of invertebrate translocations are often dismissed by colleagues. This was witnessed during the interviews as well. Some interviewees pointed out that invertebrate translocations may involve risks and can sometimes be seen as controversial. Whereas others explicitly mentioned they feel that such invertebrate translocations are not controversial. These different risk perceptions may lead to differences in determining who should be involved when a narrow definition is used.

When comparing these two definitions, it was noticed that the tension between inclusion and influence arises again. The use of a broad definition focusses on inclusion. It would lead to more members of the public getting involved, but they can exert less influence. Whereas a narrow definition often leads to less members of the public being involved. But they might be able to exert more influence on the decision-making process. Which definition to choose is dependent on the type of legitimacy pursued.

Despite the different definitions, public participation is often characterised by a limited representativeness. Few members of the public are involved, a certain type of people is overrepresented (Janse & Konijnendijk, 2007) and not all interests are perceived to be included in the process. Such process is sometimes called the 'noisy minority' compared to the 'silent majority' (Day, 2017). As several interviewees mentioned, it are often the 'usual suspects' who get involved. This is related to the 'tyranny by the minority' as it is seen to be doubtful that this minority represents the interests of the majority (Fung, 2006; Irvin & Stansbury, 2004). Moving on to a broader representation of a local community or the wider public is seen to be difficult, due to the lack of interest.

One interviewee mentioned such low representativeness also implies that no 'neutral' members of the public are involved. And this was seen to harm meaningful participation practices. For example because this meant that undesirable input could be delivered. It was implicitly mentioned that this could or should be counteracted and prevented by organising less influential forms of public participation. This idea of undesirable input conflicts with the neutrality and openness of a facilitating agency. This neutrality and openness is a key-requirement for meaningful public participation processes (Heath et al., 2006). The question also arises whether neutrality in terms of interests or perceptions is possible. Each individual has his or her own interests to pursue and therefore an individual cannot be neutral. But it is required that interests or agendas need to be transparent for all participants (Rodela, 2012).

Most interviewees assumed representativeness is an objective which should and could be reached when public participation is properly implemented. However, representativeness is a concept which is highly debated in literature. Some studies advocate for achieving representativeness as it promotes inclusiveness, equity (Oughton, 2008) and fairness (Newig, 2007). Or as it is considered to be 'good practice' (Conrad et al., 2011a; López-Bao et al., 2017). Other studies argue it is very difficult, unrealistic or even impossible to achieve such representativeness (Few et al., 2007; Lowndes et al., 2001b; Oughton, 2008; Turnhout et al., 2010). Several interviewees considered and encouraged an increased representativeness. But it was also questioned how many people you could get involved. These interviewees implicitly indicated the trade-off between inclusion and influence as discussed earlier.

An interviewee also wondered how to consider the input of all members of the public involved, when representativeness would be achieved. The underlying thought was that this is already a difficulty in current public participation processes. Indeed, it should be kept in mind that achieving representativeness does not immediately legitimise the process and the decision taken. It does not necessarily mean the input has been taken into consideration (Oughton, 2008). Following up on the difficulty expressed by the interviewee, it might be worthwhile to first move away from a focus on representativeness in processes in which the input of the public cannot or will not be considered. The focus should be on an actual consideration of the input of the public. As well as on transparency on argumentations on how the input has been considered. In turn, representativeness may be strengthened as responsiveness and inclusiveness are seen to be mutually reinforcing mechanisms (Hickey & Mohan, 2004).

### Towards more democratic decision-making?

I began this chapter with the statement that democracy and participation are fundamentally intertwined. Public participation could and should be used to strive towards more democratic decision-making. However, to be able to strive towards democratic decision-making, effective or meaningful public participation practices are necessary. As mentioned in Chapter 1, it is regularly questioned whether public participation is and can be used effectively. Such concerns on the effective use of public participation were also witnessed in Scotland. The different hindering processes, the impairment of good governance principles and trade-offs between such principles underline the difficulty of making public participation work on the ground. Principles which are aimed to be accomplished and to be reinforced by using public participation. As suggested in the Theoretical Framework, the trade-off between effectiveness and legitimacy may hinder effective public participation. This trade-off was clearly visible and often recurring in the discussion. Interestingly, the often mentioned solution to overcome this trade-off (through-put legitimacy) could

lead to other trade-offs among several good governance principles. *Table 4A and 4B* provide a complete overview of the different processes, impairments and trade-offs and their effect in terms of opportunities and barriers to effective participation as described in this subchapter.

Table 4A: Summary of processes, categories, opportunities and barriers (part 1).

Driving Force	Processes (Chapter 4)	Broader categories (Chapter 5)	Opportunities for effective participation	Barriers to effective participation
Actors	Who is the public?	Representativeness		<ul> <li>Differing definitions of the public -         <ul> <li>Interviewees, (Creighton, 2005)</li> <li>Input-legitimacy versus through-</li> </ul> </li> </ul>
	Engaging the public, a balanced representation?			put legitimacy / inclusion versus influence - Interviewees - 'Tyranny of the minority' - Interviewees, (López-Bao et al., 2017)
Discourses (Positive)	Fundamental for success	A change in rationale?	- Instrumental or normative rationale witnessed among some nature conservationists - Interviewees, (Wesselink et al., 2011)	<ul> <li>Few interviewees recognised importance of public involvement - Interviewees</li> <li>Legalistic rationale underlying the use of public participation - Interviewees, (Wesselink et al., 2011)</li> <li>Focus on informing methods, no dialogue - Interviewees</li> <li>Danger of box-ticking exercises - Interviewees, (Reilly et al., 2016)</li> </ul>
Discourses (Hindering)	From 'Nature Despite People' to 'Nature and People'?			
	Lack of interest	Public 'apathy'		<ul> <li>Lack of interest public -         Interviewees</li> <li>Overgeneralisation of underlying         processes towards lack of interest         - Interviewees, (Turnhout et al.,         2010)</li> <li>Focus on perspective of         facilitating actors, perspective of         public often overlooked -         Interviewees, (Dalton, 2006;         Doelle &amp; Sinclair, 2006)</li> </ul>
	Lack of knowledge	Integration different sources of knowledge	- Bottom-up initiatives show opportunities for meaningful participation - Interviewees	<ul> <li>Focus on techno-rational approach - Interviewees, (Petts &amp; Leach, 2000)</li> <li>No consideration of other types of knowledge - Interviewees, (Janse &amp; Konijnendijk, 2007)</li> <li>Professional knowledge is 'neutral' - Interviewees, (Giller et al., 2008)</li> <li>Resource constraints educational activities - Interviewees</li> </ul>
	Effectiveness versus public involvement	Honest and effective public participation	See Normative rules of the game (Table 4B)	See Normative rules of the game (Table 4B)

Table 4B: Summary of processes, categories, opportunities and barriers (part 2).

Driving Force	Processes (Chapter 4)	Broader categories (Chapter 5)	Opportunities for effective participation	Barriers for effective participation
Power and Influence	Distorted power relations between public and other actors	Levelling the playing field		<ul> <li>Powerful sectors - Interviewees</li> <li>Political processes - Interviewees</li> <li>Unwillingness to give up power by nature conservationists - Interviewees, (Iacuzzi et al., 2015)</li> <li>Resource inequality, also within</li> </ul>
	Resource constraints			the public - Interviewees, (Jami & Walsh, 2014) - Efficiency versus effectiveness - Interviewees, (Jami & Walsh, 2014)
Rules of the Game (Formal)	UNECE Aarhus Convention	Institutionalisation	- Legal institutionalisation not necessary for meaningful public participation - Interviewees, (Papadopoulos & Warin, 2007)	<ul> <li>Difficulty of formalising legal requirements public participation - Interviewees, (Bryson et al., 2013)</li> <li>Uncertainty on whether legal requirements lead to meaningful participation – Interviewees, (Papadopoulos &amp; Warin, 2007)</li> <li>Lack of change in attitude, but necessary for institutionalisation - Interviewees, (Pimbert, 2004)</li> <li>Lack of change in - and clarity of procedural norms, but necessary for institutionalisation - Interviewees, (Pimbert, 2004)</li> </ul>
	IUCN Guidelines for Reintroductions and Other Conservation Translocations  Scottish Code for Conservation			
	Translocations  Uncertainty on			,
	how to involve the public	Honest and effective public participation		<ul> <li>Lack of dialogue due to preference informing methods - <i>Interviewees</i></li> <li>Lack of transparency of</li> </ul>
Rules of the Game (Normative)	Uncertainty on decision on the amount of influence given to the public			consideration and weighing of input public - Interviewees, (Lockwood et al., 2010; Petts, 2008)  Retroactive legitimisation of decisions - Interviewees, (Ohl et al., 2008)
	Transparency and fairness of both the final decision-making process and participation methods			<ul> <li>Effectiveness versus legitimacy -         Interviewees, (Ohl et al., 2008)</li> <li>Lack of neutrality or openness         facilitator / hidden agendas -         Interviewees, (Booth &amp; Halseth,         2011; Dalton, 2006)</li> </ul>

Both the establishment of the Scottish Code, as well as the Aarhus Convention, were seen to build a legal framework which encourages the use of effective public participation practices. However, the study showed that institutionalisation into a legal framework is not the key for making public participation work. Institutionalisation does require more changes, among which changes in procedural norms and attitudes. These were not often witnessed in the Scottish context. This is underlined by the different hindering discourses and the preference of many interviewees towards informing methods. Under such circumstances, legal institutionalisation can lead to the use of public participation as an end-result. When it is used as an end-result, the main purpose of implementing public participation practices is to merely comply with legal requirements. It does not empower members of the public. To be able to promote and strengthen democratic decision-making, public participation should be used as a means to an end. In such case it is used as an instrument to achieve the different societal objectives it should serve.

Considering the different societal objectives of public participation (Appendix A), few to none of such societal objectives are seen to be met by current practices. Perhaps with the exception of objectives such as meeting legal requirements as part of the Scottish Code (not considering requirements of the Aarhus Convention as these are not met) and an increased public awareness when the public is actively informed. These two objectives are more easily reached in high(er)-profile translocations such as the beaver reintroduction, due to strict requirements and a higher perceived interest among the public. However, both objectives should be used to work towards more meaningful public participation practices. Broader underlying objectives of public participation are not seen to be met as these are seriously hampered by the processes found in the results. Examples of such broader underlying objectives are the establishment and enhancement of the legitimacy of a decision-making process and the decision taken, citizen empowerment and meeting good governance principles. It should be kept in mind that participation practices may backfire if they are not properly designed and implemented (Halvorsen, 2003). It may lead to more disillusion of both participants and practitioners (Yang & Pandey, 2011) whereas 'a history of participation with no visible impact on agency decisions can be worse than no participation at all' (Halvorsen, 2003, p. 540). Such disillusion was visible among the interviewees who encouraged the use of meaningful public participation, but who also noticed that there are too many hindering process at play to make public participation work.

It should be clear that public participation in decision-making on conservation translocations is seen to fail. There are (too) many different processes which are seen to hinder the use of public participation as an instrument to reach societal objectives. Examples are the different hindering discourses among nature conservationists, no realised level playing field and the difficulties with representativeness. It is questionable if and how the input of the public is actually considered in decision-making processes. Whereas the opportunity to deliver input is also hampered by the preference towards informing methods or by organising public participation during the release-phase (or even later). Societal objectives which should be served by public participation are not seen to be met. A careful consideration of underlying fundaments of public participation is needed to comply with good governance principles (Fung, 2015) as well as to achieve the societal objectives. Achieving these societal objectives is a requirement for democratic decision-making. Especially when the importance of both the participatory and deliberative democracy model is considered. It can be argued that decision-making is less democratic than it could or should be compared to a context in which effective public participation practices are used.

Such conclusion on ineffective public participation and the consequences for democratic decision-making in Scotland may also have consequences for the use of public participation in an international context of conservation translocations. The Scottish Parliament intends to strive towards an open

and participatory democracy (Bonney, 2003) by enhancing the connection between the political and decision-making level and the society (Davidson & Elstub, 2014). However, this is seen to be impaired by several processes such as serious concerns on how and whether the input of the public is considered and a lack of a level-playing field (Davidson & Elstub, 2014; Scottish Wild Land Group, 2017). It shows that concerns and processes found in this study are part of a larger democratic deficit which appears to be present in Scotland. This may have implications for the usability of effective public participation in nature conservation in other countries as well. A (strive towards a) progressive and participatory democracy is considered to be key-requirement and an important underlying rationale for using effective public participation practices (see Chapter 2). If effective public participation cannot be achieved in such an environment, it may be doubtful how such effective participation practices can be achieved in less progressive democracies. This shows that there are still many hurdles to take to involve the public effectively in decision-making and to be able to effectively strive towards more democratic decision-making in nature conservation.

# 5.2. Reflection on the conceptual framework

Both the results and the reflection on these results show that the conceptual model (*Figure 3, p. 12*) proved to be a valuable model to identify and analyse processes which affect the effectiveness of public participation practices.

For each driving force multiple processes were identified. These processes were seen to have a direct effect on the functioning of public participation. These processes were also seen to affect and (often) reinforce other processes, which proved that these driving forces are interrelated. The linkages which show this interrelatedness between the driving forces are seen to be correct. The same is true for the direct linkages between the driving forces and effectiveness of public participation. These linkages have been kept the same in *Figure 4* (p. 59).

However, one change has been made on the basis of the results found in the Scottish case study. The project characteristics were initially thought to be directly related to the functioning of public participation, i.e. directly affecting the decision on which participation method to use and the degree of influence for the public. It was found that the most important project characteristics are traced back to risk perceptions and their indicators. Initially, other aspects such as finances (or other resources) were seen to be part of such project characteristics. These resources, and their constraints, are now considered to be a process which is part of the 'Power and Influence' driving force. This is the first change which was made.

Next, it was seen that the project characteristics are not directly related to the effectiveness of public participation. These project characteristics are seen to be of influence on the processes which are part of the different driving forces. This means that they have an indirect effect on the functioning of public participation. To give an example: a lack of professional knowledge was deemed to be more important for low-profile translocations of plant - or invertebrate species. This lead to the suggestion that it is better to inform the public than to organise consultations as the public would not be able to deliver meaningful input. In this example, the distinction between low-profile and high-profile or the type of species involved leads to the outlined reasoning which is related to the 'lack of knowledge' discourse. Thus, the project characteristics are seen to be directly related to the four driving forces, indirectly affecting the functioning of public participation. This has been changed in *Figure 4* (p. 59).

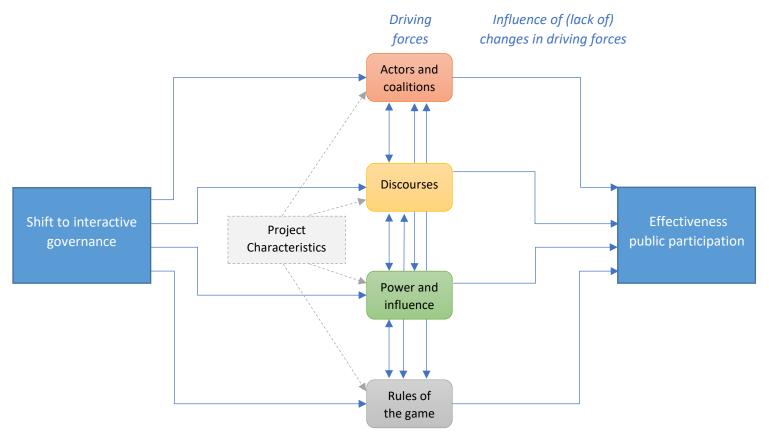


Figure 4: Conceptual model (revised). Adapted from policy arrangement approach by Arnouts and Arts (2009).

## 5.3. Reflection on the methodology

It is thought that the results found in this study are representative for the actual underlying processes which lead to the often acknowledged failure of public participation methods. This is seen to be underlined by similar results found in studies on public participation in other fields such as environmental sciences or natural resources management. Or even broader, similar results are also found in studies on public participation in the field of public administration or health care.

Data for this study has been collected by using qualitative methods and as part of a case study. The case study has been used to contact representatives of different organisations who were involved in the different translocations which were chosen for the case study. Each interview was in part focussed on the specific case a representative or organisation was involved in. The remaining part was used to collect data on the use and workability of public participation in decision-making processes on conservation translocations in general. Because of this, most results can be generalised to the use of public participation in Scottish conservation translocations overall. There is one exemption, which is the first sub-question on the main forms of participation used. This question served as a stepping stone towards the analysis of the underlying processes and it was used to assess the actual use of public participation on the ground. This gave the opportunity to compare the main forms used with (potential) answers of interviewees which would not be in line with the actual situation on the ground. In other words, it could also be used as part of triangulation and to check for socially desirable answers. This sub-question has primarily been answered by using data on the four cases. This means that more interactive forms could have been used in other translocations, which

was demonstrated by an example by one of the interviewees. At first glance, the results for this subquestion are not directly generalisable to other translocations. However, the discussion did show that the data for this sub-question is in line with other findings on - and preferences towards public participation methods. Moreover, it is also seen that the results for the first sub-question are in line with the regularly mentioned preference on the timing of public participation, i.e. rather during the planning - or release phase than earlier in the decision-making process.

For example, the data collected on the underlying processes shows there still is a tendency to use (mainly) informing or consultative types of participation due to various reasons. This is in line with the data found for the first sub-question. These processes were in part distilled from argumentations on how to use public participation in the different cases, but also from data on general feelings towards the use and workability of public participation methods. The different processes described as part of the various driving forces are seen to be processes which can be generalised to mechanisms which affect (and often hamper) the use of meaningful public participation methods in the light of conservation translocations. The examples given about the unfair use of public participation methods such as mentioned in Chapter 4.2.4 on normative rules are not examples which are generalisable to processes which affect effective public participation. But it does show there is opportunity to use dishonest methods and practitioners have been seen to use this space either deliberately or unintentionally.

When considering the methods used to collect the data, several limitations can be found. First, literature research was conducted as a preparation for the semi-structured interviews. During the data collection phase, the SNH website was renewed. The old website, and thus documents, was offline and documents on the new website were often not readily available. Even though the most important documents were already acquired during the proposal phase of the thesis, there were situations in which certain documents were not available before the start of an interview. The same goes for the database which is mentioned in the Scottish Code, even though this database was also not found on the previous website of the SNH.

The use of semi-structured interviews had its pros and cons. The response rate on the amount of invitations sent was quite low. Nine responses out of thirty led to an interview. Some of the enquiries had been forwarded to the same interviewee. However, it often led to no response. It is suspected that most interviewees who answered to the enquiries were interested in the use of public participation in the first place. This interest in public participation could have led to an overly positive view on the use of public participation. However, the data collected showed that interviewees, despite their interest, did have quite a realistic view on the workability of public participation on the ground. The low amount of interviewees can be perceived as a constraint of this study. However, the interviewees who were willing to participate provided useful in-depth data on the use of public participation on the ground and on which processes are at play. Therefore it is thought that this constraint did not affect the results.

The semi-structured interviews enabled the use of fictive scenarios. Other methods such as questionnaires would have led to a limited usability of such scenarios as questions are fixed and there is no opportunity to ask follow-up questions. A questionnaire, and its questions, would also force a respondent to think towards a certain direction. Whereas the scenarios were ideally used to analyse responses and processes which immediately came to mind, without using any steering questions. The questions which were used to support the discussion on a scenario were intentionally open-ended and non-steering questions. The use of the scenarios has been a valuable addition which often resulted in an in-depth discussion on why and how to use participation in such fictive translocations and in conservation translocations in general.

The use of semi-structured interviews also enabled the author to ask follow-up questions when evasive answers were given or to observe body language when certain statements were made by interviewees or by the author. It is also seen that such interviews do provide more data, as it also provided interviewees the opportunity to elaborate on similar cases they were involved in or had heard of. Such elaborations were not expected when using for example questionnaires. However, interviews do have one important drawback: socially desirable answers. The author tried to prevent such answers by ensuring anonymity. But there were occasions in which such answers were seen to be given. Such socially desirable answers are seen to be less of a risk when using questionnaires. However, as such answers were not regularly given, such limitation does not weigh up against the benefits of using semi-structured interviews.

This makes it rather unfortunate no interviews could be arranged to compare the results found in Scotland with the societal objectives of the Aarhus Convention or the IUCN guidelines. Especially a reaction of organisations which work the implementation the Aarhus Convention would have been a valuable addition. For example, transparency and levelled power relations are seen to be a major step forward in paving the road to effective public participation which is encouraged by the Aarhus Convention. While these are also often seen to be a major and unsolvable impairment to effective public participation processes as shown in this study. Although such reaction would have been a welcome addition, it does not affect the outcomes on the effectiveness of public participation on the ground. The abundance of legislative documents and scientific studies on public participation gave the opportunity to compare the underlying processes with good governance principles and other societal goals.

# 6. Conclusion

This study has answered the following research question: *To what extent does the implementation of public participation in decision-making on conservation translocations achieve the societal objectives which citizen participation ought to serve?* It was shown that there is a clear distinction between the use of public participation in decision-making on conservation translocations and the societal objectives the concept should fulfil.

Both the main forms used in the case study and the results on the underlying processes have shown that nature conservationists have a preference towards the use of mainly informative and sometimes consultative methods. Several characteristics of a translocation have an indirect effect on the use of public participation. These are all related to risk perceptions. A risk perception is based on three indicators, which are: low-profile versus high-profile translocation; perceived (biological or societal) impact; dispersal power in combination with the scale of the translocation. These indicators affect the use of (effective) public participation practices indirectly as the risk perception is seen to feed into the different underlying processes at play.

There are many, often hindering, processes of influence on the use of (effective) public participation. There are two processes found which may have a positive effect of public participation. One is the legal framework established as part of the Scottish Code, which demands the use of public participation practices for translocations which require a license. However, it is doubtful how this enhances the use of public participation in decision-making processes on non-licensed translocations. The second process which may positively affect the effectiveness of public participation is the awareness witnessed among some interviewees on the need of public involvement to increase chances for a successful translocation. However, many other processes are seen to hamper an effective use of public participation. A summary of these processes, and the barriers they pose to effective participation, is shown in *Table 4A and 4B, p. 55, 56*. The most important processes which hinder the functioning of public participation are difficulties in achieving representativeness, a lack of knowledge and interest among the public, distorted power relations, a preference towards one-way communication and a lack of transparency. This lack of transparency concerns both public participation practices and the subsequent procedures on the consideration of the input delivered by the public.

These processes were seen to lead to several trade-offs which are related to principles of good governance and to democratic principles. The main trade-offs found are between the effectiveness of the translocation and either openness, transparency, inclusion, fairness and influence. With such trade-offs and hindering processes it is hard to see how most societal objectives can be achieved. These are either societal objectives as found in regulations or scientific literature, or fundamental democratic principles. Whereas societal objectives such as meeting statutory requirements as part of the Scottish Code and informing the public on ongoing projects may be achieved by several projects, broader and more fundamental underlying objectives such as citizen empowerment and legitimising decision-making processes are not seen to be achieved.

## Recommendations for future research

As this study has shown there are many processes which hinder the effective use of public participation. One of the main constraints is the mindset and the unwillingness of many nature conservationists to organise meaningful public involvement. This reluctance was sometimes related to uncertainties or to previous experiences with failing public participation practices. More guidance and a further development of public participation practices as well as its design may be useful to address such reluctance. Three recommendations for future research are made. These recommendations are either a follow up on the results found or on aspects which were not considered in this study.

- 1. The first and foremost recommendation which arises from this study concerns the perspectives of the public on public participation. As shown, the perspectives of members of the public on why they would or do not get involved are generally ignored by professionals. The lack of involvement was often being regarded as a lack of interest or public apathy. Public participation is essentially about two-way communication, which makes it important to consider the perspectives of both sides involved. This study has focussed on the perspective of the practitioner and decision-maker, nature conservationists in this study. A different study which analyses the perspectives of the Scottish public would be a valuable addition to get an understanding of why many members of the public do not get involved and what should be improved to change this. Eventually, these two perspectives could be combined to make recommendations on how to make public participation more meaningful and effective.
- 2. Secondly, and in line with uncertainties of several interviewees, it would be interesting to specifically look into the timing of public participation. In other words, during which phases public involvement could be considered and used. This knowledge could be used to determine how to align the use of public participation with the requirement that public participation should be used as early as possible. The earlier the public is involved in a decision-making process, the more meaningful their input is. And this could also build increased levels of trust as the public would feel their opinions matter and they have can meaningfully deliver input on a design. This is less the case when public participation is organised at a late stage of a decision-making process when decisions are already (felt to be) taken. The results showed that multiple opinions exist on when it is best to involve the public. Sometimes it was preferred to organise public participation practices when decisions had been taken, which hinders meaningful involvement. More guidance on such uncertainty could be another step which could lead to more meaningful and effective public participation.
- 3. Finally, a lack of a level playing field was seen to be one of the processes which hinders the effective use of public participation. The following suggestion for future research is not directly related to conservation translocations and the influence of power relations on whether such translocations are carried out or not. This suggestion is related to the design of public participation practices and the consideration of public input. Both scientific literature and legislation such as the Aarhus Convention encourage the realisation of a level playing field. Whereas input delivered by the public can only be meaningfully considered when it is not swept aside by input of actors who have a stronger voice. It is doubtful whether a true

level playing field can be achieved due to differences in resources and due to political relations. However some power relations may be levelled by an improved design of a decision-making process (e.g. increased transparency), such as distorted power relations between the public and facilitating nature conservationists who do not take an open or neutral position in the process. More guidance on how to design and evaluate participatory processes to ensure a meaningful consideration of the public could help enhancing the effectiveness of public participation.

# References

- Aarts, N., & Leeuwis, C. (2010). Participation and power: reflections on the role of government in land use planning and rural development. *Journal of agricultural education and extension*, 16(2), 131-145.
- Agere, S. (2000). *Promoting good governance: Principles, practices and perspectives* (Vol. 11): Commonwealth secretariat.
- Alemanno, A. (2013). Unpacking the principle of openness in EU Law: Transparency, participation and democracy. *European Law Review*, *39*(72).
- Andersson, K., Wene, C.-O., Sjöberg, B.-M. D., & Westerlind, M. (2003). Design and evaluation of public hearings for Swedish site selection. *SKI Report, Stockholm, Sweden, 32*.
- Armstrong, D. P., & Seddon, P. J. (2008). Directions in reintroduction biology. *Trends in Ecology & Evolution*, 23(1), 20-25.
- Arnouts, R., & Arts, B. (2009). Environmental Governance Failure: The 'Dark Side' of an Essentially Optimistic Concept. In B. Arts, A. Lagendijk, & H. v. Houtum (Eds.), *The Disoriented State:* Shifts in Governmentality, Territoriality and Governance (pp. 201-228). Dordrecht: Springer Netherlands.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners,* 35(4), 216-224.
- Arts, B., Leroy, P., & Van Tatenhove, J. (2006). Political modernisation and policy arrangements: a framework for understanding environmental policy change. *Public organization review*, *6*(2), 93-106.
- Arts, K., Fischer, A., & van der Wal, R. (2014). Political decision making, governance shifts and Scottish animal reintroductions: are democratic principles at stake? *Journal of Environmental Planning and Management*, *57*(4), 612-628.
- Beaver Salmonid Working Group. (2015). Final report of the beaver salmonid working group. Retrieved from
- Bekkers, V., Dijkstra, G., Edwards, M. A., & Fenger, M. (2007). *Governance and the democratic deficit:* assessing the democratic legitimacy of governance practices (V. Bekkers, G. Dijkstra, M. A. Edwards, & M. Fenger Eds.): Ashgate Publishing, Ltd.
- Berg-Schlosser, D. (2004). The quality of democracies in Europe as measured by current indicators of democratization and good governance. *Journal of Communist Studies and Transition Politics*, 20(1), 28-55.
- Biegelbauer, P., & Hansen, J. (2011). Democratic theory and citizen participation: democracy models in the evaluation of public participation in science and technology. *Science and Public Policy*, 38(8), 589-597.
- Bonney, N. (2003). The Scottish Parliament and participatory democracy: vision and reality. *The Political Quarterly, 74*(4), 459-467.
- Booth, A., & Halseth, G. (2011). Why the public thinks natural resources public participation processes fail: A case study of British Columbia communities. *Land Use Policy, 28*(4), 898-906.
- Brooks, T. (2014). Ethical Citizenship and the Stakeholder Society *Ethical Citizenship* (pp. 125-138): Springer.
- Brown, C., McMorran, R., & Price, M. F. (2011). Rewilding A New Paradigm for Nature Conservation in Scotland? *Scottish Geographical Journal*, *127*(4), 288-314.
- Bryson, J. M., Quick, K. S., Slotterback, C. S., & Crosby, B. C. (2013). Designing public participation processes. *Public Administration Review*, 73(1), 23-34.
- Bulkeley, H., & Mol, A. P. (2003). Participation and environmental governance: consensus, ambivalence and debate. *Environmental Values*, 12(2), 143-154.
- Burton, P. (2009). Conceptual, theoretical and practical issues in measuring the benefits of public participation. *Evaluation*, 15(3), 263-284.

- Cairngorms Rare Plants Project. (2011). Small Cow-wheat. Retrieved from <a href="http://www.cairngormsrareplants.org.uk/index.php/the-species/32">http://www.cairngormsrareplants.org.uk/index.php/the-species/32</a> on 18-09-2017.
- Clark, J. D., Huber, D., & Servheen, C. (2002). Bear Reintroductions: Lessons and Challenges: Invited Paper. *Ursus*, *13*, 335-345.
- Conrad, E., Cassar, L., Jones, M., Eiter, S., Izaovičová, Z., Barankova, Z., Christie, M., & Fazey, I. (2011a). Rhetoric and reporting of public participation in landscape policy. *Journal of environmental policy & planning, 13*(1), 23-47.
- Conrad, E., Cassar, L. F., Christie, M., & Fazey, I. (2011b). Hearing but not listening? A participatory assessment of public participation in planning. *Environment and Planning C: Government and Policy*, 29(5), 761-782.
- Conroy, M. J., & Peterson, J. T. (2013). *Decision making in natural resource management: a structured, adaptive approach*: John Wiley & Sons.
- Converse, S. J., Moore, C. T., Folk, M. J., & Runge, M. C. (2013). A matter of tradeoffs: Reintroduction as a multiple objective decision. *The Journal of Wildlife Management*, 77(6), 1145-1156.
- Creighton, J. L. (2005). *The public participation handbook: Making better decisions through citizen involvement*: John Wiley & Sons.
- Dalrymple, S. E., Crichton, R. J., & Scobie, A. R. (2016). Small Cow-wheat. In M. J. Gaywood, P. J. Boon, D. B. A. Thompson, & I. M. Strachan (Eds.), *The Species Action Framework*. Battleby, Perth: Scottish Natural Heritage.
- Dalton, T. M. (2006). Exploring participants' views of participatory coastal and marine resource management processes. *Coastal Management*, *34*(4), 351-367.
- Davidson, S., & Elstub, S. (2014). Deliberative and Participatory Democracy in the UK. *The British Journal of Politics & International Relations*, 16(3), 367-385.
- Day, J. C. (2017). Effective Public Participation is Fundamental for Marine Conservation—Lessons from a Large-Scale MPA. *Coastal Management*, 1-17.
- De Santo, E. M. (2016). Assessing public "participation" in environmental decision-making: Lessons learned from the UK Marine Conservation Zone (MCZ) site selection process. *Marine Policy*, 64, 91-101.
- Depoe, S. P., Delicath, J. W., & Elsenbeer, M.-F. A. (2004). *Communication and public participation in environmental decision making*: SUNY Press.
- Dietz, T., & Stern, P. C. (2008). *Public participation in environmental assessment and decision making*. Washington, DC: National Academies Press.
- Doelle, M., & Sinclair, A. J. (2006). Time for a new approach to public participation in EA: Promoting cooperation and consensus for sustainability. *Environmental Impact Assessment Review*, 26(2), 185-205.
- Doornbos, M. (2001). 'Good governance': The rise and decline of a policy metaphor? *Journal of Development studies, 37*(6), 93-108.
- Driessen, P., Goverde, H., & Leroy, P. (2007). Milieubeleid als interactievraagstuk. In P. Driessen & P. Leroy (Eds.), *Milieubeleid. Analyse en perspectief.* Bussum: Uitgeverij Coetinho.
- Driessen, P. P., Dieperink, C., Laerhoven, F., Runhaar, H. A., & Vermeulen, W. J. (2012). Towards a conceptual framework for the study of shifts in modes of environmental governance—experiences from the Netherlands. *Environmental policy and governance*, 22(3), 143-160.
- Ewen, J. G., Soorae, P. S., & Canessa, S. (2014). Reintroduction objectives, decisions and outcomes: global perspectives from the herpetofauna. *Animal Conservation*, *17*, 74-81.
- Fenger, M., Bekkers, V., & Dijkstra, G. (2007). Governance and the Democratic Deficit: Routledge.
- Few, R., Brown, K., & Tompkins, E. L. (2006). Public participation and climate change adaptation. Tyndall Centre for Climate Change Research Working Paper, 95.
- Few, R., Brown, K., & Tompkins, E. L. (2007). Public participation and climate change adaptation: avoiding the illusion of inclusion. *Climate policy*, 7(1), 46-59.
- Fung, A. (2006). Varieties of participation in complex governance. *Public Administration Review,* 66(s1), 66-75.

- Fung, A. (2015). Putting the public back into governance: The challenges of citizen participation and its future. *Public Administration Review*, 75(4), 513-522.
- Gaywood, M. J., Stringer, A., Blake, D., Hall, J., Hennessy, M., Tree, A., Genney, D., Macdonald, I., Tonhasca, A., Bean, C., McKinnell, J., Cohen, S., Raynor, R., Watkinson, P., Bale, D., Taylor, K., Scott, J., & Blyth, S. (Eds.). (2015). *Beavers in Scotland: A report to the Scottish Government*. Inverness: Scottish Natural Heritage.
- Gibbons, M. (1999). Science's new social contract with society. Nature, 402, C81-C84.
- Giller, K., Leeuwis, C., Andersson, J., Andriesse, W., Brouwer, A., Frost, P., Hebinck, P., Heitkönig, I., van Ittersum, M., & Koning, N. (2008). Competing claims on natural resources: what role for science? *Ecology and Society*, *13*(2).
- Glucker, A. N., Driessen, P. P., Kolhoff, A., & Runhaar, H. A. (2013). Public participation in environmental impact assessment: why, who and how? *Environmental Impact Assessment Review*, 43, 104-111.
- Griffin, L. (2010). The limits to good governance and the state of exception: A case study of North Sea fisheries. *Geoforum*, *41*(2), 282-292.
- Hage, M., Leroy, P., & Petersen, A. C. (2010). Stakeholder participation in environmental knowledge production. *Futures*, *42*(3), 254-264.
- Halvorsen, K. E. (2003). Assessing the effects of public participation. *Public Administration Review,* 63(5), 535-543.
- Heard-Lauréote, K. (2010). European Union governance: effectiveness and legitimacy in European Commission committees: Routledge.
- Heath, R. L., Pearce, W. B., Shotter, J., Taylor, J. R., Kersten, A., Zorn, T., Roper, J., Motion, J., & Deetz, S. (2006). The processes of dialogue: Participation and legitimation. *Management Communication Quarterly*, 19(3), 341-375.
- Hickey, S., & Mohan, G. (2004). *Participation--from tyranny to transformation?: Exploring new approaches to participation in development*: Zed books.
- Wildlife and Countryside Act 1981 (as amended), § 16 & 16A (1981).
- Iacuzzi, S., Ianniello, M., Fedele, P., & Brusati, L. (2015). Civil Dialogue: Obstacles and Solutions A Meta-Analysis of the Empirical Evidence1. *Forms and Determinants of Development of Civil Dialogue*, 47.
- IAP2. (2014). IAP2's Public Participation Spectrum. Retrieved from <a href="http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/foundations\_course/IAP2\_P2\_Spectrum\_FINAL.pdf">http://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/foundations\_course/IAP2\_P2\_Spectrum\_FINAL.pdf</a> on 04-08-2017.
- Innes, J. E., & Booher, D. E. (2004). Reframing public participation: strategies for the 21st century. *Planning theory & practice, 5*(4), 419-436.
- Irvin, R. A., & Stansbury, J. (2004). Citizen participation in decision making: Is it worth the effort? *Public Administration Review, 64*(1), 55-65.
- IUCN. (1987). Position Statement on the Translocation of Living Organisms: Introductions, Reintroductions, and Re-stocking. Species Survival Commission in collaboration with the Commission on Ecology and the Commission on Environmental Policy, Law and Administration, Gland, Switzerland.
- IUCN. (1998). *Guidelines for Re-introductions*. Gland, Switzerland and Cambridge, UK: IUCN IUCN, & SSC. (2013). *Guidelines for Reintroductions and Other Conservation Translocations*. Gland,
- Switzerland
- Jacobson, S. K., & Duff, M. D. (1998). Training Idiot Savants: The Lack of Human Dimensions in Conservation Biology. *Conservation biology*, *12*(2), 263-267.
- Jami, A. A., & Walsh, P. R. (2014). The role of public participation in identifying stakeholder synergies in wind power project development: The case study of Ontario, Canada. *Renewable Energy*, 68, 194-202.
- Janse, G., & Konijnendijk, C. C. (2007). Communication between science, policy and citizens in public participation in urban forestry—Experiences from the Neighbourwoods project. *Urban Forestry & Urban Greening*, *6*(1), 23-40.

- Jones, M. (2011). European Landscape and Participation—Rhetoric or Reality? Paper presented at the The European Landscape Convention.
- Kangas, A., Kangas, J., & Kurttila, M. (2008). Decision support for forest management: Springer.
- Keping, Y. (2011). Good governance and legitimacy *China's Search for Good Governance* (pp. 15-21). New York: Palgrave Macmillan.
- Keulartz, J., & Leistra, G. (2007). *Legitimacy in European nature conservation policy: case studies in multilevel governance* (Vol. 14): Springer Science & Business Media.
- Kidney, T. C. (2002). *Public involvement and civic rationalism in local authority planning and decision making*. University of Wales Cardiff.
- King, C. S., Feltey, K. M., & Susel, B. O. N. (1998). The question of participation: Toward authentic public participation in public administration. *Public Administration Review*, *58*(4), 317-326.
- Kjaer, U. (2012). Vital Democracy: A Theory of Democracy in Action: Taylor & Francis.
- Kohler-Koch, B. (2012). Post-Maastricht Civil Society and Participatory Democracy. *Journal of European Integration*, *34*(7), 809-824.
- Lange, P., Driessen, P. P., Sauer, A., Bornemann, B., & Burger, P. (2013). Governing towards sustainability—conceptualizing modes of governance. *Journal of environmental policy & planning*, 15(3), 403-425.
- Lauber, T. B., & Knuth, B. A. (2000). Citizen participation in natural resource management: a synthesis of HDRU research.
- Laurian, L., & Shaw, M. M. (2009). Evaluation of public participation: the practices of certified planners. *Journal of Planning Education and Research*, 28(3), 293-309.
- Lawrence, L., Debbie, A., & Deagen, R. (2001). Choosing public participation methods for natural resources: a context-specific guide. *Society &Natural Resources*, *14*(10), 857-872.
- Leroy, P., & Driessen, P. (2007). Milieu en samenleving. In P. Driessen & P. Leroy (Eds.), *Milieubeleid. Analyse en perspectief*. Bussum: Uitgeverij Coetinho.
- Lieberherr, E. (2013). The role of throughput in the input-output legitimacy debate: Insights from public and private governance modes in the Swiss and English water sectors. Paper presented at the Conference Paper: First International Conference on Public Policy. Panel 39: The New Policies of Privatization.
- Liefferink, D. (2006). The dynamics of policy arrangements: turning round the tetrahedron. In B. Arts & P. Leroy (Eds.), *Institutional dynamics in environmental governance* (pp. 45-68). Dordrecht: Springer.
- Light, A. (2006). Ecological citizenship: The democratic promise of restoration. *The Human Metropolis: People and Nature in the 21st-Century City [full book]*.
- Light, A., & Higgs, E. S. (1996). The politics of ecological restoration. *Environmental Ethics, 18*(3), 227-247.
- Lockwood, M., Davidson, J., Curtis, A., Stratford, E., & Griffith, R. (2010). Governance principles for natural resource management. *Society and natural resources*, *23*(10), 986-1001.
- López-Bao, J. V., Chapron, G., & Treves, A. (2017). The Achilles heel of participatory conservation. *Biological Conservation, 212*, 139-143.
- Lowndes, V., Pratchett, L., & Stoker, G. (2001a). Trends in public participation: part 1–local government perspectives. *Public administration*, *79*(1), 205-222.
- Lowndes, V., Pratchett, L., & Stoker, G. (2001b). Trends in public participation: part 2–citizens' perspectives. *Public administration*, *79*(2), 445-455.
- Mace, G. M. (2014). Whose conservation? Science, 345(6204), 1558-1560.
- Martín-López, B., Montes, C., Ramírez, L., & Benayas, J. (2009). What drives policy decision-making related to species conservation? *Biological Conservation*, 142(7), 1370-1380.
- Mendoza, G. A., & Prabhu, R. (2000). Multiple criteria decision making approaches to assessing forest sustainability using criteria and indicators: a case study. *Forest Ecology and Management*, 131(1), 107-126.
- Michels, A., & De Graaf, L. (2010). Examining Citizen Participation: Local Participatory Policy Making and Democracy. *Local Government Studies*, *36*(4), 477-491.

- Morrison, C., & Dearden, A. (2013). Beyond tokenistic participation: Using representational artefacts to enable meaningful public participation in health service design. *Health Policy, 112*(3), 179-186.
- Muths, E., Bailey, L. L., & Watry, M. K. (2014). Animal reintroductions: An innovative assessment of survival. *Biological Conservation*, *172*, 200-208.
- National Species Reintroduction Forum. (2014). The Scottish Code for Conservation Translocations. Retrieved from
- Neumann, B. (2012). Before settling for a public hearing, consider the continuum of public involvement. Retrieved from <a href="http://msue.anr.msu.edu/news/before\_settling">http://msue.anr.msu.edu/news/before\_settling</a> for a public hearing consider the continuum of public invol on 04-08-2017.
- Newig, J. (2007). Does public participation in environmental decisions lead to improved environmental quality?: towards an analytical framework. *Communication, Cooperation, Participation (International Journal of Sustainability Communication), 1*(1), 51-71.
- Nilsen, E. B., Milner-Gulland, E. J., Schofield, L., Mysterud, A., Stenseth, N. C., & Coulson, T. (2007). Wolf reintroduction to Scotland: public attitudes and consequences for red deer management. *Proceedings of the Royal Society B: Biological Sciences, 274*(1612), 995.
- O'Rourke, E. (2014). The reintroduction of the white-tailed sea eagle to Ireland: People and wildlife. *Land Use Policy, 38*, 129-137.
- Ohl, C., Stickler, T., Lexer, W., Beckenkamp, M., Risnoveanu, G., Geamana, N., Fischer, A., Fiorini, S., Dumortier, M., & Casaer, J. (2008). *Governing biodiversity: procedural and distributional fairness in complex social dilemmas.* Paper presented at the Proceedings of the 12th Biennial IASC Conference.
- Orr-Ewing, D. (n.d.). Red Kite. Retrieved from <a href="http://www.scottishraptorstudygroup.org/redkite.html">http://www.scottishraptorstudygroup.org/redkite.html</a> on 06-09-2017.
- Oughton, D. (2008). Public participation-potential and pitfalls. *Energy & environment, 19*(3-4), 485-496.
- Papadopoulos, Y., & Warin, P. (2007). Are innovative, participatory and deliberative procedures in policy making democratic and effective? *European Journal of Political Research*, 46(4), 445-472.
- Parker, K. A. (2008). Translocations: providing outcomes for wildlife, resource managers, scientists, and the human community. *Restoration Ecology*, *16*(2), 204-209.
- Parkins, J. R., & Mitchell, R. E. (2005). Public participation as public debate: a deliberative turn in natural resource management. *Society and natural resources*, *18*(6), 529-540.
- Petts, J. (2008). Public engagement to build trust: false hopes? *Journal of Risk Research, 11*(6), 821-835.
- Petts, J., & Leach, B. (2000). *Evaluating methods for public participation: literature review:* Environment Agency Bristol.
- Pimbert, M. (2004). *Institutionalising participation and people-centered processes in natural resource management*: IIED.
- Pratchett, L. (1999). New fashions in public participation: towards greater democracy? *Parliamentary Affairs*, *52*(4), 616-633.
- Rauschmayer, F., van den Hove, S., & Koetz, T. (2009). Participation in EU biodiversity governance: how far beyond rhetoric? *Environment and Planning C: Government and Policy, 27*(1), 42-58.
- Reading, R. P., & Kellert, S. R. (1993). Attitudes toward a Proposed Reintroduction of Black-Footed Ferrets (Mustela nigripes). *Conservation biology*, *7*(3), 569-580.
- Reed, M. S. (2008). Stakeholder participation for environmental management: a literature review. *Biological Conservation*, 141(10), 2417-2431.
- Reilly, K., O'Hagan, A. M., & Dalton, G. (2016). Moving from consultation to participation: A case study of the involvement of fishermen in decisions relating to marine renewable energy projects on the island of Ireland. *Ocean & Coastal Management*, 134, 30-40.

- Rodela, R. (2012). Advancing the deliberative turn in natural resource management: An analysis of discourses on the use of local resources. *Journal of Environmental Management*, *96*(1), 26-34.
- Rotheray, E. L., & MacGowan, I. (2015). Pine Hoverfly. In M. J. Gaywood, P. J. Boon, D. B. A. Thompson, & I. M. Strachan (Eds.), *The Species Action Framework Handbook* (Vol. 1.0). Battleby, Perth: Scottish Natural Heritage.
- Rowe, G., & Frewer, L. J. (2004). Evaluating public-participation exercises: a research agenda. *Science, technology, & human values, 29*(4), 512-556.
- Royal Zoological Society of Scotland. (n.d.). Pine hoverfly restoration. Retrieved from <a href="http://www.rzss.org.uk/conservation/our-projects/project-search/field-work/pine-hoverfly-restoration/">http://www.rzss.org.uk/conservation/our-projects/project-search/field-work/pine-hoverfly-restoration/</a> on 08-09-2017.
- RSPB. (n.d.). Birds and Wildlife Red Kite. Retrieved from <a href="https://www.rspb.org.uk/birds-and-wildlife-guides/bird-a-z/r/redkite/index.aspx">https://www.rspb.org.uk/birds-and-wildlife-guides/bird-a-z/r/redkite/index.aspx</a> on 09-08-2017.
- Runhaar, H. A. C., & Driessen, P. (2007). Milieubeleid als vraagstuk van doelrationeel handelen. In P. Driessen & P. Leroy (Eds.), *Milieubeleid. Analyse en perspectief.* Bussum: Uitgeverij Coetinho.
- Russell Bernard, H. (2011). *Research methods in anthropology: Qualitative and quantitative approaches*: Rowman Altamira.
- Scottish Beaver Trial. (2009). Scottish Beaver Trial: Project Update No. 2. Retrieved from Scottish Wild Beavers Org. (n.d.). Beavers and salmon. Retrieved from <a href="http://scottishwildbeavers.org.uk/facts-and-fiction-the-scientific-bit/beavers-and-salmon/">http://scottishwildbeavers.org.uk/facts-and-fiction-the-scientific-bit/beavers-and-salmon/</a> on 06-09-2017.
- Scottish Wild Land Group. (2017). Response to the consultation: Places, People and Planning.

  Retrieved from

  <a href="http://www.swlg.org.uk/uploads/6/3/3/8/6338077/2017">http://www.swlg.org.uk/uploads/6/3/3/8/6338077/2017</a> swlg places people and plannin g response.pdf on 02-02-2018.
- Scottish Wildlife Trust. (2016). Beavers are back for good partners welcome return of the Eurasian beaver. Retrieved from <a href="https://scottishwildlifetrust.org.uk/news/beavers-back-for-good/">https://scottishwildlifetrust.org.uk/news/beavers-back-for-good/</a> on 06-09-2017.
- Seddon, P. J. (2010). From reintroduction to assisted colonization: moving along the conservation translocation spectrum. *Restoration Ecology*, *18*(6), 796-802.
- Seddon, P. J., Armstrong, D. P., & Maloney, R. F. (2007). Developing the science of reintroduction biology. *Conservation biology*, *21*(2), 303-312.
- Seddon, P. J., Griffiths, C. J., Soorae, P. S., & Armstrong, D. P. (2014). Reversing defaunation: restoring species in a changing world. *Science*, *345*(6195), 406-412.
- Sjöberg, L. (1999). Risk perception by the public and by experts: A dilemma in risk management. Human Ecology Review, 6(2), 1-9.
- Slimak, M. W., & Dietz, T. (2006). Personal values, beliefs, and ecological risk perception. *Risk analysis*, 26(6), 1689-1705.
- Smart, J., Amar, A., Sim, I. M. W., Etheridge, B., Cameron, D., Christie, G., & Wilson, J. D. (2010). Illegal killing slows population recovery of a re-introduced raptor of high conservation concern The red kite Milvus milvus. *Biological Conservation*, 143(5), 1278-1286.
- Smismans, S. (2008). New modes of governance and the participatory myth. *West European Politics,* 31(5), 874-895.
- Smith, D. J., O'Donoghue, P., Convery, I., Eagle, A., Piper, S., White, C., & van Maanen, E. (2015). Application for the trial reintroduction of lynx to Scotland. Retrieved from
- Smith, M. (2009). Centralized Enforcement, Legitimacy and Good Governance in the EU: Routledge.
- Smith, P. D., & McDonough, M. H. (2001). Beyond public participation: Fairness in natural resource decision making. *Society & Natural Resources*, *14*(3), 239-249.
- Sørensen, E., & Torfing, J. (2016). *Theories of democratic network governance*: Springer.
- Stankey, G. H., & Shindler, B. (2006). Formation of Social Acceptability Judgments and Their Implications for Management of Rare and Little-Known Species. *Conservation biology, 20*(1), 28-37.

- Stevenson, A., & Evans, R. (Eds.). (2015). *White-tailed eagle* (1 ed.). Battleby, Perth: Scottish Natural Heritage.
- Tayside Beaver Study Group. (2015). Tayside Beaver Study Group final report. Retrieved from
- Teorell, J. (2006). Political participation and three theories of democracy: A research inventory and agenda. *European Journal of Political Research*, 45(5), 787-810.
- Torres, R. T., Carvalho, J., Fonseca, C., Serrano, E., & López-Martín, J. M. (2016). Long-term assessment of roe deer reintroductions in North-East Spain: A case of success. *Mammalian Biology Zeitschrift für Säugetierkunde*, 81(4), 415-422.
- Tritter, J. Q., & McCallum, A. (2006). The snakes and ladders of user involvement: Moving beyond Arnstein. *Health Policy*, *76*(2), 156-168.
- Turnhout, E., Van Bommel, S., & Aarts, N. (2010). How participation creates citizens: participatory governance as performative practice. *Ecology and Society*, *15*(4).
- UNESCAP. (2002). What is good governance? Bangkok
- United Nations. (2014). *The Aarhus Convention. An Implementation Guide.* Geneva, Switzerland United Nations. (2017). Parties to the Aarhus Convention and their dates of ratification. Retrieved from http://www.unece.org/env/pp/aarhus/map.html on 13-12-2017.
- Varner, J. (2014). Scientific outreach: toward effective public engagement with biological science. *BioScience*, *64*(4), 333-340.
- Vermeulen, W., & Wiering, M. (2007). Multisector en multiactor beleidsvoering. In P. Driessen & P. Leroy (Eds.), *Milieubeleid. Analyse en perspectief*. Bussum: Uitgeverij Coetinho.
- Warren, M. E. (2009). Citizen participation and democratic deficits: considerations from the perspective of democratic theory *Activating the citizen* (pp. 17-40): Springer.
- Webler, T., & Tuler, S. (2000). Fairness and competence in citizen participation: Theoretical reflections from a case study. *Administration & Society, 32*(5), 566-595.
- Wesselink, A., Paavola, J., Fritsch, O., & Renn, O. (2011). Rationales for public participation in environmental policy and governance: practitioners' perspectives. *Environment and Planning A, 43*(11), 2688-2704.
- White, T. H., de Melo Barros, Y., Develey, P. F., Llerandi-Román, I. C., Monsegur-Rivera, O. A., & Trujillo-Pinto, A. M. (2015). Improving reintroduction planning and implementation through quantitative SWOT analysis. *Journal for Nature Conservation*, *28*, 149-159.
- Yang, K., & Pandey, S. K. (2011). Further dissecting the black box of citizen participation: When does citizen involvement lead to good outcomes? *Public Administration Review, 71*(6), 880-892.

### Appendix A. Societal objectives of public participation

Table 5: Societal Objectives of public participation (Adapted from Laurian & Shaw, 2009 and additional input from Glucker et al., 2013; IUCN, 2013; Kohler-Koch, 2012; Light, 2006 and Oughton, 2008).

### Societal objectives of public participation

Process-based	Outcome-based
<u>Social process</u>	<u>Issue-related outcomes</u>
Citizen empowerment (ability to exert influence)	Meet statutory requirements
Mutual learning	Reach consensus
Increase public awareness of issue at stake	Integration different sources of knowledge
Increase agency awareness of public perceptions	
	Governance
<u>Democratic process</u>	Increase legitimacy of the decision
Inclusiveness	Increase legitimacy of the agency
Transparency	Mitigate conflict / conflict resolution
Fairness	Facilitation implementation decision (build support/ effectiveness)
Level-playing field (power relations)	
Accountability	Social outcomes
Equity	Build institutional capacity
Increase legitimacy of the process	Increase public trust in agency / decision-making process
	Create sense of ownership
	Build social networks and mutual understanding between actors
	Improve outcomes for disadvantaged
	Create a sense of stewardship (ecological citizenship)

### Appendix B. Possible processes affecting driving forces

Table 6: Examples of processes which may affect the driving forces of the conceptual model.

Driving force	Process
Actors and coalitions	Inclusiveness versus effectiveness project (Lieberherr, 2013)
	Who to involve (Creighton, 2005)
	When to involve (Creighton, 2005)
Discourses	(Lack of) interest among the public as perceived by decision-maker (Booth & Halseth, 2011)
	(Lack of) sufficient knowledge and competence (Parker, 2008)
	Past experiences which either positively or negatively affect willingness to participate or to offer opportunities to participate (Turnhout et al., 2010; Yang & Pandey, 2011)
	Perceived role of citizens in terms of type of influence, depending on normative democracy (Teorell, 2006)
Power and influence	(Lack of) level playing field for all actors involved (Webler & Tuler, 2000)
	Conflicting objectives or interests pursued by actors, leading to a trade-off between influence for citizens and other objectives (Converse et al., 2013)
	(In)equality in terms of resources among actors (Fung, 2006)
	Equal opportunities offered to actors to attend, participate and influence process (Webler & Tuler, 2000)
	Efficiency (time / budget) versus participation (Jami & Walsh, 2014)
Rules of the game	Clarity of legislation or unwritten rules to all actors (Arnouts & Arts, 2009)
	Transparent process (Conrad et al., 2011a)
	Accessibility (complete and unbiased) information (Booth & Halseth, 2011)
	Responsiveness of agencies involved (Halvorsen, 2003)
	Objective of partipipation: Instrumental / symbolic versus meaningful (Alemanno, 2013; Morrison & Dearden, 2013)
	Intensity / degree of influence (Creighton, 2005)
	Organisational factors affecting involvement public (Day, 2017)

### Appendix C. Summary of the Scottish Code

This Appendix gives an idea of the structure of the Scottish Code. The summary of the Scottish Code and further information can be found on:

https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/reintroducing-native-species/scottish-code-conservation-translocations



# The Scottish Code for Conservation Translocations

#### **Background**

Conservation Translocation refers to the deliberate movement and release of living organisms for conservation purposes. This includes:

- Reinforcement: adding to an existing population
- Reintroduction: restoring a species to parts of its natural range from which it has been lost
- Conservation Introduction: establishing new populations of a species outwith its natural range

Translocations represent just one type of conservation action. In most circumstances, management of species in their current localities, and wider habitat management, will be more costeffective and lower risk. However, there are some situations where conservation translocations are appropriate. This Code and its accompanying *Best Practice Guidelines for Conservation Translocations in Scotland* provide a framework for evaluating whether and how to undertake such conservation translocations in Scotland.

#### When might conservation translocations be appropriate?

Human induced habitat loss and degradation, and other factors, have caused population size reductions and local extinction in many species. In addition, climate change is leading to environmental conditions becoming unsuitable for many populations in their current locations. Given that natural barriers and habitat fragmentation limit the ability of some species to respond to such threats by natural re-colonisation or migration to new localities, conservation translocations can serve to offset these losses.









### What are the potential benefits from conservation translocations?

Reducing extinction risk and/or improving the conservation status of a species by:

- Increasing the number of individuals, and/or increasing the number of locations at which a species occurs
- Improving the genetic health and resilience of a population by directly introducing genetic diversity
- Establishing 'bridging populations', to facilitate migration and /or genetic exchange
- Establishing populations in areas where the species will experience reduced levels of threat (e.g. by moving organisms into more suitable 'climate space', disease-free areas, or localities with suitable management).

Improving the conservation status of an ecosystem, habitat and/or other species by:

- Increasing the overall species richness of a habitat to enhance its biodiversity value
- Increasing habitat quality (e.g. translocating species to change grazing regimes)
- Improving ecosystem services and functions (e.g. translocating species to provide pollinator services)

<u>Additional</u> socio-economic benefits that may arise as a result of conservation translocations:

- Enriched human experiences and environmental awareness due to increased contact with biodiversity
- Improved ecosystem services which lead to human benefits (e.g. pollination of food plants)
- Revenue from ecotourism where the translocated species leads to increased visits or spend

What are the potential risks from conservation translocations?

Negative outcomes that may arise from conservation translocations include:

- Direct harm to the conservation status of the focal species, or welfare of individual animals, due to removing individuals at the donor site, or mortality in transit or after release
- Harm caused to other species or habitats by the translocated population (e.g. due to competition, disease transmission or genetic swamping)
- Harm to humans if translocated populations causes health problems, or negative impacts on livelihoods or leisure









The Scottish Code for Conservation Translocations is not an advocacy document for translocations.

Its aim is to guide the process of evaluating whether a translocation is appropriate, and if so, how to increase the likelihood of successful outcomes, and reduce the likelihood of problems and conflict.

It is based on the principles of precaution and proportionality.

The level of planning and evaluation should be proportionate to the level of risk.

Where there is considerable uncertainty in the level of risk, translocations should not proceed. Where there is a risk that unacceptable damage may occur, translocations should not proceed.

The code is designed to cover translocations where conservation is the primary purpose. It does not cover translocations where the primary purpose is agriculture, aquaculture, hunting, forestry or horticulture, or releases made on other grounds such as individual animal welfare.

### The Code

#### Evaluate whether a conservation translocation is the best option

 Undertake an assessment of whether other management actions may be more appropriate (or complementary) in providing a lower-risk, lower-cost, less interventionist conservation solution

### Where translocation is the best option, develop a plan to deliver a defined conservation benefit

- Establish the desired outcome: this should be to improve the conservation status of the focal species/habitat by enabling more individuals/populations to survive in the wild and also to provide wider benefits to biodiversity and people
- Develop a plan including goals and actions, assessment of feasibility and desirability, risk and resource needs, monitoring and management actions (including integration with other conservation actions), and an exit strategy; the depth of planning should be proportionate to the level of risk









### Stay legal: obtain necessary permissions and adhere to relevant legislation

- Obtain permissions from landowners before collecting or releasing organisms in the wild
- Consult with Scottish Natural Heritage before undertaking translocations which involve protected species or designated sites, or moving species outwith their native range; obtain all necessary legal permissions and licences
- Where the translocation involves moving organisms to/from other countries, obtain all necessary import/export permissions and licences, and consult with the relevant statutory bodies in all involved countries to establish national legislative requirements
- Adhere to any relevant animal welfare, health and safety, biosecurity, quarantine and sanitation legislation

## Maximise chances of successful establishment of the translocated population

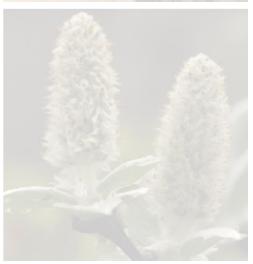
- All translocations must be grounded in a thorough knowledge of the species' ecological requirements
- Avoid selecting donor populations that have reduced genetic diversity or are likely to be poorly adapted to the release site
- Ensure that the release site and wider area meets all necessary requirements for survival and maintenance of healthy populations into the foreseeable future
- Select the timing, life stage and numbers/sexes of individuals to be released based on the reproductive ecology of the focal species and likely seasonal changes in survival/establishment
- Deliver ongoing management to help translocated individuals survive and become established

#### Minimise the risks of harm to biodiversity

- Do not remove organisms from a donor site if it will place that population at risk
- Adopt high standards of animal welfare, and adopt strategies to avoid stress, harm or mortality during the translocation and subsequent release and monitoring
- Adopt appropriate animal and plant health quarantine and sanitation procedures to avoid the spread of harmful pests and diseases
- Evaluate whether establishment at the release site is likely to lead to unacceptable, negative effects on species, habitats or the wider ecosystem, and do not proceed if this is likely to occur
- Evaluate the likelihood of the species or its genes becoming problematically invasive following the translocation, and do not proceed if this is likely to occur
- Avoid mixing highly divergent populations that are likely to be genetically incompatible









- Take particular care where translocations involve islands or isolated water bodies to avoid disrupting their natural isolation from invasive species, pests and diseases
- Translocation of species into areas where they have not previously occurred naturally should only be undertaken if the desired conservation outcome cannot be achieved by other means

### Maximise societal benefits and minimise conflict with other land-users

- Consult with other land-users and stakeholders to fully understand the potential socioeconomic consequences of conservation translocations as part of the process of deciding whether it is acceptable to proceed, noting that the benefits and costs of a conservation translocation may be unequally distributed among different stakeholders/land-users
- Evaluate the potential for a translocation to lead to economic or cultural benefits, and identify how any benefits can be targeted
- Evaluate the potential for a translocation to cause harm to human health, well-being and livelihoods and only proceed if acceptable mitigation and management mechanisms can be identified and delivered appropriately
- Have resources in place, and clarity on financial liabilities and legislative restrictions, to deliver any necessary ongoing management and, in exceptional circumstances, to enable reversal of a translocation should unforeseen and unacceptable consequences arise

### Record translocations and monitor, evaluate and communicate outcomes

- Monitor translocations to evaluate success and to inform any necessary ongoing management interventions
- Document the translocation and share findings to inform future strategies and projects

Further information can be found in the accompanying Best Practice Guidelines for Conservation Translocations in Scotland available from www.snh.gov.uk/translocation-code. Scottish Natural Heritage is the government agency for nature conservation in Scotland, and its staff are available to offer guidance on best practice and regulatory requirements.

The Scottish Code and Best Practice Guidelines have been produced by the National Species Reintroduction Forum. They are based on the International Union for the Conservation of Nature's 2013 *Guidelines for Reintroductions and Other Conservation Translocations*.









Photography: Mark Hamblin, Sue Scott/SNH and Lorne Gill/SNH.

### Appendix D. Scenarios

These scenarios are used to collect different views on the use of public participation under different circumstances and in different settings. It is emphasised that this means that there is no right or wrong in these scenarios, the same goes for the answers given by the interviewee.

### Scenario (Animal)

This scenario describes a fictional design and organisation of a decision-making process in the planning-phase that leads up to the license application for a reintroduction of an **animal species**, a butterfly species in this scenario.

The idea to reintroduce the **butterfly species** has initially been proposed by a nature conservation charity. A decision-maker who is involved in paving the road to the actual reintroduction has decided to use the **public ecology** concept as an example for the **design and organisation of the decision-making process**. Public ecology aims to encourage citizens and other stakeholders to take part in an interdisciplinary decision-making process, together with professionals such as scientists and policy-makers.

As the decision-maker has chosen to use public ecology as a starting point, citizens and other (local) stakeholders are **offered the opportunity to be actively involved** in the design of the final plan for the reintroduction. Together, these different stakeholders decide on topics such as the area in which the reintroduction should take place and how possible concerns should be addressed as small-scale habitat restoration is deemed to be necessary by the professionals.

Even though the opportunity to be involved in the decision-making process has been advertised by using several media sources, only a **few citizens were willing to be actually involved** and made use of the opportunities offered. The few citizens who were involved did act as a **representative** for citizens who decided not to get involved. They answered questions of fellow citizens, concerns and interests they took notice of within the local community were passed on and discussed in meetings with other stakeholders. Overall, the local community felt that they were actually involved and it made local citizens feel responsible for the success of the reintroduction.

What do you think of such an idea on public involvement? Would using an interdisciplinary approach be feasible in your opinion?

#### Scenario (Plant)

This scenario describes a fictional translocation of a plant species. This translocation is perceived to be necessary by nature conservationists as the **plant species** is threatened with extinction as a result of habitat loss and habitat degradation. The translocation aims to **establish a new and vital population** which could, hopefully, recolonise the area by natural dispersal. The translocation will take place in an area located within the historical range of the species. The population in this area disappeared as the local conditions changed due to **land use changes** such as less intensive grazing regimes which resulted in woody plant encroachment.

As land uses changes led to an unsuitable habitat, one of the requirements for a successful translocation is the restoration of the habitat in the area in which the translocation will take place. A suitable habitat should be created in which the plant species can occur and compete with other plant

species without being outcompeted, promoting the overall survival of the population. Several types of **habitat management** are used, among these are small-scale tree felling to open up the canopy and controlled burning to prevent further encroachment.

It is perceived that the local community is **not directly harmed or influenced**. However, people may take notice as **words spreads fast** around town and the translocation, and accompanying habitat management, will take place in an area which is used for recreational activities.

What would you do as an implementer of this translocation? Would you use public participation in this case and if so, how would you use it? Would this be different when no habitat restoration is needed?