



LYNX TO SCOTLAND

Assessing the social feasibility
of returning Eurasian lynx to
Scotland.



What did the study reveal?

The ecological feasibility of lynx reintroduction to Scotland has been assessed by previous studies but this is the first time that the social feasibility has been considered in detail. This is key for the proposed reintroduction of a large carnivore that has been absent from Scotland for a long period of time. Central to this study was an investigation and analysis using Q-Methodology, a technique used to quantify the subjective views of people on a given topic.

The Q-Method approach identified five broad but distinct, stakeholder perspectives towards lynx reintroduction in Scotland.

Two perspectives (1 and 5) support lynx reintroduction, one (perspective 2) is opposed, whilst the remaining two (perspectives 3 and 4) do not support lynx reintroduction currently but are open to further exploring the potential.

1.

Lynx for change

We are ready for lynx, and lynx is part of the change we need

2.

No to Lynx

There is no need for lynx, and we don't want them back

3.

Scotland is not ready

We support the conversation, but Scotland is not ready

4.

We are not convinced

We are open to discussing lynx reintroduction, but it must be better justified

5.

Lynx for the economy

We should reintroduce missing species; lynx will be a boon for local economies



Lynx for change

“Fundamentally at an ecological level, large predators are a vital part of any functional living system”



No to Lynx

“The certainty of scientific knowledge is questionable. The reality we experience is often different”



Scotland is not ready

“In twenty years we will have the habitat to support lynx”



We are not convinced

“There has to be a net environmental gain from lynx”



Lynx for Economy

“It would be an attraction to the area - if I saw one I would tell a thousand people”

Over the course of the study, 116 informal, semi-structured interviews were carried out with stakeholders. In addition to these, online webinar sessions took place for members of eight stakeholder organisations with a national remit, and facilitated community events were held in two geographical areas, previously identified as being biologically suitable for lynx. These were in the Cairngorms National Park (CNP) and in Argyll.

Reintroductions of charismatic animals such as the lynx, are ambitious conservation interventions, which are often seen as presenting a radical change to the status quo and can provoke controversy. However, this was not our overall experience during this study. Whilst the content of discussion sometimes evoked passionate responses, and robust debates were had during some of the webinar and community events, all of the participants who engaged over the course of the project, were respectful and open in contributing their views, knowledge and experience to the consultation.

Lynx for Change and **No to Lynx** represent the two most divergent perspectives along a spectrum of support for lynx reintroduction. However, we also disclosed three perspectives distributed between these two, which align with each of them to varying extents over specific issues. This highlights a greater level of diversity and nuance amongst stakeholder views towards lynx reintroduction than the simple ‘for’ or ‘against’ which has typically been presented in the public and media discourse to date.

There were a number of key themes which emerged from our study. Stakeholders diverged in their perception of habitat suitability for lynx in the Cairngorms and Argyll. Those aligning with **Lynx for Change**, and **We are not Convinced** to a lesser degree, felt there was sufficient habitat, which they anticipated improving over time with increasing afforestation objectives.

Much of the discussion relating to habitat concerned the quality of woodland. Two experts in lynx ecology stated that lynx primarily required ambush cover, prey availability and secure denning sites, which they felt were adequately provided for in the CNP and Argyll, even in relatively simply structured conifer plantations. A forest manager highlighted that although at a coarse level, commercial conifer plantations seem homogenous, they actually constitute a mosaic of varying coupe stages, from recently cleared and newly planted coupes, through to thicket, pole stage, and mature coupes, with windblow and rocky outcrops for shelter.

Contributors to **No to Lynx** did not disagree that lynx could survive in the Cairngorms, but drew comparison with European countries that have lynx, particularly Norway, which they perceived to have a much greater extent of relatively undisturbed forest available compared to Scotland, and the CNP specifically.

It was felt that the forests in the CNP are highly fragmented, and the simple structure of even age plantations might not provide enough resources and shelter for lynx, whilst the presence of lynx might impede some forest operations.

Stakeholders aligning with **Scotland is not Ready** shared the concern that the majority of woodland in the CNP was poor quality conifer plantation with little connectivity. A woodland grants coordinator suggested that in twenty years the habitat would, to their understanding, be much more suitable for lynx, but the extent and connectivity was currently questionable. There was uncertainty about how lynx might use commercial plantations in Scotland; whether they might adapt novel behavioural strategies not experienced elsewhere.

Native woodland has been suppressed in the Cairngorms for several centuries but is now expanding, with ambitious targets in place to create bigger, structurally diverse and better-connected forests in the future.

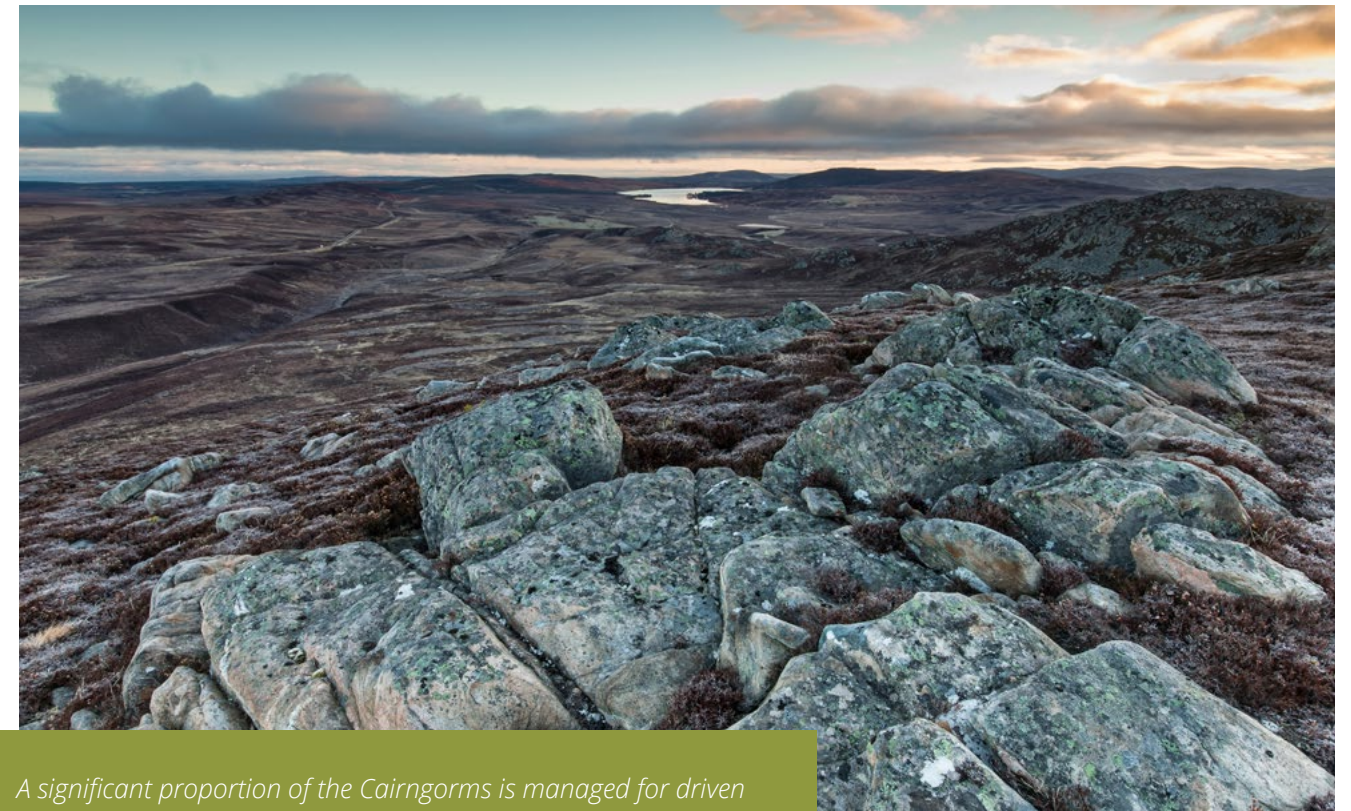


All of the participants were respectful and open in contributing their views, knowledge and experience.

There was divergence amongst the stakeholders over the legitimacy of inferring lynx behaviour from European countries with existing lynx populations, would necessarily reflect in Scotland. Stakeholders aligning with **Lynx for Change** and **Lynx for Economy** felt that lynx behaviour

is to a great extent predictable, irrespective of habitat, whilst stakeholders aligning with **No to Lynx, Scotland is not Ready** and **We are not Convinced** felt that comparisons could not be made - that the Scottish context is too different.

A number of stakeholders, particularly those aligning with **No to Lynx** and **Scotland is not Ready**, were concerned about the level of human disturbance in the CNP. For one ecologist interviewed, the presence of people was not anticipated to be an issue, citing situations in Europe where lynx live in relatively close proximity to people without being detected or causing any problems. Stakeholders aligning with **Lynx for Change** and **Lynx for Economy** felt that large carnivore recovery in comparatively densely populated parts of western Europe, demonstrates that lynx are able to live alongside people. Whereas **No to Lynx, Scotland is not Ready** and **We are not Convinced** view the Scottish context as very different from, and incomparable with, countries in Europe.



A significant proportion of the Cairngorms is managed for driven grouse shooting, which does not provide suitable habitat for lynx.

Stakeholders aligning with **No to Lynx, Scotland is not Ready** and **We are not Convinced** perceive the CNP as being intensively used for natural resource management, farming, conservation, sporting interest and tourism, and believe it would be a challenge currently to incorporate lynx into such a complex cultural landscape. **Scotland is not Ready** perceived the CNP as a patchwork of, often competing, stakeholder interests, which they feel translates into a landscape of high risk to lynx.

The degree to which wildlife and the environment should be managed by people or increasingly encouraged to self-regulate, or rewild, provided an important theme around which the views of the five perspectives and consultees orientated. **Lynx for Change** and **Lynx for Economy** perceived that a transition towards increasingly self-regulating ecosystems is progressive and desirable for the restoration of biodiversity in Scotland, and that lynx could, and should, be a facilitatory component of this shift, through their trophic interactions with other species. This related mainly to woodland deer and trees, but also smaller predators and their prey. **Scotland is not Ready** is sceptical of entirely transitioning towards non-interventive ecosystems but supports developing a more holistic approach towards managing land in which lynx could play a role in the future, representing a position of compromise between the other perspectives.

Supporters of lynx reintroduction anticipate that in predating woodland deer, lynx will contribute to nutrient cycling, vegetation and tree regeneration, and carcass provision for other species. However, none of the perspectives and very few of the stakeholders interviewed anticipated lynx providing a 'silver bullet' for the perceived problems with deer in Scotland, but rather represent a more 'natural' mechanism of deer control that will reduce the financial cost to the public of culling. In being 'natural', it is anticipated to be more palatable to the Scottish public than culling by people, and perhaps less resisted in the areas where culling is contentious.

A consistent point made by landowners and foresters who are growing trees commercially or for native woodland regeneration, was that deer are currently an impediment to this, which is eroding the value of commercially grown trees and undermining overarching objectives to combat climate change – objectives which are financially incentivised by various woodland grant schemes.



The degree to which wildlife should be managed by people or increasingly encouraged to self-regulate, or rewild, provided an important theme.

A number of the deer managers and foresters interviewed expressed how difficult it is to cull deer in dense woodland, with one forest manager describing how deer quickly learned which areas to avoid in relation to risk from human hunters. It was felt that in the Scottish context, lynx could be beneficial in applying predation pressure on deer in the dense forest coupes where deer are inaccessible to hunters. Stakeholders aligning with **Lynx for Change**, **Scotland is not Ready** and **Lynx for Economy** perceived that roe deer were generally increasing in abundance

throughout Scotland and there was some divergence over whether culling by people was sufficiently effective or not. It was highlighted by a deer ecologist that climate change is resulting in greater primary productivity, which is generally translating into better conditions for deer growth and reproduction, and that lynx could potentially be part of an integrated approach towards managing this burgeoning issue.



Supporters of lynx anticipate that in predating woodland deer, lynx will contribute to nutrient cycling, vegetation and tree regeneration, and carcass provision for other species.



Stakeholders aligning with **No to Lynx, Scotland is not Ready** and **We are not Convinced** feel that the contemporary Scottish landscape is almost entirely managed by people, and that aspirations for self-regulating ecosystems in such a highly altered, managed landscape, are unrealistic. **No to Lynx** and **We are not Convinced** believe that the dynamics associated with predation by large carnivores are adequately replicated by people, including deer culling, although **We are not Convinced** recognises that lynx could be beneficial in facilitating afforestation.

The ubiquity of the 'deer problem' is questionable for **No to Lynx**, whilst one contributor to **Scotland is not Ready** suggested that culling and stalking moves the herds around, diluting their impact in any one location. This was supported by a deer ecologist, who perceived that the densities and impacts of deer were variable and not ubiquitously negative. Stakeholders involved with deer management diverged in their perceptions of deer abundance. Roe deer are reportedly increasing in the east and the lowlands but are perceived to be either stable, at low density or declining in the uplands of the CNP and parts of Argyll.

Some estate owners and stalkers in the uplands of the CNP, observed that roe deer here are scarce and lynx would therefore, either switch to an alternative prey source, such as livestock, birds and lagomorphs, or move out of the areas desirable for their establishment, into areas where there are more woodland deer, but also greater potential for conflict with people.

Suppression of deer by lynx was not desirable for some estates. Roe deer were cited to be worth around £400 each to one estate in the CNP (and as much as £1500 for a medal head buck), who felt that lynx reintroduction

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could jeopardize their business. Although another pointed out that in Europe, hunters have been managing game species alongside lynx for decades, and do not consider there to be a conflict of interest.

The potential for lynx to predate sika deer was perceived as broadly positive. There were also few concerns over the potential impact on red deer stalking, given that red deer are predominantly kept to the open hill, and with the presence of roe deer in woodland, represent a less attractive target for lynx. For some however, this latter point brought the central case for lynx reintroduction into question, as it was perceived that red deer are more abundant and problematic than other species but would not be targeted by lynx. What is clear is that perceptions of the abundance and distribution of woodland deer, particularly roe deer, are highly variable and contested and given the importance of roe deer to the ecology of lynx, more spatially explicit information is required.



For stakeholders aligning with **No to Lynx**, the addition of another predator is anticipated to compound biodiversity loss.

The other predominant ecological dynamic discussed by stakeholders was the relationship between lynx and smaller carnivores. A number of conservation stakeholders thought that lynx could represent a potentially sustainable, long-term solution to perceived predation issues associated with rare woodland birds, such as capercaillie. Lynx might also benefit wildcat conservation by exerting pressure on foxes and feral cats. One ecologist highlighted the strong, well evidenced relationship between lynx and fox where, in some regions of Europe, predation by lynx appears to be capable of suppressing fox populations.

Stakeholders aligning with **Lynx for Change**, particularly those concerned with animal welfare and those supportive of rewilding, perceived that lynx could provide a more humane, 'natural' method of predator control. Whilst it was acknowledged by **No to Lynx** and **Scotland is not Ready** that lynx would likely kill some smaller predators, there was uncertainty over whether this would translate into an impact at the population level. The majority of farming stakeholders interviewed perceived that lynx would pose a significantly greater risk to sheep than to other predators.



The Lynx to Scotland study revealed wide-ranging perspectives around the impact of lynx on smaller predators, such as red fox.

For stakeholders aligning with **No to Lynx**, the addition of another predator is anticipated to compound biodiversity loss, whilst they asserted that the lynx is not in itself a conservation priority for Scotland. One view that was frequently expressed was that the focus should be on existing species in need of intervention, and on restoring biodiversity from the bottom up. Lynx reintroduction was perceived by opposition stakeholders to be a distraction and a waste of finite resources, whilst management of wildlife by people was perceived to be a more than adequate surrogate for the processes purportedly missing in the absence of large carnivores.

Stakeholders opposing lynx reintroduction perceived that the risk to capercaillie from the addition of another predator was too great; that not only were capercaillie populations too small to absorb any additional predation (even if predation events were rare), but efforts towards their conservation had already received millions of pounds of public money, which would be undermined by a lynx reintroduction. In the same way, it was thought that wildcat conservation would be jeopardized by lynx. However, a reintroduction biologist asserted that lynx are not perceived to be an issue for wildcats in Europe, where the two species coexist in a number of countries. For capercaillie, the prevailing view was that their decline is more strongly associated with climate change and habitat, whilst a couple of stakeholders familiar with lynx ecology, cited the very low prevalence of capercaillie in the diet of lynx in Europe, particularly in the Swiss Jura mountains, parts of which were reported to be capercaillie strongholds.



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Overall, the stakeholders in support of lynx reintroduction anticipate that lynx, through their trophic interactions with other species, would contribute to more balanced, biodiverse woodland ecosystems, and constitute a sustainable, nature-based solution to some of the complex and contested issues facing conservation and biodiversity recovery. Whereas stakeholders in opposition feel that management of wildlife by people is enough to negate the need for a large carnivore. For stakeholders aligning with **Scotland is not Ready** and **We are not Convinced**, an expanding of the ecological and conservation justifications for lynx reintroduction is required; proponents of lynx reintroduction must be able to demonstrate that their return would result in a net gain for biodiversity.

On the subject of lynx and gamebirds, the main area of concern for shooting stakeholders was the potential impact on pheasants and red-legged partridge raised in woodland. It was suggested that there are no comparable examples in Europe of the model of mass rearing of exotic gamebirds in woodland, so the risks to pheasants could not be inferred from elsewhere with any confidence. Supportive stakeholders acknowledged the potential issue but did not believe that the raising of exotic birds for sport should impede reintroduction of a native species. It was suggested by one field sportsman that protective fencing, which can be made adequate to protect birds from smaller carnivores and raptors, would be a futile barrier to a lynx. Despite concerns over the potential impacts on pheasant and partridge shooting, this was not thought to be a major barrier, but a factor to be considered when conducting a risk assessment.

Predation of sheep is a key point of tension associated with human/lynx coexistence in sheep rearing countries, and was the predominant area of challenge discussed by stakeholders in this study.

Though there was generally a consensus across the stakeholders that some sheep predation would likely occur, they diverged in their interpretation of what constitutes 'significant' risk or impact on sheep farming in Scotland, and how much they anticipated this to be a problem for lynx reintroduction.

There was little concern for poultry, but some of the farmers interviewed expressed concern for calves, and small breeds of cattle such as Dexters. Concern was also expressed for deer farming, which is projected to significantly expand in Scotland over the next decade. An estate owner, whose predominant income was from farmed venison, was not necessarily concerned about the predation impact but thought that if a lynx gained access to an enclosure and panicked the deer, there could be numerous casualties and injuries from collisions with the fencing.

It was felt by supporters of lynx reintroduction that the wider ecosystem and societal benefits from lynx reintroduction would offset, if not justify, the loss of what they anticipate would be a small number of sheep relative to the Scottish sheep farming economy. It was felt by some stakeholders aligning with **Lynx for Change** and **Lynx for Economy**, that increased woodland cover from afforestation efforts, and the supposed abundance of woodland deer, would translate into a negligible risk to sheep, whilst a number of stakeholders perceived sheep to be kept on open ground, not in the forest, and thought that encounters between sheep and lynx would be very rare. A researcher suggested that lynx were relatively predictable in their behaviour; that the main issues with sheep arise when they co-occur with the lynx's primary prey, roe deer, and incidental predation occurs when lynx encounter sheep during their search for deer. One ecologist cited European experience, suggesting that predation did not occur more than 400m from the forest, and that there was almost none at 200m from the forest edge. When making inference from European experience, supportive stakeholders weighted comparison towards Sweden, Switzerland and France, where predation of sheep is in the low hundreds each year, compared to figures reported from Norway which are substantially higher.

Stakeholders opposing lynx reintroduction were influenced by the experience of Scottish farmers visiting Norway, as well as peer to peer accounts between Scottish and Norwegian farmers, and consequently anticipated significant levels of sheep predation. The Scottish sheep farming context was perceived to be more similar to Norway than other countries, particularly with increasing afforestation objectives. Sheep were reported to be grazed over extensive



range, often adjacent to woodland. Those ranges often incorporate transitional ground; scrubby vegetation of gorse, bracken, juniper, and it was thought that sheep would be vulnerable to predation given the soft edge between woodland and hill. This was particularly the case in Argyll, where most farmers stated that at least one of their boundaries was with forest.

In relation to this, one consistently asked question was why would lynx hunt hard to catch deer when they could easily hop over a fence and catch sheep or a lamb? Stakeholders aligning with **Scotland is not Ready** felt that lynx reintroduction would be more viable if there was more suitable habitat and less sheep, whilst **No to Lynx** and **We are not Convinced** perceived that the loss of even small numbers of sheep would constitute a significant impact on the livelihoods of individual farmers and estate owners. They were concerned that the loss of a just a few individuals from vulnerable flocks, could impact the viability of rare breeds and bloodlines, the ability to heft flocks, and to maintain a prescribed number of animals for conservation grazing schemes. Some of the stakeholders aligning with **We are not Convinced** said that sheep are entwined with the management of grouse moors through grazing and tick mopping. If sheep are lost, then so are the grouse, and if the grouse go, so do the sheep. Sheep predation was therefore a serious concern for estates deriving income from grouse shooting.



One consistently asked question was why would lynx hunt hard to catch deer when they could easily hop over a fence and catch sheep?



The majority of farmers that took part in the study kept sheep and had serious concerns about their future if a lynx reintroduction was undertaken. Concerned stakeholders stated that upland sheep farming and crofting was under numerous pressures and, though some of the farming stakeholders did not anticipate levels of predation comparable to Norway, they perceived lynx reintroduction as being an additional drain on an already beleaguered sector. However, a number of stakeholders contextualised the issue by speculating that any loss of sheep to lynx would be negligible compared to losses from inclement weather, accident, disease and 'black loss'.



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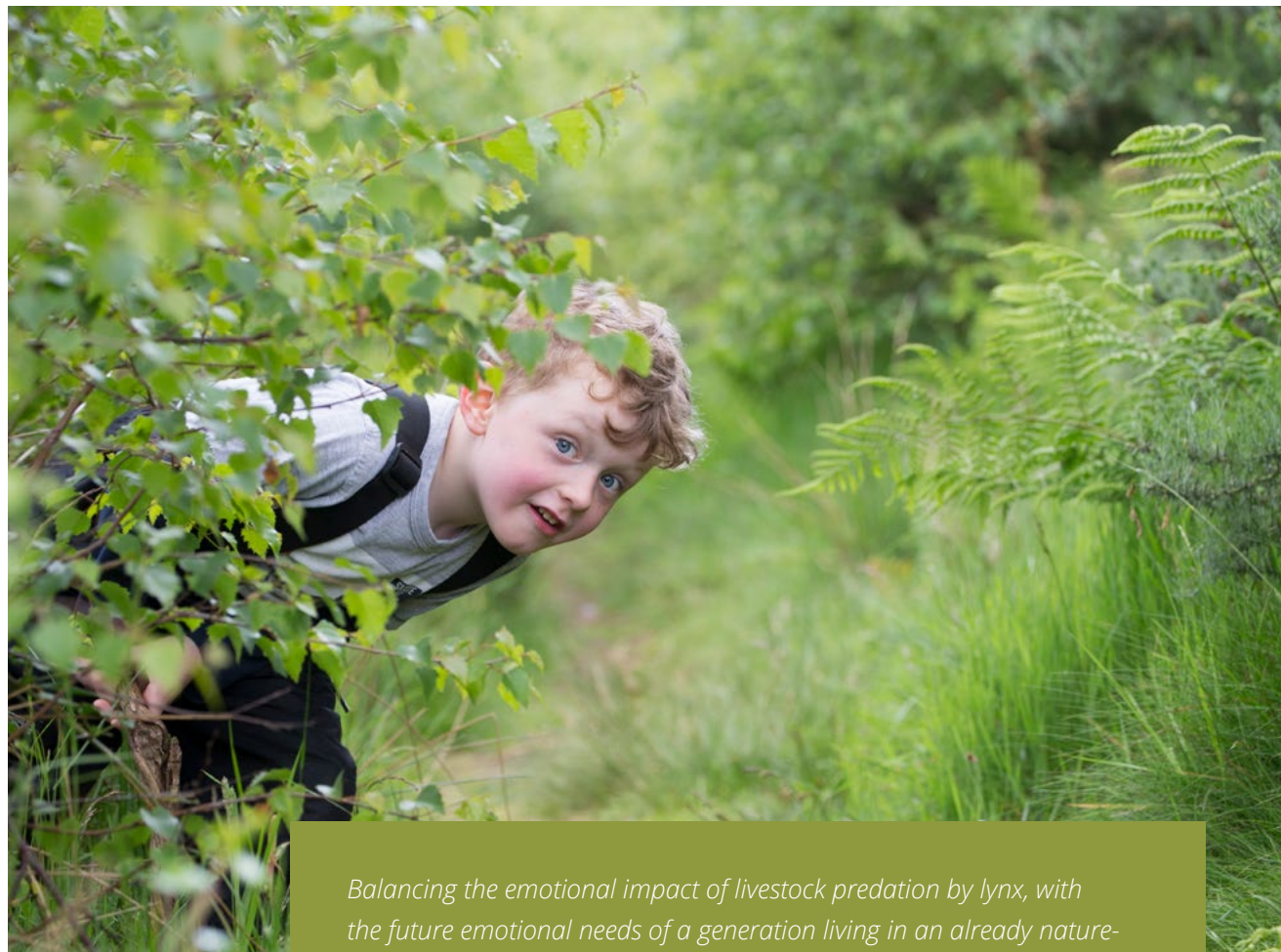
For stakeholders aligning with **No to Lynx** and **We are not Convinced**, sheep predation would not simply represent economic loss and a welfare issue for livestock, but a ratcheting up of pressure on a marginally subsisting culture that is currently facing an uncertain future. **Lynx for Change, Scotland is not Ready** and **Lynx for Economy** recognised this, and there was sympathy with the plight of sheep farmers. There was a feeling however, even amongst some of the farming representatives, that the extent and number of sheep on the hills was on a trajectory of decline, and that the emphasis on sheep management in the future would be geared towards their incorporation into a more holistic model of environmental use, to which farmers must adapt.

For farming representatives, the problem was that too much change is occurring simultaneously, and that farmers were struggling to meet the changing demands of society whilst retaining their livelihoods, their sense of community and their cultural identity. For **We are not Convinced**, the future of shepherding was a concern as in the uplands, shepherding was perceived to be culturally valuable and deeply important to rural communities. The feeling of being under multiple, compounding pressures, has worn down the reserves of many farmers who as a result, have little tolerance for the idea of lynx reintroduction. There was a general feeling amongst the farmers interviewed that they were being pilloried by pro-environmental media and were not supported by society in their roles as custodians of the environment and, more fundamentally, as food producers.



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Lynx for Change, No to Lynx and **We are not Convinced** felt that the emotional toll on farmers of incurring livestock loss to lynx would need sensitive consideration, and this was perhaps the strongest point made by farming representatives during our study. For many farmers, the potential for financial compensation missed the point – the real impact is on their emotional welfare and ways of life. On the other hand, a contributor to **Lynx for Change** highlighted that there is also an emotional consideration for people who feel that lynx reintroduction is entirely feasible and necessary, but is being blocked by powerful stakeholder interests defending unsustainable rural industries.



Balancing the emotional impact of livestock predation by lynx, with the future emotional needs of a generation living in an already nature-depleted country, was a recurring theme in the study.

Stakeholders aligning with **Lynx for Change, Scotland is not Ready, We are not Convinced** and **Lynx for Economy** believe that farmers could, or should, adapt their shepherding practices to accommodate lynx, given sufficient financial and technical support. **We are not Convinced** felt it was important that society is supportive of farmers should adaptation be necessary; that the skill and culture of shepherding needs to be recognised and appreciated. At a more fundamental, systemic level, a number of stakeholders from across the spectrum of interest expressed that sheep farmers need to be paid fairly for the meat and wool products they produce, easing pressure on farmers.

Stakeholders aligning with **No to Lynx** felt that the length of time between now and when people last had to consider large carnivores is too great; that re-adaptation is not possible given the development of contemporary shepherding practices. In the Scottish uplands, this is stated to involve extensively grazing flocks over large areas without close shepherding, usually all year-round, lambing on the hill, and often in close proximity to woodland; a scenario they perceive as similar to Norway where farmers experience comparatively greater levels of sheep predation to lynx than other countries.

Recognizing the likelihood that sheep predation could occur, there was consensus across the perspectives, and most of the stakeholders interviewed, that mitigation should be devised and prioritised early. It was felt this should include a sustainable compensation mechanism, and for **Lynx for Change, Scotland is not Ready** and **Lynx for Economy**, innovative coexistence measures. It was generally felt that compensation would need to be the responsibility of the Scottish Government, as is the case for governments in other European countries and would require long term guarantees.



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Some of the stakeholders felt that compensation could be derived from private means. One suggestion was that a privately funded compensation pot could be administered by a board of trustees with cross-sectoral interest, whilst another idea was that in the areas where lynx were released and established, up-front payments from a private fund could be made to farmers based on anticipated levels of loss. This would be a similar model to one administered by the Swedish government for Saami reindeer herders. It was also thought by a number of

stakeholders that lynx coexistence could be incorporated into an environmental payments scheme, whilst an estate owner contributing to **Scotland is not Ready**, suggested that there were various pots available for 're-naturalizing', which could support or encourage landowners to live alongside lynx. It was suggested by an ecotourism operator that there was branding potential for sheep farmers coexisting with lynx, whereby a premium was attached to 'lynx friendly lamb'. However, there was muted support for such coexistence measures from stakeholders aligning with **No to Lynx**. On the one hand, compensation was thought to be necessary should lynx be reintroduced, but on the other, it was preferable that lynx are simply not reintroduced in the first place.



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There was little support from any of the stakeholders for the two most effective mitigations against livestock loss to large carnivores - fencing and guardian animals. Fencing was generally not thought economically or logistically practical to protect sheep grazed extensively over rough, scrubby terrain. It was also perceived that the 'right to roam', whereby the Scottish public can theoretically access the majority of the landscape, would be a barrier to additional protective fencing. Funding shelters for lambing could be useful in protecting ewes and dependent lambs, improving survival rates at their most vulnerable stage, but it was acknowledged that this would only provide security for a limited period of time.

The use of guardian animals received a mixed response from stakeholders. It was generally felt that guardian dogs would be problematic, given the public's right to roam, and the extensive areas grazed by sheep. One farmer highlighted a point around liability, should a member of the public, or their pet dog be attacked by a guard dog. Some stakeholders felt that llamas and donkeys had potential, though specific consideration would need to be made for their husbandry and welfare. Most of the farmers interviewed were sceptical about accommodating animals that would require specific extra husbandry, and that potentially represented biosecurity challenges from the novel diseases and pathogens they might harbour.

A number of stakeholders felt that the best mitigation would be to fund additional shepherds, and to revitalise the practice of close shepherding that is used in countries where sheep are reared alongside large carnivores. Farming stakeholders however, felt that there was not

enough appetite amongst young people to undertake the hard work of shepherding or to dedicate the requisite time to becoming skilled in the practice. Supportive stakeholders felt that seasonal shepherding roles could be attractive to people who wanted an escape from the demands of contemporary work life, urbanity, and who sought a closer, simpler relationship with the land. It was thought that this could be made additionally attractive if framed as contributing to the coexistence of farmers and lynx, though the cost burden of training and accommodating additional shepherds should not fall on the farmer.

Stakeholders aligning with **No to Lynx** and **We are not Convinced** felt it absolutely necessary to include licensed lethal control in a mix of mitigations. The fear of loss of control and a breakdown in 'rural order' are recurrent themes in discourses opposing wildlife reintroductions. For **No to Lynx** and **We are not Convinced**, the need to be able to manage the perceived risks posed by lynx to people's wellbeing and livelihoods, or to game and wildlife species under their protection, underpins their strong support for lethal control. Whilst this is unpalatable for adherents to **Lynx for Change** and **Scotland is not Ready**, they acknowledge that support, or acceptance of lynx reintroduction will probably be contingent on the inclusion of lethal control as an option. This is conflicting for stakeholders aligning with **Lynx for Change**, for which some of the contributors felt strongly that the welfare of reintroduced lynx should be prioritised, which would preclude lethal intervention. The five perspectives all anticipate some level of public backlash should a lynx need to be killed under licence, which is expected to be a potential barrier to its implementation. Stakeholders aligning with **No to Lynx** frequently asked what controls lynx populations in Europe and, what would prevent a reintroduced lynx population 'exploding' in numbers in Scotland?



The fear of loss of control and a breakdown in 'rural order' are recurrent themes in discourses opposing wildlife reintroductions.



Landscapes that are ecologically suitable for lynx are often perceived as 'disorderly' or 'untidy', reflecting the perspective that nature is better off being managed, or controlled, by people.

The potential impacts on sheep represented the most challenging and contested aspect of lynx reintroduction discussed by stakeholders. There was strong divergence over the magnitude of anticipated impacts, and a great deal of uncertainty over the potential relationship between lynx and sheep in a Scottish context. There was consensus that some level of sheep predation was likely, and that mitigating the impacts was a top priority. What is apparent is a need to integrate the science and local knowledge – particularly in relation to how and where sheep are kept in relation to potential lynx habitat, and the subsequent level of risk to sheep. A comprehensive risk analysis is required, ideally with collaboration from people with expertise in lynx behaviour and spatial ecology, and farming representatives/agricultural researchers, to gain a better understanding of the potential dynamics of lynx-sheep interactions.

There was consensus amongst the perspectives from the Q Method investigation that lynx reintroduction would likely benefit local economies, primarily through increased tourism, though for stakeholders aligning with **No to Lynx** and **We are not Convinced** this should not be equated to desirability. It was generally acknowledged that few tourists would actually see a lynx, but for **Lynx for Change, Scotland is not Ready** and **We are not Convinced**, it was not thought that this would limit the appeal of areas with lynx presence. There was consensus across the perspectives that some landowners would consider lynx presence to be an attractive marketing opportunity.

In the long term, it was perceived by some supportive stakeholders that the anticipated improvements to woodland health and biodiversity from hosting a top carnivore, would create future opportunities for people and communities that were as yet unrecognised. However, one stakeholder with a role of overseeing the tourism sector in CNP, felt that wildlife tourism was niche and that lynx would have limited appeal. There was very little concern among the stakeholders that lynx would pose a danger to people. There was some concern over the potential for lynx to attack dogs being walked off the lead, or to attack pets at the fringes of human settlements, but this was generally not anticipated to be a problem.



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Despite the elusiveness of lynx, some communities in the Saxony region of Germany, use them as an ambassador to brand a landscape rich in nature. The same principle has been applied in parts of Scotland with red kites, ospreys and white-tailed eagles.

We are not Convinced felt that tourism was not a sound economic justification for lynx reintroduction. They also questioned whether any additional money derived from lynx tourism would trickle down to local people who had to coexist with lynx on a daily basis, or whether it would simply stay in the pockets of ecotourism operators and hospitality businesses. Stakeholders opposing lynx reintroduction felt that the argument for ecotourism had been overblown and thought it ironic that proponents of lynx espoused ecotourism benefits on the one hand, whilst at the same time assuring people that lynx were shy, elusive, and unlikely to be regularly seen.

For many of the stakeholders aligning with **Lynx for Change** and **Lynx for Economy**, lynx are intrinsically valuable. It was felt by some supporters to be hypocritical that people in Britain encourage tolerance for large carnivores in other countries but have been unwilling to redress a legacy of wildlife extermination in Britain, that has left the country with none of its native large carnivores. It was felt amongst some stakeholders that there was a moral argument in favour of reintroducing species that had been extirpated by humans, and that there was a duty to future

generations to undertake this, especially given what was perceived to be society's enlightened understanding of the crucial ecological roles these species contribute to ecosystems.

Stakeholders aligning with **No to Lynx**, and **We are not Convinced** did not agree that reintroducing lynx would be symbolic of society demonstrating a more enlightened relationship with nature and, did not believe that the wider context of climate change and biodiversity decline, justified the proposal. In fact, they felt that obscene amounts of money were spent on large, charismatic species. For **No to Lynx** and, to a lesser extent **We are not Convinced**, lynx reintroduction was perceived as an idealistic aspiration.



Stakeholders aligning with **No to Lynx** and **We are not Convinced** were less enthusiastic about the potential for additional ecotourism.



For many of the stakeholders aligning with **Lynx for Change** and **Lynx for Economy**, lynx are intrinsically valuable.

Stakeholders aligning with **Lynx for Change** and **Scotland is not Ready** perceived that a trajectory of increasing community empowerment in Scotland, will make the prospect of lynx reintroduction more likely in the future. One stakeholder stated that community empowerment was central to facilitating a shift in the rural economy to one orientated around regenerative land use, in which wildlife reintroductions have a role in providing nature-based solutions to environmental problems. **No to Lynx** and **We are not Convinced** did not agree that community empowerment would facilitate lynx reintroduction; they perceived that rural communities with strong links to farming and sporting culture would have serious concerns. They felt that initiatives such as wildlife reintroductions were popular with the urban populace who do not understand the reality of living and working in the countryside, and that decision making is biased towards an urban support base, resulting in initiatives being forced/imposed on rural communities by external agencies, who are not fully aware of the consequences of their decisions, or have to bear the costs.

The question of who should have a say in deciding whether to reintroduce lynx came up frequently with stakeholders. Opinion on this was generally split; stakeholders aligning with **Lynx for Change** and **Lynx for Economy** felt that lynx reintroduction was of national importance and in the interests of Scottish society, so ultimately, it should be put to a public vote. For stakeholders aligning with **No to Lynx** and **We are not Convinced**, this would be a major concern. It was felt that decision making should be weighted towards the opinion of people within affected communities, and that the opinions of a proportionately larger urban population inevitably disempowered the voice of rural communities.

It was generally agreed by most stakeholders interviewed that, currently, the public do not have enough information about lynx to make an informed decision on whether to reintroduce them. It was perceived, particularly by **No to Lynx** and **We are not Convinced**, that public opinion is too often based on popular, and sometimes ill-informed, media discourse and narratives perpetuated by powerful, influential individuals and groups.



The question of who should have a say in deciding whether to reintroduce lynx came up frequently with stakeholders.

Lynx for Economy believes that private investment by aspirant landowners seeking to purchase land for rewilding will make lynx reintroduction more feasible, as more land comes under the ownership of people who are likely to be sympathetic towards lynx reintroduction. **Scotland is not Ready**, however, anticipates conflict if lynx reintroduction is framed within a rewilding context, perceiving existing and emergent tensions between landowners with divergent objectives for land management (over deer culling quotas and predator control for example). The emergent phenomenon of 'green lairds' investing in Scottish land to rewild is perceived by some as spurious and threatening, which is reflected in **No to Lynx's** feeling that lynx reintroduction is part of a broader rewilding movement that threatens the culture, livelihoods and ways of life of rural people.

We are not Convinced does not necessarily perceive lynx reintroduction as being part of a broader cultural threat in the same way as **No to Lynx**, but they do feel under pressure from what is perceived to be a sanctimonious environmentalism within public discourse and pro-environment media, that challenges the value and necessity of their ways of life. For **Lynx for Change**, the restoration of lynx as a top predator is linked to, and symbolic of, aspirations for reduced human control of nature in favour of restoring natural processes, but for stakeholders aligning with **No to Lynx**, and to lesser extent **We are not Convinced**, the 'bringing of wilderness' as symbolised by lynx is perceived as an existential threat.

A key point of consensus across the perspectives and stakeholders interviewed during the consultation, was the perception that there is a lack of trust between groups in Scotland. Of greatest relevance to lynx reintroduction were stakeholders' perceptions and experiences of protected species management, and the recovery of historically rare or extirpated species. Tensions over recovering wildlife also related to the management of protected predators, particularly those that were historically rare but are recovering following legal protection. **No to Lynx** and **We are not Convinced** perceived that the populations of badgers and pine martens were continually increasing, by virtue of their protected status, resulting in negative impacts on 'vulnerable' wildlife. These underlying tensions led one contributor to **No to Lynx** to state "how can we think about reintroducing lynx when we have so many unresolved issues with the predators we have?"

The perspectives and stakeholders diverged in how they prioritised the weighting of knowledge and information, which underpinned a number of the contested aspects of potential lynx reintroduction. This divergence was explicitly obvious in, for example, the stakeholders' understanding and appraisal of the potential impact on livestock, deer populations, other wildlife species, as well as in their preferred options for mitigating impacts and managing human-lynx coexistence.



Lynx reintroduction is part of a broader rewilding movement that threatens the culture, livelihoods and ways of life of rural people.

Stakeholders aligning with **No to Lynx** expressed that the lived experience and local knowledge of land managers and gamekeepers, was not valued by policy makers, who prioritise scientific evidence in decision making, whilst the converse view, particularly amongst the stakeholders involved in scientific research, was that policy decisions need to be objective and evidence based.

For **No to Lynx**, and to a lesser extent **We are not Convinced**, the issues with recently reintroduced species such as white-tailed eagle and beaver, coupled with long-term tensions over managing protected predators, have undermined trust in the competency of conservationists to equitably undertake and manage reintroductions. They feel it an injustice that conservation objectives are, in their view, imposed on local communities by external agencies who do not effectively consult affected people, do not fully understand the long-term implications of their actions and policies, and who do not have to bear any of the direct costs.

There was consensus across the perspectives from the Q Method investigation that should lynx reintroduction continue to be explored, it would be desirable to establish a participatory approach with cross-stakeholder input; the objective being to work collaboratively to identify and discuss existing knowledge gaps, contested areas of knowledge, and importantly, to create new knowledge and build trust between stakeholders by proactively addressing existing and emergent areas of conflict.

It was felt important to bring in European experiences to this process, and for **No to Lynx** and **We are not Convinced**, this should necessarily include insights from farmers and hunters who live alongside lynx.

A collaborative process was felt to be very important for stakeholders aligning with **Lynx for Change**, and despite adherents to **No to Lynx's** opposition to lynx reintroduction, they perceived that inclusivity in proactively addressing conflicts and building trust, would be valuable. For stakeholders aligning with **Scotland is not Ready** and **We are not Convinced**, a step by step process that provides more detailed information is necessary to soundly appraise the proposal and enable responsible decision making.

Stakeholders aligning with **We are not Convinced**, do not believe the case for lynx reintroduction is currently strong enough, and is ultimately only justifiable if it can be clearly demonstrated that there would be a net gain for biodiversity. Stakeholders aligning with **Scotland is not Ready** feel that at present, there is too much potential for exacerbating existing conflicts and potentially creating new ones, and that trust issues need addressing, which it was felt could take a considerable amount of time.

It was only **Lynx for Economy** that felt that lynx reintroduction within a five-year timeframe was possible. It was felt by stakeholders aligning with **No to Lynx** and **We are not Convinced** that the experience and local knowledge of land managers, stalkers, and gamekeepers should be valued and given parity with scientific knowledge; that their experience 'on the ground' contributes relevant information to the science.

There was consensus that exploring mitigations of the potential impacts on livestock, affected rural industries, and protected species should be a priority. This should include exploring mechanisms of financial and technical support to promote coexistence, including a sustainable source of compensation, the source of which must be agreeable to all stakeholder groups. A number of stakeholders suggested that a trial reintroduction would be a responsible step, however, other stakeholders felt this would not work for lynx and that ensuring reversibility would be a problem.

Ultimately, it was felt by some that there will be a point when it must be accepted that the limit of what is knowable and reasonably predictable has been reached, and a level of risk must be accepted in undertaking to reintroduce lynx. The only way to understand the dynamics of lynx in a Scottish context is to release them and monitor what happens. The potential financial cost was a point of issue for some stakeholders, who perceived that an entire process for lynx reintroduction, including post release monitoring and a long-term commitment to supporting coexistence and population viability, could be extremely expensive – in the order of tens of millions. It was questioned whether it was right to spend this amount of money on one species. A number of stakeholders felt it was important to engage with Scottish Government (SG) early on to explore, in the hypothetical event of a well-supported licence application for lynx reintroduction being submitted, whether Scottish Government would endorse and fund mitigation and compensation.

The experience of other European countries who live alongside lynx can offer significant insights into how they might behave in a Scottish context but ultimately, until we sanction a trial reintroduction, we will never know for sure.

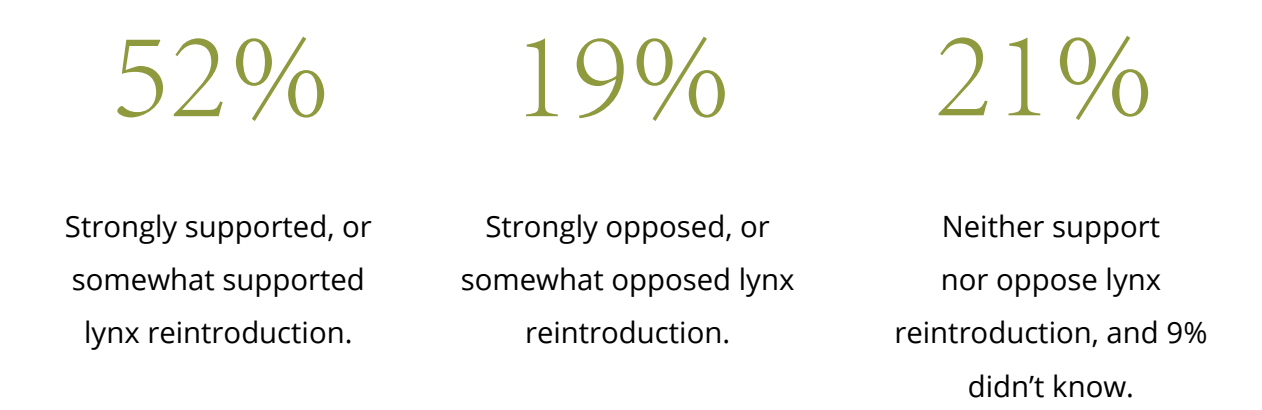


What does the wider Scottish public think?

The Lynx to Scotland study focused on two specific geographic areas, although many of the stakeholders and all of the organisations that engaged with the study, also have a national remit. To put this study into a wider context however, in 2020, the market research organisation Survation, carried out a Scotland-wide opinion poll on behalf of the Scottish Rewilding Alliance. 1,071 Scottish adults (over 16) were polled. Respondents were presented with the following statement:

“Managing excessive deer numbers cost Forestry and Land Scotland almost £7m in 2018/19, and almost 80,000 deer are culled annually to protect woodlands from overgrazing. Other countries in Europe, including France and Switzerland, have reintroduced lynx, a medium-sized cat which hunts deer and reduces their range: Scottish lynx were hunted to extinction at some point between 800AD and 1250AD”.

They were then asked to what extent they would support or oppose a pilot reintroduction of lynx to Scotland. The results (in rounded figures) were:



The Lynx to Scotland study presents a more detailed, objective insight into the views of stakeholders and affected communities over the perceived costs and benefits, contested areas of information and knowledge, and underlying contextual factors associated with the potential reintroduction of lynx to Scotland. This provides a valuable foundation on which further discussion can be based.



Conclusion and Recommendations

Of the five perspectives, stakeholders aligning with **Lynx for Change** and **Lynx for Economy** support lynx reintroduction. Stakeholders aligning with **No to Lynx** oppose lynx reintroduction, whilst **Scotland is not Ready** and **We are not Convinced** do not think lynx should be reintroduced currently, but are open to discussing the future potential.

There was sufficient appetite amongst the stakeholders to develop a more comprehensive understanding of the potential for lynx reintroduction in Scotland to warrant its further exploration. However, any continuing process will need to be inclusive of the range of stakeholder interests, or risk disaffection of marginalised voices. This study has disclosed tensions between stakeholders over values, process, contested information and knowledge, and interpersonal/group conflicts. Nonetheless, the consensus over a desire to proactively address these issues is encouraging and displays an aspiration amongst stakeholders for a process that allows debate and deliberation of the costs and benefits of lynx reintroduction.

1.

Based on the synthesis of findings in our study, we make the following recommendations:

There are some major barriers that need to be satisfactorily addressed before it is appropriate to proceed with a trial lynx reintroduction.

2.

A Lynx Action Group with cross-sectoral representation, should be established to appraise the findings of this study, identify existing key barriers and through a facilitated and participatory process, seek to address the perceived knowledge gaps and contested areas of information.

3.

The Lynx Action Group should seek to combine both local and scientific knowledge in appraising how key barriers might be overcome.

4.

The Lynx Action Group should commission further assessment of the impact of lynx reintroduction on existing protected species and rural industries, and also seek to collate, and perhaps generate new and spatially explicit information, on roe deer populations.

5.

Should it be decided that a trial or pilot lynx reintroduction is appropriate with acceptable mitigation/compensation measures in place and an agreed exit strategy, then the Action Group will continue to work together to design key constituents of what is required.



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