

Native behaviour – the human and land-use implications of returning key species to Scotland

Feedback from participants at the recent 'Wild, free and coming back?' conference raises a range of issues to do with human-wildlife relationships and points to possible ways forward in returning key species to Scotland.

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Chairing a conference as opposed to participating as a delegate can give one the opportunity to step back from the nitty-gritty of the debate and take a wider view from the podium. This article is my own attempt to summarise and make sense of key debates at the 'Wild, free and coming back?' conference, jointly run by the Wildland Network and Trees for Life in September 2008 to consider the return of key species in Scotland. After some thought provoking talks by speakers, delegates considered key issues pertaining to reintroductions in six groups, each focusing on one of the following issues:

- Perceptions of predators
- Livelihoods from reintroductions
- Farming and forestry issues
- Game issues
- Community-based reintroduction projects
- Ecosystem restoration – how reintroduced species can drive it

While it is not possible to summarise here the full breadth of debate on each of these points, below I have pulled together a few of the main themes that give a flavour of the richness of this debate.¹

Perceptions of predators

The British public has very mixed opinions about its predators.² On the one hand we are fascinated by them, being avid watchers of TV wildlife programmes, and are keen that countries with remaining populations of big cats, bears and other top



The UK Wolf Conservation Trust visits schools to help children learn about the nature and behaviour of wolves.
Photo: Peter Cairns www.toothandclaw.org.uk

predators do everything in their power to protect and promote their welfare. On the other hand we, by and large, do comparatively little to protect our own indigenous predator species; witness the fate of the Scottish wildcat of which there are only about 400 left. Indeed, we have, as a nation, systematically persecuted our predators over the centuries to worryingly low numbers and in many cases to extinction. Some continue to do so today. There is a clear need for more research on reintroductions, particularly on predator-prey relations, habitat requirements and human-wildlife interactions that will address our lack of knowledge, not only of the species themselves, but also our relationships with them. It can be argued that the stumbling blocks to reintroductions are largely human ones and that the ecological conditions are already fit for lynx^{3,4} and for wolf.⁵ Fear, prejudice, and a lack of clear, unbiased information from non-partisan sources are all at fault in creating these barriers. If we are to move forward in predator reintroductions we need to work hard to remove these and create a level playing field for meaningful and productive debate. Finding the common ground (if such a thing is possible) is an essential pre-requisite for reintroductions at any scale. One way to achieve this is through better education as to just what predators are, what they do and how they can help improve the functional landscape of Britain. This should start in schools at a young age, but extend to all demographic levels as needed. This can be achieved in numerous ways such as positive reporting in the media and creative programming on TV and radio, but there is no substitute for direct experience through close contact with the animals themselves, for example through wildlife parks such as *Wildwood* in Kent, and the *Highland Wildlife Park* on the edge of the Cairngorms, or travelling 'wildlife displays' such as the school visits run by the UK Wolf Conservation Trust.

Livelihoods from reintroductions

Whatever education initiatives and targets are pursued it is likely that there will be strong resistance to reintroductions from some, if not many, amongst the farming, forestry and game lobby. This is not without due cause because livelihoods are potentially at risk through economic losses due to livestock predation, crop damage, and the like. The example of the long-running saga of beaver reintroductions in Scotland is a good case in point.⁶ The answer here is to legislate for a system of financial incentives that will make the presence of predators in the landscape economically advantageous, for example, through increased tourism and visitor revenues or government grants and payment schemes. This has been shown to be successful in other European countries (e.g. Sweden) and could be successful here.

It is crucial that the necessary infrastructure is built to make the most of revenue potential from wildlife watching. Such facilities will include visitor centres, car parks, catering services, interpretative trails, hides and captive viewing areas. This should involve land managers from a very early stage to ensure the right facilities are installed in the right places such that they are well placed to capitalise on both direct and indirect spin-offs from increased tourism. Valuable lessons can be learnt from the history of sea eagle reintroductions on the Isle of Mull in this respect where wildlife tours and bird watching safaris have become part of the local business culture. There is a clear need for an advisory service to support the development of local and regional wildlife economies where reintroductions take place. The FWAG (Farming and Wildlife Advisory Group) model of trusted advice may be relevant here. Such a service could provide advice and outreach to farmers, land managers, land owners, businesses and local government on how best to adapt to the inevitable changes that reintroduced species will bring and how to capitalise on the associated opportunities.

Farming and forestry issues

Reintroductions can bring concerns about physical and economic damage to farming and forestry operations, although predator populations are actually more likely to bring associated benefits from reduced herbivore populations due to predation and changed behavioural dynamics. Nonetheless, farming and forestry operations may see new and unexpected costs associated with reintroductions, for example in livestock protection, ensuring public safety and the employment of wildlife rangers or wardens. Farmers are often regarded as stewards of the land and therefore managing reintroductions could be a logical extension of that role, in overseeing changes to the landscape that reintroductions might bring. Connectivity of wildlife habitats is a key issue in creating a landscape that is more 'permeable' to wildlife, that allows free movement of both predator and prey species across the country, along corridors between core natural areas and around or over obstacles such as transport routes, urban, industrial and intensively farmed land. The cooperation of all land owners is essential here together with appropriately designed and located infrastructure (e.g. eco-bridges), though legislation will be needed to modify planning policies and provide the funds for capital projects. This approach has been successfully demonstrated in the

Netherlands and adjoining partner countries in the Pan European Ecological Network (PEEN).⁷ Nonetheless, experience has shown in regard to existing reintroduction success stories such as the sea eagle, osprey and red kite, that local involvement and commitment is required to ensure a successful and uncontested outcome.

Game issues

In many respects the game lobby promises to be the most difficult nut to crack. For hundreds of years game interests in the British Isles have focused their combined might on eradicating the countryside of its predators and other 'pests' so that man would have no competition in his quest for good game or high crop yields. This started on a large scale with the Tudor vermin laws and has continued largely unabated into Victorian times and up to the First World War. It still persists even today in the hardened attitudes of some old-school land managers who believe the countryside will be better off without its eagles, badgers, otters, pine marten and wild cats. This arises out of the entrenched and erroneous view that less predators equals more game. I am reminded of the words of Aldo Leopold (again) at this point when he realised that fewer wolves did not necessarily mean more deer and hunters' paradise because removing natural predator control merely passes the job onto humans who are unable to keep pace with prey species' birth rates leading ultimately to over grazing and poor quality hunting stock. Of course this is, ecologically speaking, rather a simplistic view but in general, the practical experience usually shows that things never go right for an ecosystem after the removal of the upper tiers of its biotic pyramid.

Despite legislation providing legal protection to the rarer predators, views on predators do remain somewhat polarised and wildlife crime persists in some areas (e.g. illegal poisoning of golden eagles and shooting of hen harriers). It is of course, not all doom and gloom as we have seen some great steps being made toward increasing predator populations. For example, otters are increasing in number and spreading back into their old haunts and are even showing up in urban catchments. Any change must be shown to have clear economic benefits, however, as landowners will not tolerate additional cost, especially under the current fiscal climate. Greater emphasis needs to be placed on new revenue streams such as might be found from improved quality of existing stock, improved quality of the hunting experience and the availability of new target species (e.g. boar hunts). In addition, headway must be made in stressing the beneficial controls larger predators have on the numbers of lower order predator species. For example, it has been shown from research on the continent that lynx can control fox populations⁴, while otters have a similar effect on mink. In this manner, the game lobby can and must be brought on board and so become a powerful ally and an informed advisor in species reintroductions. See Dave Blake's article in this issue for a longer discussion on the game issues.

Community issues

History tells us that the reintroduction projects most likely to succeed are not necessarily those backed by good science and strong legislation alone, but those

that are organised and led by local communities (e.g. osprey reintroductions). Community owned reintroduction projects are the way forward, as without community backing (including the farming, forestry and game interests mentioned already) the outcome is uncertain at best. For this to work, economic benefits need to be seen to be distributed widely throughout the community be it through government incentives, new infrastructure, tourism income, trickled-down effects and direct and indirect employment. Again, history has shown that if communities really go for it then they are unstoppable, even in the face of government uncertainty and antipathy, and distributed wealth creation will ensure widespread support.

Ecosystem restoration

Ecologically speaking, whole ecosystem restoration that combines landscape-scale habitat restoration with species reintroductions makes perfect sense, with benefits accruing to all sectors and at all levels. For example, interest in the trial reintroduction of beavers in Scotland has opened up the debate on riparian issues, salmon fisheries, forestry and hydrological processes. Environmental resilience and ecosystem services are two important themes here. Diverse and spatially connected ecosystems that are well aligned and integrated with our productive and urban landscapes are likely to be more robust to external forces such as climate change. Building this kind of resilience into the landscape mosaic will be important in helping both humans and nature adapt to changes as they occur. At the same time, natural areas provide additional benefits in the form of ecosystem services such as carbon sequestration and storage, flood water retention and groundwater recharge, nutrient and sediment stripping and protected clean water supplies, habitat and wildlife protection, environments for tourism and recreation, etc. All these facets of ecological restoration, including reintroductions, need to be packaged and carefully marketed in a way that leaves no doubt that the overall benefits outweigh the costs. In many respects, we already have a good idea about habitat networks and big ecosystem opportunities, especially from lessons learnt abroad, and can therefore be opportunistic in regard to influencing policy development and implementation in the UK. It may be that we can effectively piggy-back whole ecosystem restoration onto higher profile initiatives to reintroduce charismatic species. These are more likely to grab the public imagination than tree planting or river restoration schemes, and yet these will necessarily form part of the reintroduction programmes.

Sooner or later...?

A great deal of expertise and experience was brought to bear on the topic of species reintroductions at the 'Wild, free and coming back?' conference, and these notes are merely a summary of that discussion. Standing in at the edges of some of these conversations it seems clear to me that there is a great deal of enthusiasm among the (albeit self-selecting) people who promote the worth of reintroductions. Looking further afield it is possible to identify a much wider constituency of stakeholders who might not be so enthusiastic or, in some cases, will be down-right



Visitor income from wildlife watching on the Isle of Mull has been boosted by the draw of reintroduced sea eagles.

hostile. These are the people who we need to engage with in a much wider ranging debate to see if we can identify common ground and establish a consensus based on a clear exchange of facts and exploration of the benefits and opportunities afforded by ecosystem restoration and associated reintroductions. Amongst the general public I feel confident that there is sufficient existing interest and support for wildlife and countryside issues that we might term 'the SpringWatch' factor. Further careful media programming, government backing and education will bring a great many of these people firmly on board in due course, if they are not on-message already.

Two speakers at the conference gave very different challenges on the timing of reintroductions. Alan Watson Featherstone of Trees for Life laid down some carefully considered and detailed timelines for the reintroduction of beaver, lynx and wolf into selected areas of the Scottish countryside. These were based on the idea of 'back-casting' or identifying the milestones needing to be achieved and steps taken in order to reach the overall aim of a successful reintroduction at some specified point in the future (e.g. first wolves reintroduced into the Highlands in 2043). Roy Dennis was more blunt, saying that we just need to get on with it... now. I suspect they are both correct, as the lead times will be quite lengthy as we have seen with the beaver. In the meantime, while we prepare the ground for practical actions on reintroductions there remains much work to be done in conserving current populations of rare and endangered species such as pine marten, wild cat and capercaillie. With limited resources, the question inevitably arises as to how

we might prioritise complementary conservation and reintroduction activities. Community-led programmes may well be the most efficient and successful approach so long as they are backed up by clear and strong government policy and well-funded systems of financial support that are underpinned by the EU Habitats Directive and linked legislation. It is then up to the rest of us to provide support 'in kind' be it through giving of our time, muscle, expertise or custom.

References and notes

1. For a full list of topics discussed, please see the Wildland Network web pages at www.wildland-network.org.uk
2. See the Tooth and Claw web pages at www.toothandclaw.org.uk for more information.
3. Hetherington, D. (2006) The lynx in Britain's past, present and future. *ECOS* 27(1), 66-74.
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How long before we have lynx trails in Britain?

