Scottish Wildlife Trust

Briefing

Beaver conservation and conflict *December 2024*

Key points:

- Beavers have been reintroduced to Scotland but are nationally classified as an endangered species as the population is still recovering following reintroduction and continues to require sensitive management.
- Beavers are an integral part of a fully functioning river ecosystem, creating diverse habitat mosaics to the benefit of many other species. Their dams can also provide nature-based climate adaptation solutions to drought and flooding by slowing the flow of water.
- Scotland's Beaver Strategy 2022 – 2045[1] calls for active expansion of the beaver population and for the species to achieve Favourable Conservation Status due to their potential to help address the twin climate and biodiversity crises.
- The rate at which landowners are applying for licenses to remove beavers is higher than the rate at which new translocation sites are becoming available, resulting in the unnecessary removal, either via translocation to England or culling, of many beavers from the Scottish population each year.
- Achieving Favourable Conservation Status, and moving the species out of the endangered category, requires engagement with land managers to improve their ability and willingness to live alongside beavers.
- Increased spending on nature-friendly farming so that preferred practices can be properly incentivised (i.e. wide river buffers and natural floodplain management) will support beavers existing in our landscapes and minimise conflict.
- More research on beaver-salmon interactions is needed to address fishery concerns regarding salmon passage.
- We would like to see more translocation sites become available and would encourage NatureScot to roll out Strategic Environmental Assessments (SEAs) of new catchments at a greater pace and review the approval requirements for new sites.
- Greater resource should be directed to NatureScot's Beaver Team and Beaver Mitigation Scheme to ensure there is capacity to deal with the increasing number of requests for support that are likely to arise as Scotland's beaver population expands into new areas.

Background

Beavers have been reintroduced to Scotland, both officially, through the Scottish Beaver Trial at Knapdale, and unofficially, by way of unauthorised releases in Tayside. Both populations were given

leave to remain in 2016, and all beavers in Scotland now have protected species status. Although beavers are back in Scotland, they are still classed as an endangered species on the GB Red List[1] , and strategic conservation actions and sensitive management decisions are required if we are to avoid seeing the species going extinct in Scotland once again.

Both populations of beavers in Scotland face challenges. The Knapdale population is isolated due to geographical barriers, making natural expansion difficult. While the Tayside population has been able to expand freely, the tendency of beavers to come into conflict with other land use interests in heavily managed landscapes has led to at least 360 individuals being lethally controlled since licensing began in 2019[2,3,4,5,6].

Scotland's Beaver Strategy 2022 – 2045 and its accompanying Implementation Plan were published in August 2022. Central to the Strategy is its vision for 2045 of active expansion in the range of the beaver population and seeing the species achieve Favourable Conservation Status[7]. The Strategy has a strong focus on conservation translocations to expedite the expansion of the beaver population into suitable habitat where their presence can yield the greatest conservation value, and to minimise the need to lethally control the protected species.

Ensuring that beavers thrive in Scotland is important, not least to avoid undermining the successes and extensive work that went into the Scottish Beaver Trial, but also because of the potential of a healthy beaver population across Scotland to contribute to reversing the twin climate and biodiversity crises. Through their natural damming and coppicing behaviours, beavers benefit biodiversity by creating diverse wetland habitat mosaics. Beaver dams can also offer a nature-based climate adaptation solution to extreme high and low flow events by slowing the flow of water through catchments.

Up until 2023 the rate at which landowners were applying for licenses to remove beavers was a lot higher than the rate at which new sites were becoming available for translocations within Scotland. This resulted in many beavers being removed from the Scottish population each year (either through

Image 1: Drone image of a beaver created wetland between a maize crop and sheep grazing on the River Otter, Devon (Credit: Alan Puttock, University of Exeter)

[1] The Mammal Society (2024) The Reintroduction of Beavers to Britain. Available at: https://mammal.org.uk/position-statements/the-reintroduction-of-beavers-to-britain

[2] NatureScot (2020) Beaver Licensing Summary 1st May – 31st December 2019. Available at: https://www.nature.scot/doc/naturescot-beaver-licensing-summary-1st-may-31st-december-2019

[3] NatureScot (2021) Beaver Management Report for 2020. Available at: https://www.nature.scot/doc/beaver-management-report-2020

[4] NatureScot (2022) Summary of beaver populations and licensing returns covering the period 1st January to 31st December 2021. Available at: https://www.nature.scot/doc/summary-beaver-populations-and-licence-returns-covering-period-1st-january-31st-december-2021

[5] NatureScot (2023) Beaver Management Report for 2022. Available at: https://www.nature.scot/doc/beaver-management-report-2022

[6] NatureScot (2024) Beaver Management Report – January 2023 to April 2024) https://www.nature.scot/doc/beaver-management-report-january-2023-april-2024

[7] JNCC. Favourable Conservation Status: UK Statutory Nature Conservation Bodies Common Statement.

culling, or by translocation to enclosed reintroduction projects in England), threatening the genetic integrity and increasing the extinction risk of this newly established population.

The number of animals killed in the most recent licensing period (2023/24) was much lower than it had been previously, with only eight animals reported as having been lethally controlled under licence. This can partly be explained by the increase in the number of beavers being translocated, both to English projects and within Scotland. It is also possible that some individuals, in avoidance of the need to adhere to certain licence conditions, are bypassing the system and are engaged in illegal culling, however this is difficult to prove.

Thirty-four of the animals trapped in the period were translocated within Scotland – a much higher number than in previous years (17 of these went to the Cairngorms Beaver Project). However, there were still 34 animals lost from the Scottish population through translocation to enclosed reintroduction projects in England

Although these improved figures are very welcome, it would be a mistake to think that the situation can't revert back to the way it has been in previous years. The Cairngorms Beaver project will eventually reach its capacity of 15 beaver pairs over five years, and as far as we know there are no other large beaver reintroduction projects planned. Additionally, as beavers naturally expand into new areas with the potential for conflict, work will need to be done to avoid the lethal control figures rising again.

Beavers and agriculture

One important aspect to keeping lethal control figures low (both legal and otherwise) will be to improve the ability and willingness of land managers, particularly farmers, to live alongside beavers. Beavers come into conflict with agriculture most often in low-lying farmland, which is often farmed right to the edge of the watercourse. We believe that the key to land managers co-existing with beavers is in properly incentivising them to move intensive land management back from the watercourse to make space for the natural flow of rivers and wetlands and to allow riparian woodland to regenerate (see image 1). In doing so farmers will not only benefit beavers, but also enhance the resilience of their farmland to adverse climate effects such as drought, flooding, erosion and soil loss, and reduce the input of diffuse pollution into watercourses.

Beavers and fish

There is still a lot of uncertainty around the effect of beaver activity on priority fish species, particularly the Atlantic salmon, a species whose conservation status in the UK recently changed to 'endangered'[8]. Some members of the fisheries and fish conservation sector argue that the salmon's successful migration, particularly upstream, could be compromised by the presence of beaver dams. Research exists from Norway and America (e.g. Kemp *et al*. 2012[9]) that demonstrates a net positive benefit to salmon from beaver activity, however it is thought by some that evidence from abroad should not be applied to the Scottish situation, arguing that Scotland's rivers are more highly modified with more manmade barriers than those in the countries already studied. Given that concerns around salmon passage are emerging as a major obstacle to beaver translocation applications being approved, it will be important to build a body of evidence on beaver-fish interactions in a Scottish context. Encouragingly, work into this is already underway at the University of the Highlands and Islands, with

[8] Atlantic Salmon Trust (2023) *Wild Atlantic salmon in much of Great Britain classified as endangered by IUCN*. Available at: https://atlanticsalmontrust.org/wild-atlantic-salmon-in-much-of-great-britain-now-officially-endangered/

[9] Kemp, P. S., Worthington, T. A, Langford, T. E. L., Tree, A. R. J. and Gaywood, M. J. (2012). *Qualitative and quantitative effects of reintroduced beavers on stream fish.* Fish and Fisheries. 13, pp. 158 – 181

one PhD studentship investigating the impacts of beavers on migratory fish on the River Tay using eDNA analysis and electrofishing surveys.

Mitigation and management

In many cases the issues that land managers experience with beavers can be resolved using mitigation measures such as the use of tree guards and deterrent paint to stop beavers felling trees, and the installation of flow devices into dams to regulate water levels. NatureScot's Beaver Mitigation Scheme[10] offers advice and practical support to land managers with the aim of avoiding the need for licensed interventions and to promote living alongside beavers rather than excluding them. However, NatureScot's beaver team is small, and we have heard anecdotally that requests for support with mitigation from landowners are not always responded to within a useful timeframe. It is crucial that landowners feel supported in accommodating beavers and we would suggest that more resource is directed to the Beaver Team and the Mitigation Scheme to ensure there is the capacity to deal with the increasing number of requests for support that are likely to arise as Scotland's beaver population expands into new areas.

We recognise that there will always be cases where, after the Beaver Management Framework[11] has been followed (based on the hierarchy of mitigation and management detailed in the Strategy: accommodate beavers > mitigate negative beaver impacts > translocate beavers to more appropriate sites > lethally control beavers), it will be deemed necessary by NatureScot to remove beavers from a site. To avoid killing beavers, or translocating them out of the Scottish population, more receptor sites must be made available for translocations within Scotland.

The translocation bottleneck

There are two main factors currently preventing more new translocation sites from becoming available:

1. Currently translocations are only permitted to locations within catchments that have been subject to a catchment-scale Strategic Environmental Assessment (SEA). Completing SEAs requires a large amount of NatureScot's limited resource, and so far only a handful of catchments have been assessed, meaning that most of Scotland is still off the cards for beaver translocations.
2. Translocations into new areas also require a thorough stakeholder consultation to be carried out. The responsibility for carrying out the consultation lies with the landowner or organisation offering the receptor site(s). This means that it is only really feasible for large organisations or statutory agencies to embark on translocation projects to new catchments.

We would like to see NatureScot prioritising opening new catchments for beaver release, particularly those where beavers have already arrived naturally. When reviewing potential translocation sites, NatureScot classifies sites that fall within a catchment to which beavers have been formally introduced following the completion of an SEA and a formal stakeholder consultation as 'within-range'. For these sites the translocation process is relatively straightforward, with minimal stakeholder engagement required. This NatureScot definition of 'within-range' is different from the Habitats Directive's definition of a species' natural range - *"When a species or habitat spreads on its own to a new area or*

[10] NatureScot (2024) Beaver Mitigation Scheme. Available at: https://www.nature.scot/professional-advice/protected-areas-and-species/protected-species/protected-species-z-guide/beaver/beaver-mitigation-scheme

[11] NatureScot (2024) Management Framework for Beavers in Scotland. Available at: https://www.nature.scot/professional-advice/protected-areas-and-species/protected-species/protected-species-z-guide/beaver/management-framework-beavers-scotland

territory, or when a species has been reintroduced into its former natural range (in accordance with the rules in Article 22 of the Habitats Directive), this territory has to be considered part of the natural range." This means that as the beaver population expands into sites where SEAs and stakeholder consultations have not been completed, more and more of the species' natural range will be classed as 'out of range' for translocations by NatureScot and will therefore require lengthy and detailed engagement with local communities, even in areas where beavers may have been living for many years.

The Scottish Government took the decision in 2016 to allow all beavers in Scotland to remain[12] and expand their range naturally, and the species was given European Protected Species status[13] in 2019. Beavers should therefore be treated as the native species that they are, and translocations within the species' natural range should be much less complicated and require much less resource to undertake. We believe that the requirement for SEAs and consultations where beavers have already chosen to settle naturally are an unnecessary barrier to achieving the goals of the Strategy.

We also believe that a programme of public education and outreach, making the public aware of the presence of beavers, what to expect and how to access support should be rolled out. Such a programme should prioritise those sites that are within the beaver's natural range according to the Habitats Directive, but which haven't yet been included in a formal stakeholder consultation, as well as areas in which beavers are not yet present, but are anticipated to expand to naturally within the next few years. We believe that this would be more appropriate than formal consultation in these areas and should be enough to allow translocations to be treated as 'within range' if beavers are already present in the catchment.

If SEAs are still deemed necessary in catchments where beavers are already present, then it is imperative that NatureScot consider rolling out SEAs of new catchments at a greater pace, prioritising those in which beavers are already present. For completely new catchments, we believe that land-owning public bodies, such as NatureScot and Forestry and Land Scotland should take the lead in performing initial strategic releases and carrying out the necessary catchment-wide consultations. This would pave the way for a more inclusive, less resource heavy translocation process which allows individual landowners and small conservation organisations to offer up suitable sites for beavers. We are also supportive of the idea of making a note of interest form available on the NatureScot website to allow NatureScot to gauge which catchments should be prioritised for SEAs or to identify potential translocation project partnerships.

Conclusion

It is true that the attributes of beavers that make them such an asset to the health of our ecosystems can also make it challenging for them to fit into our modified landscape. However, we believe that by making space for the natural flow of rivers, we can not only reap the benefits of the nature-based solutions provided by a healthy, connected river network, but also allow beavers to co-exist alongside humans as an integral part of a fully functioning river ecosystem.

What is needed is a boost to the budget for nature-friendly farming so that wide river buffers, which would bring multiple benefits and allow farmers to accommodate beavers on their land, can be properly incentivised. Additionally, more funding needs to be directed to NatureScot's Beaver

[12] Scottish Government. (2016). Beavers to remain in Scotland. Available at: https://www.gov.scot/news/beavers-to-remain-in-scotland/

[13] Scottish Government. (2021). *Protecting Scotland's beaver population*. Available at: https://www.gov.scot/news/protecting-scotlands-beaver-population/

Mitigation Scheme to ensure landowners can access assistance with mitigation before beaver activity becomes a real issue. Furthermore, more of Scotland needs to be given the green light for beaver translocations, so that more beavers can be rehomed in places of low conflict where their presence can yield the greatest ecological benefit. Finally, consideration should be given to how much red-tape is appropriate for translocations to places where the species has expanded to naturally, given the beaver's status as a native species in Scotland.

Hazel Forrest
Policy Advisor (Species)
December 2024