

Scottish Environment LINK

Still Delivering the Goods

Case Study 3



Scottish Beaver Trial & Scottish Beavers Reinforcement Project Royal Zoological Society of Scotland and Scottish Wildlife Trust



Read the full report, with the 15 case studies here: https://www.scotlink.org/publication/still-delivering-the-goods/

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	Background	The Scottish Beaver Trial was a partnership of the Royal Zoological Society of Scotland (RZSS), Scottish Wildlife Trust (SWT), and Forestry and Land Scotland, supported by SNH (now NatureScot). The subsequent Scottish Beavers Reinforcement project was a partnership of the same four bodies, with assistance also being provided by the Heart of Argyll Wildlife Organisation.
		The Reinforcement grew out of the Scottish Beaver Trial, which ran from 2009–2014, and saw 16 beavers from Norway released into Knapdale Forest, Argyll. In 2017, the two lead partners in the Trial, RZSS and SWT, reunited for the Reinforcement project, which ran from 2017–2020.
	Project aims	The Scottish Beaver Trial had five main aims:
		 to study the ecology and biology of the Eurasian beaver in the Scottish environment.
		 2 to assess the effects of beaver activities on the natural and socio-economic environments.
		3 to generate information during the proposed trial release that will inform a potential further release of beavers at other sites with different habitat characteristics.
		4 to determine the extent and impact of any increased tourism generated through the presence of beavers.
		5 to explore the environmental education opportunities that may arise from the Trial itself and the scope for a wider programme should the Trial be successful.
		The aim of Scottish Beaver Reinforcement project was to release beavers into the majority of suitable release points within Knapdale with a view to having the following during the three-year period:
		1 At least one Norwegian-cross-Bavarian pairing that successfully breed.

- 2 An additional two pairs establish and breed as a direct result of the reinforcement.
- 3 The overall population equate to a minimum of five breeding pairs/family groups.



The Scottish Beaver Trial was launched in 2009 and was completed in 2014. The Reinforcement project launched in September 2017 and ended, with the sign-off of the final report, in December 2020.



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SBS Objectives

Photo: Philip Price



The aims from the 2020 Challenge for Scotland's Biodiversity:



To protect and restore biodiversity on land and in our seas, and to support healthier ecosystems. The re-establishment of a viable population of a once-extinct native species is clearly a project that restores biodiversity. The fact that the beaver is a keystone species that creates and enhances wetlands means that it contributes to the health of the wider ecosystem.

To connect people with the natural world, for their health and wellbeing and to involve them more in decisions about their environment. The project's engagement with land managers, neighbours, the local tourist industry and with schools/colleges meant that it enabled considerable numbers of people to connect with nature.

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To maximise the benefits for Scotland of a diverse natural environment and the services it provides, contributing to sustainable economic growth. The project, and the wider engagement about beavers, promoted the benefits of a natural environment, including the ecosystem services derived from natural functioning wetlands.

Project Summary The Trial was completed in 2014, with 16 beavers released and then monitored intensively for four years. This resulted in the establishment of a beaver population in Scotland, and the eventual declaration of beavers as a European protected species by Scottish Government in 2019.

The Reinforcement project is also complete, with 21 beavers of Bavarian genetic origin translocated into Knapdale. Three out of the four stated targets are complete. The only target yet to be met is that of at least one Norwegian-cross-Bavarian pairing successfully. This will take time but is likely to happen as Norwegian and Bavarian origin kits grow up, disperse, and meet.

Overall, the number of beavers in Knapdale has increased from \sim 8 to \sim 20–30, and the genetic diversity in the population has been boosted significantly, making it more likely the population will persist in the long term.

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Climate Impacts

There is evidence that the presence of beavers in a river catchment, along with the naturally functioning wetlands that they help create, can help mitigate the flooding that results from climate change.





Scottish Beaver Trial:

- Direct employment: Various members of staff involved at different stages of project. Up to 5.5FTE at the peak, and 3.5FTE by end. Additionally, up to 14 support staff from various partner organisations gave various amounts of time.
- > Volunteers: 61 volunteers contributed >11,000 hours of time.
- > Wider engagement: Between May 2009 and May 2014, the project delivered the following headline educational outputs:
 - > 31,100 people engaged in SBT walks, talks, events, and education sessions, including:
 - > 5,343 children and 2,092 adults engaged in the formal education programme, and:
 - over 200 schools and colleges visited by SBT partner education staff (nursery, primary, secondary, tertiary and continued education).

Scottish Beavers Reinforcement:

- Direct employment: 1 FTE plus support from 20 people across various partner organisations and 15 volunteers.
- Wider engagement: Community engagement via stakeholder events three times through project (20–50 people each time).
- > Numerous talks to local interest groups, university classes, both locally and nationally.



Successes and achievements

Primarily, the number of beavers in Knapdale has increased from 8 to 20 -30, and the genetic diversity in the population has been boosted significantly.

Additionally, a huge amount of advocacy work around the importance and benefits of beavers by both lead partners via their respective membership and media teams, and through visitors to RZSS' two zoos has been achieved. Community engagement in the local area with an annual engagement event as part of the reinforcement was also a key component. Partners also participated on the Scottish Beaver Forum, feeding into policy and management of beavers in Scotland. Numerous scientific publications were produced as well as two final reports (see overleaf).

Scottish Beavers work was recognised with an RSPB/NatureScot Nature of Scotland Species Champion award in 2019.



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The main challenge in the field was the difficulty of monitoring beavers post release, making it difficult to establish the fate of individual animals or make precise population estimates in either project. Camera trap footage helped with this but identifying and following the fate of all beavers in the population proved impossible.

A second challenge was addressing issues raised by the unauthorised release of beavers elsewhere in Scotland. Controversy about that process, including issues of consultation, and flood and burrowing damage, led to anti-beaver sentiment. This has, in part, contributed to the Scottish Government's current position of no further translocations outside of range for the foreseeable future. The Scottish Beaver Forum has made great strides in facilitating dialogue between a variety of stakeholders for beavers in Scotland, but issues around management and, particularly, use of lethal control, remain to be resolved.

The main challenge to the future of beavers in Scotland is the establishment of new populations that will allow the population to grow, persist, and bring benefits to areas suited to beaver and human co-existence. The Knapdale projects show very clearly that beavers can bring huge benefits in terms of wetland habitat creation, biodiversity increases, and local tourism, if released in suitable areas and subject to appropriate proper consultation.

Funding

Scottish Beaver Trial:

Total cost: £1,573,018, of which:

- > Biffa Award **£1,088,108**
- £184,214 core contribution from RZSS and SWT.
- Remainder from fundraising efforts of RZSS and SWT to bring in additional funding from their respective members, People's Trust for Endangered Species, Mammals Trust, and others

Scottish Beavers Reinforcement:

Total cost: **£156,085** equally split between core funds of RZSS and SWT provided by their members and supporters; with additional funds from players of People's Postcode Lottery, the Postcode Planet Trust. Clark Bradbury Charitable Trust, D'Oyly Carte Charitable Trust, Craignish Trust, and the Hugh Fraser Foundation.

Further information

https://www.scottishbeavers.org.uk/beaver-facts/publications/ https://issuu.com/rzss/docs/scottish_beavers_reinforcement_report