



Scotland has decided not to reintroduce this once-native animal. Kevin Jones thinks it's a missed opportunity.

The wildlife and scenery of a quiet riverside stroll are familiar to most of us, but to our ancestors in the Middle Ages this experience would have been very different. There would have been far more forests, and the Eurasian beaver (*Castor fiber*) (left), would have been one of their most conspicuous riverside inhabitants. But beavers were hunted for fur and meat, and become extinct in England and Wales by the 12th century. They survived in Scotland only until the 1600s. In Europe, laws adopted in the 1800s saved beavers from complete extinction.

Now, beavers have staged a comeback across Europe, thanks to natural recolonisation, over a hundred successful reintroduction schemes (in over 20 countries), and strict hunting controls. But the beaver has yet to rejoin Britain's wildlife, despite 25 years of debate. European law (the Habitats Directive) requires member states to investigate 'the feasibility and desirability' of reintroducing formerly native species. England, Wales and Scotland are among just a few European countries that have so far failed to restore the beaver across its former range (although a few have been released onto large enclosed private estates, most recently at the Cotswold Water Park in October).

England and Wales have hardly progressed beyond preliminary discussions, but in 2001, Scottish Natural Heritage asked the Scottish Executive to allow a trial reintroduction. The request was supported by data from other European reintroduction schemes, public consultation and a selection of potential release sites. Under this scheme, around twenty tagged Norwegian beavers would be released to the Knapdale area of Argyllshire, in western Scotland, and monitored for five years. Everyone expected the government to approve the

# Bring back the **BEAVER!**



European beaver dam.

trial. And these beavers, the only wild beavers in Britain for over 400 years, were to be my study animals for three years.

Unfortunately, the Scottish Executive didn't decide until September 2005—when it said no. That left me rather in the lurch. Thankfully, a landowner in Perthshire, who is a keen conservationist, had introduced four beavers onto his land into two large enclosures. He came to my rescue.

Beavers can fell mature trees. They use the bark and leaves as food, and the wood as a building materials for lodges and dams. But beavers are not indiscriminate four-legged chainsaws. They avoid the conifers usually grown in commercial plantations in favour of native broadleaf species. Aspen is their particular favourite, together with willow and birch, and they prefer certain sizes of trunks. Interestingly, most of the beavers' preferred trees can regrow from stumps or resprout from roots. People have even suggested that our ancestors copied coppicing from beavers.

Large predators eat beavers, making them vulnerable on land. So they usually stay within about 50 metres of the waterside. Trees are only their staple diet in the autumn and winter (the animals make an underwater food store, or cache, at the entrance to their lodge, and this lets them survive periods of ice-cover). During the spring and summer, beavers mostly

eat smaller plants from both land and water, like yellow flag iris and water lilies.

The wood beavers leave behind on the forest floor gives invertebrates, small mammals and amphibians shelter and food, and the debris in dams, lodges and winter food caches offers a refuge for fish and invertebrates. Dams also raise the local water table. As riverbanks become waterlogged, trees that can't cope with the flooding die back, letting wetland and marsh plants develop. Invertebrates, fungi

and birds use the standing dead wood. Overall, beaver activity increases biodiversity.

There are lots of conifers at my two research sites, yet beavers have only felled one of these trees during my three-year study. I've also looked at how willow and aspen regrow after beavers fell them, and what happens to the biodiversity associated with woody debris both on land and in the ponds. In all cases, the initial results are encouraging. I haven't seen any adverse effects of beavers on these Scottish sites. Politicians' apparent fears of ecological devastation seem deeply unfounded.

It is true that beavers' building behaviour can sometimes cause us

problems, for example dammed culverts can flood. There are cases of beavers feeding on root crops and damaging orchards, but these are rare. In Europe, conflicts between people and beavers are uncommon, and usually easily resolved. Vulnerable trees can be protected with wire mesh. Crops can be fenced. Scents from the beavers' predators and simple kits to drain dams are all effective.

Presented with this European evidence, some politicians still argue that the only true way to know how beavers will affect the Scottish landscape is from studying beavers in Scotland. As the trial reintroduction was supposed to assess just that, the Scottish

Executive's recent decision not to allow it seems both myopic and baffling. In my opinion, this decision has been based on fear, myth, and conjecture, rather than scientific evidence. We are missing a real opportunity to bring back a native mammal to Britain. It is worth pointing out that many of the things beavers do (and which benefit biodiversity), river managers, foresters and conservationists also do, at no small financial cost, to restore some naturalness to the British countryside. When the ecological benefits of a trial reintroduction are coupled with the socio-economic benefits, such as education and tourism, restoring beavers to Scotland seems long overdue. As a scientist and a member of the public, I hope that the Scottish Executive will reconsider and bring the beaver back where it belongs.

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### Want to know more?

Kevin says, 'A really good introductory text is *Beavers* by Andrew Kitchener (2001), published by Whittet Books (ISBN 1 873580 55 X). Or you can try these websites:'

- The Scottish Beavers Network [www.scotsbeavers.org/](http://www.scotsbeavers.org/)
- Scottish Wildlife Trust [www.swt.org.uk/about\\_us/beavercampaign.asp](http://www.swt.org.uk/about_us/beavercampaign.asp)
- Scottish Natural Heritage [www.snh.org.uk/](http://www.snh.org.uk/)
- The Mammal Society [www.abdn.ac.uk/mammal/beaver.shtml](http://www.abdn.ac.uk/mammal/beaver.shtml)
- The Mammals Trust UK [www.mtuk.org/index.php?page=poll\\_page](http://www.mtuk.org/index.php?page=poll_page)
- The Scottish Executive [www.scotland.gov.uk/News/Releases/2005/09/01131458](http://www.scotland.gov.uk/News/Releases/2005/09/01131458)

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