

## The Eurasian Beaver

The Eurasian beaver (Castor fiber) is a large, semiaquatic herbivorous rodent that is a native species to Britain but was hunted to extinction some 400 years ago for their fur, meat and scent glands. Over the last twenty years the beaver has been reintroduced to both England and Scotland with a current population of roughly 2000 individuals, split evenly between the two countries. The Eurasian beaver was officially protected in England under the Conservation of Habitats and Species Regulations on October 1st 2022 making it illegal to deliberately capture, kill, disturb or injure beavers, as well as damaging their breeding sites or territories (beavers were legally protected in Scotland in 2019).

Beavers eat a wide range of bark, shoots, leaves and roots and mainly forage within 20 to 40 metres of the water's edge, rarely moving more than 60 metres from water. Feeding close to the water is partly a strategy to avoid predation. Although the main native predators of beavers (European wolves and lynx and the Brown bear) are absent from Britain, young beavers, especially kits (baby beavers) can be prey for red fox, pine martens, some raptors and large pike.

To expand their foraging range and reduce the risk of predation, beavers build dams in suitable water courses to increase and maintain the water depth in their territory. Trees are felled by beavers for food but also to provide building material for dams and lodges. This ability to shape freshwater habitats means that beavers are important ecosystem engineers and a keystone species in the landscape. Foraging by beavers opens up the woodland habitat, increasing the diversity of plants, lichens and mosses and improving the foraging opportunities for birds and bats. The larger amount of deadwood generated both on land and in the water by beaver activity also provides valuable cover from predation for a range of species and excellent habitat for invertebrates, which, in turn, are a food source for amphibians, birds and fish.

The creation of wetland areas by beavers through dam building provides new habitat for a wide range of plant and invertebrates as well as birds, bats, mammals, amphibians and fish. The lodges built by beavers provide nesting and resting places for birds and are also used by mammals such as mice, shrews, water voles and otters. The build-up of water in dams and its slow release through the leaky structures makes river systems more resilient to drought in dry periods while also decreasing the risk of flooding by better managing water flow during heavy rainfall and improving water quality. Beavers can therefore help to build climate resilient landscapes to better cope with future change and may also contribute to carbon capture by increasing the amount of habitat that acts as a carbon sink rather than source.

The beaver population in England is mainly found in some 30+ enclosed sites such as the Cornwall Beaver Trial and Cropton Forest in Yorkshire. There are also wild populations in the Otter and Tamar catchments in Devon, the Avon catchment near Bristol and the Stour catchment in Kent. The wild population in east Kent likely originated from beavers that escaped in 2008-2009 from an enclosure at Ham Fen established in 2001-2002. Wild beaver populations can result in conflict with agriculture or infrastructure, which should be managed appropriately in consultation with expert advice. A recent study indicates that people in East Kent generally have a positive attitude towards beavers, value their presence and support their reintroduction into the local landscape. Local people also supported the use of non-intrusive management techniques to mitigate any undesirable impacts of beavers. In the south-east, beaver enclosures have recently been established in Hampshire at Ewhurst Park near Basingstoke and in West Sussex on the Knepp Estate where they can be visited (https://knepp.co.uk/view/safaris/beaver-pen-tour/). More information on beavers in England and Scotland can be found on the Beaver Trust website: https://beavertrust.org/

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