WHAT'S THE PLAN?

The aim of this project is to reintroduce beavers to Oxenbourne Stream (tributary of the river Meon) running through Wilson Atkinson Farm to restore the waterways and enhance the local ecosystem. Chalk rivers are an important but rare habitat and the Meon is one of only around 200 in the world.

The proposed area contains an old duck pond and dense scrub, and the stream is under-utilised but the unique combination of geology and climate from the chalk aquifer make chalk streams like this rich habitats for wildlife. With gravel supporting riverfly and clear water offering ideal conditions for a diverse community of river plants, chalk streams also provide us with good quality drinking water and recreation, like angling and riverside walks.

Beavers are 'ecosystem engineers' and with their help, this site has the potential to be a haven for many species of birds, mammals, invertebrates and amphibians.



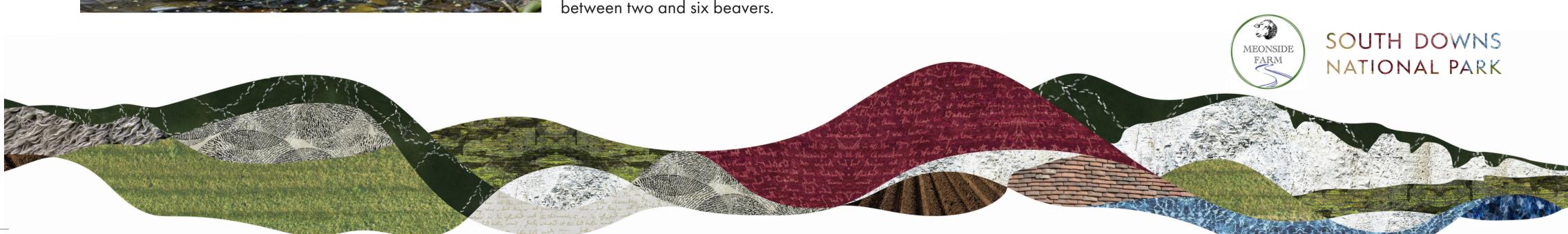


•• The beavers will create a whole new ecosystem which will benefit many species and increase biodiversity in the area. 99 Will Atkinson, Wilson Atkinson Farm

HOW WILL IT WORK?

Working in collaboration with the Beaver Trust and the South Downs National Park Authority, fencing will be installed to create a perimeter enclosure round the 2.19ha site. The type of fencing is specifically engineered for keeping beavers in.

The Beaver Trust will lead on the relocation of a beaver family group from Scotland, which will come from a site where the animals would otherwise be culled. This could be a group of between two and six beavers.







WORKING WITH THE COMMUNITY

This project will provide the chance for the local community to become invested. There will be opportunities for volunteers to get involved in with various activities, including regular fence checks, habitat monitoring and photography.

Do you have any skills that may be useful in supporting this project? Please get in touch: info@southdowns.gov.uk

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For more volunteering opportunities within the South Downs National Park, scan the QR code.

KEY FACTS

What do beavers look like?

The Eurasian beaver (Castor fiber) is a large herbivore, a mammal that is native to the UK and was once widespread. They have a broad, flat tail, as well as strongly webbed hind feet. Their dense fur (the second most dense in the animal kingdom after otters) is usually brown but can sometimes be black. They have small eyes and large, bright orange front teeth (from an ironbased enamel coating).

In the water, beavers could be confused with otters. However, otters are sleeker in appearance and have long, rounded tails.

Beavers are a native species, so where did they go?

Beavers were common until the species was hunted to extinction in the 16th century for its fur, meat and scent glands used in perfume making. The loss of this charismatic species also led to loss of the mosaic of lakes, meres, mires, tarns and boggy places that it so expertly built. Since they've been reintroduced, there are now beaver enclosures all over the UK, and several wild populations in and around Devon, Kent and Somerset as well as numerous Scottish catchments.





Why do beavers build dams?

Beavers like consistent water levels to keep them (especially their kits) safe from predators. They achieve this by building leaky dams which create deep areas of water where they can create protected, underwater entrances to their lodges and burrows. This all means they're safe from their natural predators.

How much space do beavers need?

A beaver's territory size varies with habitat, density and season. Generally 3km2 is the amount of space two adults need, but this can vary with a minimum amount of 0.5km2 for one individual.

How quickly do beavers breed?

On average, beavers breed once a year and produce an average of three young (kits). Once territories are established, population numbers only rise slowly. Beavers live in strict family groups, with only the dominant pair breeding.

Do beavers have any predators here in the UK?

Beaver kits are vulnerable to predation by foxes, birds of prey and potentially otters – so not all the young will survive. This is quite normal in wild animals with species from swans to beavers to hares all producing multiple young. As some of the young are likely to die from causes such as predation, disease, natural





causes or lack of food, for example, having multiple young increases the likelihood that at least one of the offspring will survive to adulthood to carry on the genetics of the parents.

How do beavers help other wildlife?

As ecosystem engineers, beavers make changes to their habitats, such as coppicing trees and shrub species, damming smaller water courses, and digging 'beaver canal' systems. These activities create diverse and dynamic wetlands - helping to reconnect floodplains with their watercourses. In



SOUTH DOWNS

NATIONAL PARK

turn, these wetlands can bring enormous benefits to other species, such as otters, water shrews, water voles, birds (like kingfishers), invertebrates (especially dragonflies) and breeding fish, as well as increasing floral diversity.

Native tree and shrub species in the UK evolved along with beavers. Beavers fell the trees (coppice) and the trees then regrow. This can be seen as a form of management, with beavers regularly cutting the trees over the years (on a rotation), ensuring that there is always a resource for foraging and building.





KEY FACTS

How do beavers help reduce the impacts of flooding?

Beavers help to slow the flow of water passing through the rivers and streams where they create channels, leaky dams and wetland habitats, as these hold back water and release it at a slower rate. This in turn reduces the impacts of flooding downstream.

Do beavers have any legal protection?

Beavers are now listed in Schedule 2 of the Conservation of Habitats and Species Regulations 2017, making it an offence to deliberately capture, injure, kill or disturb beavers, or damage and destroy their breeding sites or resting places. This follows Scotland's decision to make beavers a protected species in 2019.

How will fish in the Meon be impacted by the beavers?

Evidence shows that river modifications by beavers can increase availability of suitable habitat for fish, including salmonids such as brown trout. In a study carried out in northern Scotland, beavers had profound effects on the local brown trout population that promoted higher abundances of larger size classes.



Ponds created upstream of beaver dams provide juvenile overwintering and rearing habitat and critical refuge for larger fish. This results in increased fish abundance, condition and growth.

In Norway, there are well-established beaver populations (descended entirely from reintroductions) in five of the top ten salmon fishing rivers. Salmon can and do spawn in small tributary streams on many of these rivers and in Norway there is no perception of a problem caused by beavers.

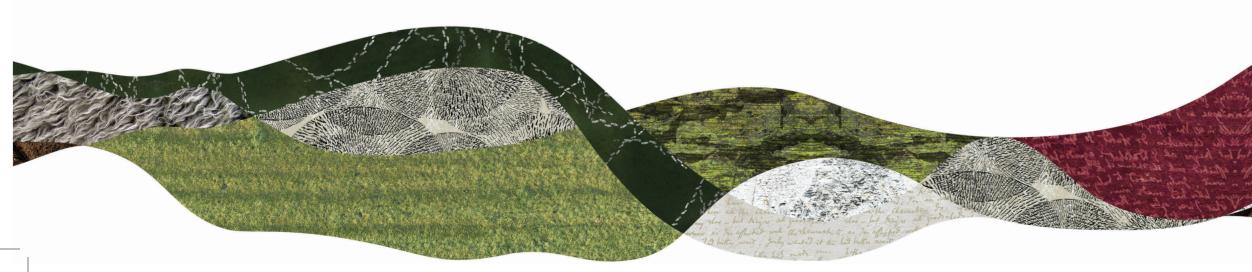
Modifications made by beavers have been linked to negative impacts on the movement of migratory fish however, it is extremely unlikely there would be migratory fish in the head waters where this project will be taking place.

What's the risk of my land flooding from beavers being reintroduced?

Beavers are known for their dam-building, and there are welltested measures that can be taken to manage or mitigate unwanted effects where they occur. Using tools such as the University of Exeter's Beaver Dam Capacity model, the feasibility study aims to identify where beaver activity might cause unacceptable flooding, and how this might be avoided. Any future wild-release proposal would require a full consultation, in accordance with Defra/IUCN translocation guidelines.

What is the current legal position in England when it comes to beaver reintroductions?

In England a licence is required to possess and release beavers into enclosures and although a licence has been granted for a free-living beaver population on the River Otter in Devon, and other breeding populations exist elsewhere, no other licences are currently being issued for direct releases into the wild while Natural England and DEFRA consider the detail of a forward policy for the species. A public consultation on the proposals to allow beaver releases into the wild, where licence applications





DID YOU KNOW?

- A recent paper noted 33% more plant species and 26% more beetles in beaver created wetlands.
- England has a population of about 500 beavers and Scotland has around 1000.



- Populations of water voles (pictured above) can increase between 1000 and 8000% in areas where beavers have been introduced.
- Beavers don't eat fish! They are vegetarian and eat pond weeds, grasses and leaves in summer, and the bark of willows and poplars in winter.
- Beavers are nocturnal so are most active and visible during dusk and dawn.
- The average lifespan of a beaver is 7-8 years but they can live up to 25 years.

We're keen to gather feedback on this project and address any questions or concerns you might have. Please complete the short survey by scanning the QR code or picking up a postcard with all the details.



SOUTH DOWNS

NATIONAL PARK

If you have a question that wasn't answered here today, please email info@southdowns.gov.uk

> MEONSIDE FARM

CORNWALL BEAVER PROJECT - A SUCCESS STORY

Summary of project

After many years of bad flooding in the village of Ladock, local farmer Chris Jones decided to introduce beavers to his farm in an attempt to slow down the flow of water. Since being introduced in 2017, a pair of beavers have built eight dams and transformed a simple first order stream into a complex mosaic of ponds, wetlands, and new streams covering the entire floodplain.



Eight new bird species have been recorded and four new mammals. In total, 11 bat species and 11 dragonfly species have been recorded.

The site has hosted Spring, Autumn and Winterwatch a total of three times, as well as many other TV productions and news broadcasts. It has hosted over 50 school visits. It has been surveyed by scientists from Exeter, Plymouth, Imperial College London, Cambridge, and Bristol universities, and several papers have been published. It has been surveyed by volunteers from Cornwall Wildlife Trust, British Dragonfly Society, Bat Conservation Trust, Cornwall Mammal Group, Bumblebee Conservation Trust and other organisations.

Frogs and toads are abundant in and around the beaver wetland.Trout have doubled in size in the lower ponds since beaver occupation, and are more than eight times bigger in the lodge pond.

New bird species recorded include: Water rail, Willow tit, Shoveler duck, Cormorant, Gadwall, Canada goose, Merlin, Reed warbler, Firecrest, and Green sandpiper. There has been interest from 50 different landowners visiting the site.

In summer 2022 a walkway was constructed by 32 volunteers to enable disabled access. The farm has hosted over 100 school visits for over 16 years. The beavers are a tremendous draw for school visits, and school children can get involved in practical work by imitating beavers in their dam making.

Having beavers has from the start been fascinating and informative. One of the aims here was for the project to be a public engagement tool and a research platform for a number of universities and this has been fulfilled in spades. The most important lesson for us is that these animals have helped with flood, drought, water quality, boosted biodiversity and have had no negative impacts on the farm at all. They have also been a great draw for schools and the general public. 99

The landowner





Management requirements

The beaver enclosure is part of a working organic livestock farm. The enclosure is in the bottom of a valley and the activities of the beavers do not interfere with the farming operation, so no management has been required.

Cattle are sometimes moved into the beaver enclosure to graze and browse on vegetation, increasing its structural complexity. In dry periods, water has been pumped out of the beaver ponds to irrigate the surrounding pasture.

