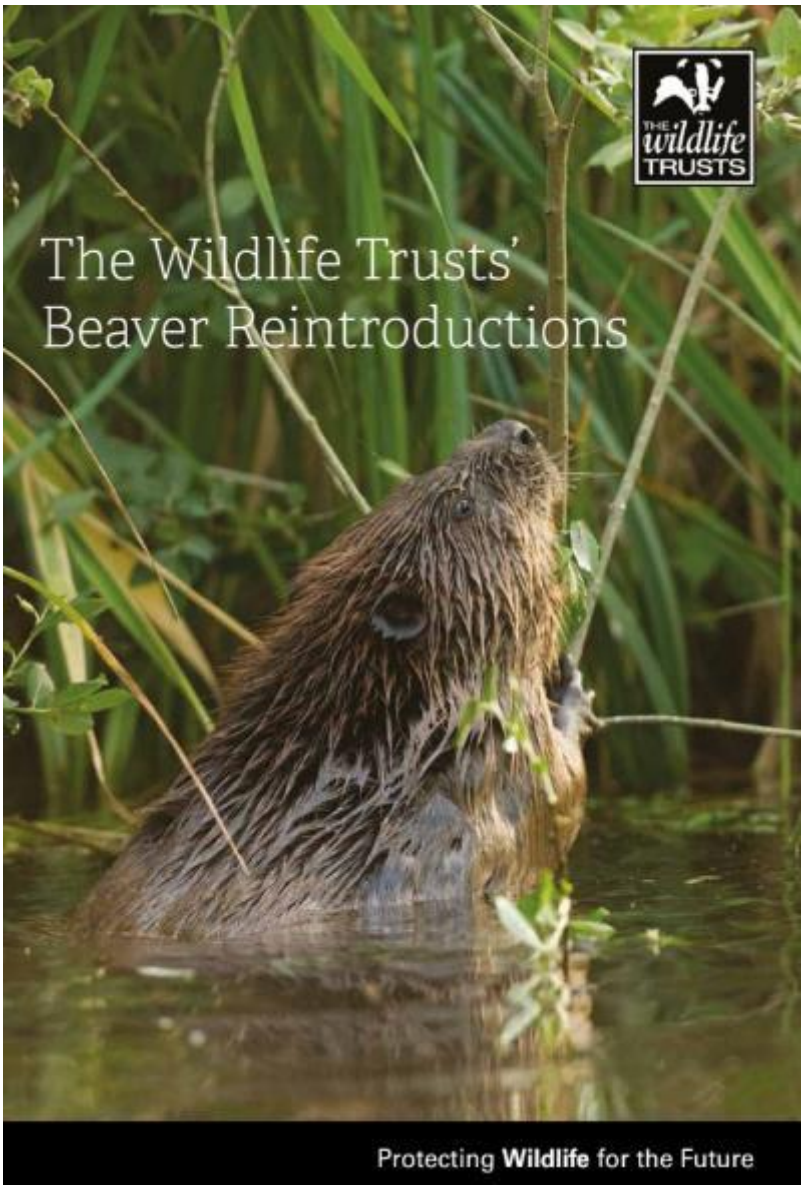
Derbyshire Mammal Group

Newsletter

Winter 2019/2020 Issue 32

In this issue:

- Beavers back to Derbyshire
- Beaver status UK
- Otter monitoring
- Wood mouse homing
- Badger on the moors
- Bats in Derbyshire
- Peak District mountain hare report
- Mountain hare culls
- Otter spotting
- UK Mammal Atlas
- Garden mammal survey
- Badger cull halted
- Wildcats in Scotland
- Pine marten reintroduced into Gloucestershire
- Pine marten in Northumberland
- Harvest mouse rediscovered in Northumberland



Bringing beavers back to Derbyshire

Derbyshire Wildlife Trust is planning to reintroduce beavers to the county after a gap of 1000 years or more. The aim is to release a family of European beavers inside a 20-acre fenced area in the Trust's Willington Nature Reserve in the Trent Valley where the native plants and trees along Egginton Brook will offer the beavers all the food variety they need to thrive and to build their characteristic dams and lodges. This would be the first stage of a wider reintroduction to the Trent Valley.

By early April 2020 with the help of Crowdfunder and other donations DWT reached their Stage 1 target of £35,000 needed to install beaver-proof fencing. Once the site is verified as secure, DEFRA can grant the licence to reintroduce the locally extinct species and hopefully beavers will be back with us before the end of this year.

It is not known for sure when beavers last occurred in Derbyshire. Their remains have been found at many archaeological sites across Great Britain but they had become rare by Saxon and Roman times and probably died out in England around 900 AD, though the species may have survived for longer in Wales and Scotland. This will be the third reintroduction of an extinct native mammal to the county after the mountain hare in the late 19th century and the releases of hazel dormice in 2003 and 2005.

Why reintroduce Beavers?

Restoring a species to areas where they once occurred, but were extirpated by hunting or other human activities, is an exciting part of 'rewilding' initiatives. In addition, beavers are a special species that play a particularly crucial with widespread ecological benefits including increasing biodiversity and reducing flood risk.

By damming water courses and digging canal systems they create diverse wetland areas which benefit many other species such as otters, water voles and water shrews, as well as dragonflies and many other aquatic invertebrates. This landscape engineering slows the flow of water, increases the capacity of the land to store water and creates a more consistent flow below their dams.

There can be negative consequences especially where beavers are released unofficially. Some landowners have raised concerns about damage to agricultural land and waterways, problems with drainage systems in low-lying areas, undermining flood banks and damage to crops.

Beaver status UK

After centuries of absence from the UK, the first reintroduction began in 2009 when a project by the Scottish Wildlife Trust and Royal Zoological Society of Scotland brought 16 Eurasian beavers from Norway and released them in Knapdale forest in Argyll and Bute. There is now an estimated population of between 24 and 36 beavers. Knapdale is a Forestry Commission site with beaver trails and hides open to the public (https://www.scottishbeavers.org.uk/visit-knapdale).

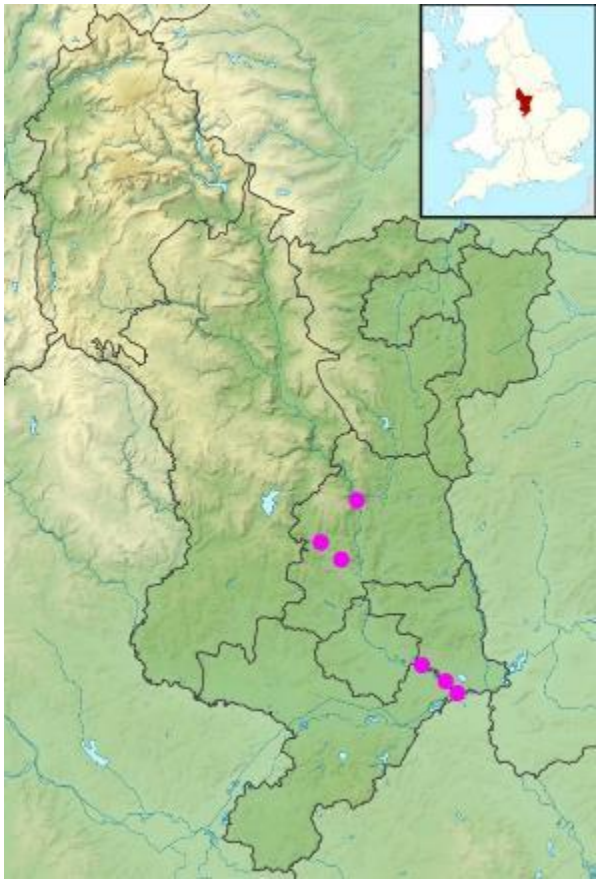
The success of the Knapdale operation led to several unofficial and unlicensed releases of beavers on Tayside, where the animals have spread widely along the River Tay and its tributaries and the most recent estimates for the population are up to 450 at 114 sites. This unexpectedly rapid spread has led to some problems with landowners and beavers have been shot as a result. On 1 May 2019 the Scottish government granted beavers protected status, making it illegal to kill the animals or destroy established dams and lodges without a licence.

There have been smaller-scale reintroductions and unofficial releases in Devon, Kent and Cornwall and more are planned in Norfolk, Suffolk and Wales. The Wildlife Trusts have a very useful short guide to beaver reintroductions (available from www.wildlifetrusts.org/beavers).

Monitoring otters

Shirley Cross

Starting in 1999 I began checking my local bridge at Ambergate on the River Derwent to look for otter spraint. Occasionally I found some or even a footprint. Then Derbyshire Wildlife Trust organised a systematic otter survey and monitoring scheme, which I joined, and soon found myself tasked with surveying six bridges in central and southern Derbyshire once every month: Ambergate, Church Wilne and Borrowash on the Derwent, Sawley on the River Trent, and Duffield Meadows and another site on the Ecclesbourne (see map).



The otter monitoring sites

Some sites were more fruitful than others, but all produced a positive result eventually. For various access reasons I had to drop one of the sites on the Ecclesbourne but it had given me lots of spraints and some of the best footprints with tail impression I have ever seen. The frequency of monitoring visits has diminished with my increasing mobility problems, but I have kept visiting the sites when I can and still find signs on some visits.

The high water-levels in Autumn 2019 meant I had to stay away from the rivers but in early March 2020 I made it back to each of the five remaining sites. I was delighted to find recent spraint at four of them (the site on the River Trent just had rat droppings and the water was still high). I am not sure when I will be able to visit the sites again, but I hope to still find signs of otters when I can.

Ambergate bridge arches where otter spraint has been found.

Wood mouse homing instinct

Jo Bissell

We thought this year we would initially grow the vegetable plants for the allotment in the cold frame at home, to give them a head start. In went the broad beans and peas, broccoli, leeks etc. etc. The following day I went to open the cold frame and found that the beans and peas had been dug up and eaten. Try again we thought, but with a few Longworth traps around the place.

Next day the culprit was caught – a wood mouse. So we relocated it away from the house. A couple of days later the beans and peas were eaten again, and another wood mouse caught. After about 8 wood mice, all adult except for one juvenile, we were beginning to get suspicious, so we marked one of the adults by carefully snipping off some of the guard hairs on its right-side hind flank.

Two days later, the same thing happened again. As you can see from the picture on the trail cam, it was our relocated mouse. This mouse had been relocated approximately 100m away. To return, it had to cross a road, go past 4 houses of which 2 have birdfeeders where it could have enjoyed lots of food, but no - it obviously enjoyed our pulses more.

Next relocation was in a different direction and about 200m away – no return this time and no more animals caught!!

The culprit!

Badger on the moors

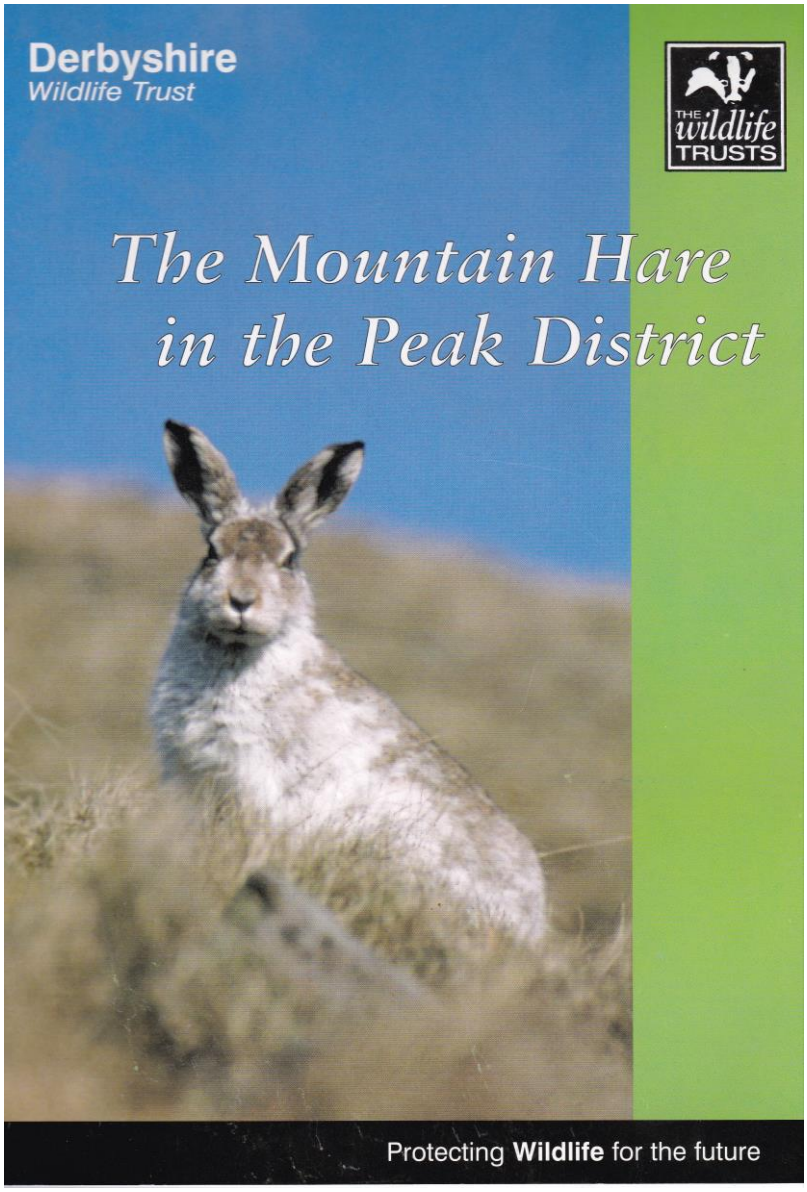
Dave Mallon

In May 2019 I was in one of the cloughs* high up on the far northern moors when something rustled through the heather on the opposite bank. Suddenly I found myself face to face with a foraging badger, which stopped, stared hard, sniffed the air, and then - as soon as I reached for the camera - turned tail, ran through a sheep fence and disappeared over the brow. It was a warm sunny day, half-past one in the afternoon, in heather and bilberry moorland at about 450 m elevation (1475 feet). Not exactly normal badger habitat or viewing time! This is the first time I have ever seen a badger in such circumstances. (*location withheld to protect the innocent: plenty of people on the moors would not want a badger anywhere near 'their' nests and eggs)!

Bats in Derbyshire

Seventeen species of bats occur in the UK and 11 of these are found in Derbyshire, ranging from the very common to the very rare. Further details can be found on the 'Bats in Derbyshire' page of the Derbyshire Bat Group's website (www.derbyshirebats.org.uk). The Group is very active (in normal times!) and has established bat box schemes across the county, monitors roosts, collects records of bats, maintains a bat database, provides advice, and organises bat walks among other activities. The latest Newsletter (issue No 82) was published in May 2020.

Mountain Hares in the Peak District



In the year 2000, DWT's High Peak local group coordinated a mountain hare survey which surveyed every 1-kilometre square in the Dark Peak and adjoining areas. More than 100 observers contributed records. The result was 332 km2, xx hares counted, and population estimated at xx tyo yy. Number of records. The survey report was published in 2001 but only in a printed version and copies ran out several years ago. An electronic version was not produced at the time partly because pdfs were then only in development. However, the original report has just been produced in a pdf version: it can be obtained directly from dmallon7@gmail.com and will soon be available on the DMG website.

Mountain hares were present across Great Britain after the last Ice Age but gradually retreated northwards as the climate warmed up and scrub and woodland developed. By about 6000 years ago they were restricted to Scotland and Ireland. Then in the late 19th century some Peak District landowners brought mountain hares from their estates in Scotland and released them on their grouse moors here. No specific reasons for reintroducing the hares to the Peak District have been documented, but most probably it was done for sporting reasons. In any case, the mountain hares have since expanded across most of the Dark Peak and farther north into the Southern Pennines as far as the M62. The 'white hare' has become a familiar sight to hikers on the moors especially when they are in their white coat. Indeed, when there is no snow, they can be picked out at more than a kilometre away

Mountain hares are widespread in the Highlands of Scotland and are especially numerous on the grouse moors of the eastern Cairngorms. Or at least they were until recently. Grouse are vulnerable to tick-borne virus that also affects sheep known as louping ill. Fears that mountain hares might be a possible vector of the disease led to some sporting estates carrying out extensive culling of mountain hares to eradicate them from their land. According to a report by the Centre for Ecology and Hydrology and the RSPB, mountain hare numbers in Scotland declined rapidly every year from 1999 so that by 2017 numbers remaining were only 1% of those in 1954 – a massive 99% decline. There is in fact no scientific evidence that the hares transmit louping ill. Nevertheless, there have been several reports of similar mass shooting here in the Peak District in the last 10-15 years and while the species is still present, numbers on several moors certainly seem to be lower than they were until recently.

Mountain hare in Crowden Valley, Longdendale; late winter coat

Otter [sign] spotting

Otters are rarely seen in Derbyshire. They are almost always recorded indirectly through field signs: mainly droppings (known as spraints) and tracks, but occasionally feeding remains too.

Spraints are characteristic in appearance and easily recognised with a bit of practice and they are deposited in characteristic places.
Appearance: Small compared to the size of the animal, black or grey in colour, often with fish bones or fish scales visible. Sometimes the spraint consists of a small black tarry deposit.
Odour: described variously as smelling like 'jasmine tea' or 'sweet hay'. They are not strongly fishy not unpleasant, unlike mink scats which are strong and foul-smelling ("mink stink").

Spraints showing fish bones (top left), fish scales (top right) and black tarry deposits (below)

Where to find them: favourite sites are under bridges, by weirs, and on the trunk or roots of riverside trees or on a prominent mound on the riverbank.

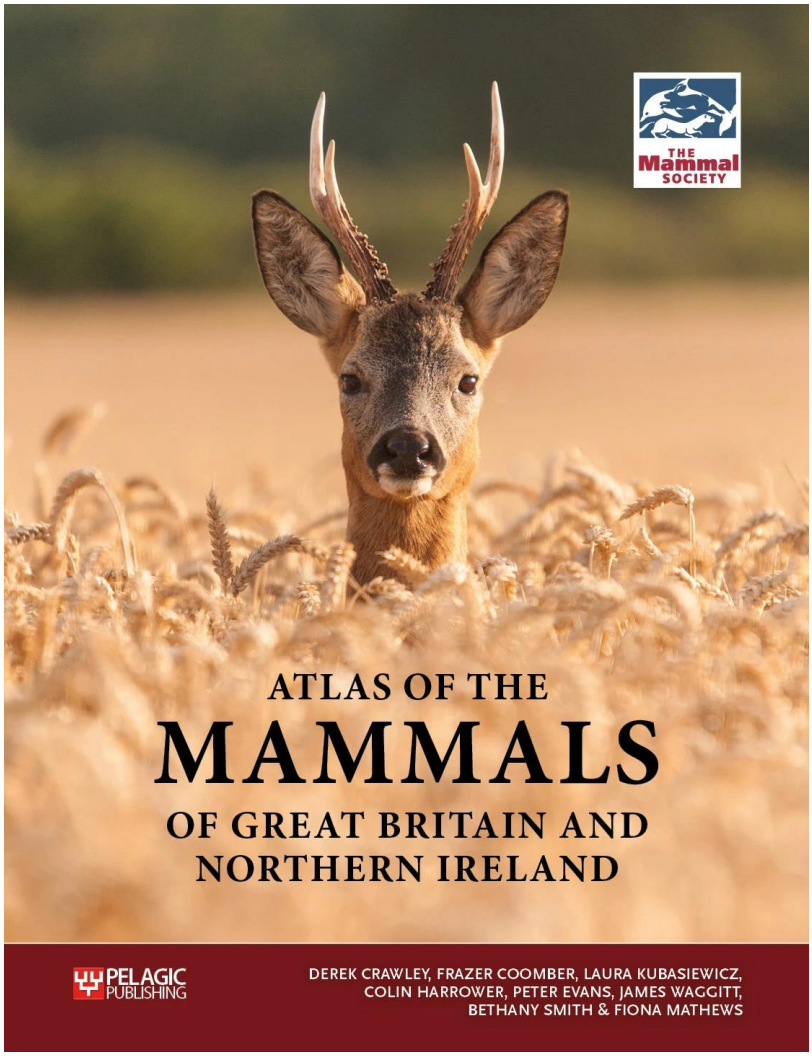
Tracks: otters have 5 toes and partly webbed feet. The track is relatively broad. If you are lucky you may find a set with a line or groove in the middle where the tail has dragged through soil or the mud.

Otter tracks by the Dove near Norbury (left) and a close up of an otter's foot (road casualty near Buxton)

Feeding remains: Fish with a large piece bitten out of the shoulder or back are sometimes found. Otters also eat crayfish, leaving behind the shell and claws.

Remains of white-clawed crayfish found next to otter spraints on the Dove near Milldale

UK Mammal Atlas published



The new *Atlas of the Mammals of Great Britain and Northern Ireland* was published by the Mammal Society at the end of March 2020.

The *Atlas* provides the most up-to-date information on the current distributions of all wild mammals, terrestrial and marine, in the United Kingdom, Channel Islands and the Isle of Man.

It is based on more than 1.5 million records from 2000-2016, including tens of thousands from Derbyshire, and is fully illustrated, containing more than 100 colour figures and 89 maps.

It starts with a concise overview of the methods used in the data collection and mapping.

There is a double page account of 84 species including a distribution map and photo as well as information on their identification and ecology. Data are also included on feral species, vagrants that have not established populations, and whales and dolphins that have only ever been recorded as strandings.

The *Atlas* maps show changes in the status of species over time, such as the rapid invasion of the grey squirrel at the expense of the red squirrel, the decline of the water vole, and the recovery of the otter, pine marten and polecat. The editorial team was led by Derek Crawley, who is known to many of us in his role as Chair of the Staffordshire Mammal Group, and the team worked with local mammal groups and other volunteers to complete this very welcome undertaking. The *Atlas* is available currently from online booksellers and hopefully soon from your local bookshop (ISBN 9781784272043).

The information for each species is split into historic (1960-1992 for terrestrial species or 1980-1999 for cetaceans) and current (2000-2016) timeframes. However, for Water Vole and the squirrel species, with rapidly changing patterns of distribution, the current time frame is reduced.

Each species account includes a single, large and easy-to-read distribution map, which shows any changes since the historic data period, and each is accompanied by an annual activity plot. For cetaceans, the distribution map is extended to include the whole North Sea and shelf seas around the British Isles. The text account for each species provides a short summary of its distribution, ecology and identification.

PTES *Living with Mammals* survey

The People's Trust for Endangered Species (PTES) runs an annual urban mammal survey to get to know what mammal visitors you get in your garden and increase the number of records from urban and suburban areas. This is an ideal way to keep in touch with nature and contribute to a national project, especially while we restricted in where we can go. So, whether you have mice in the shed, rabbits in the flower bed, bats under the eaves or hedgehogs on the patio, sign up and send your records to *Living with Mammals*. Find out more and register at: *https://surveys2.ptes.org/surveys/SignUp.aspx*

Badger cull in England halted

In response to an independent review into its TB policy, the government recently acknowledged that the mass slaughter of badgers was not a long-term solution to reducing bovine-TB. Instead there will be a new emphasis on vaccinating cattle against the disease. More than 35,000 badgers were killed during 2019, according to figures released on 27 March. The cull began in 2013 and covers 40 zones stretching across England from Cornwall to Cumbria. The total number of badgers killed since the culling policy started is now 102,349 and the cost of the cull to the taxpayer has been estimated at more than £60m!

Source: https://www.theguardian.com/environment/2020/mar/28/more-than-100000-badgers-slaughtered-in-discredited-cull-policy

Scottish wildcats: bad news and good news

For the past few years, conservationists in Scotland have been focusing on five wildcat "priority areas". Their main activities have to trap, neuter, vaccinate and release feral cats in those areas in attempt to preserve 'true' wildcats.

A recent study examined DNA from hundreds of dead and living wildcats and found they were part of the same hybrid gene pool as domestic cats. A report by the International Union for Conservation of Nature's Cat Specialist Group concluded there is no longer a viable wildcat population in Scotland and concluded that it was "functionally extinct" This means the extinction of the species is highly likely without wildcat releases.

Conservation of the wildcat in Scotland has been provided with a massive boost through a £3.2 million grant from the EU LIFE project and co-funding from the Garfield Weston Foundation, the National Trust for Scotland, the People's Trust for Endangered Species and the European Nature Trust. The project will build on the work of the Scottish Wildcat Action partnership to deliver a Saving Wildcats (#SWAforLIFE) recovery project that includes the development of the UK's first wildcat reintroduction centre. Situated at the Royal Zoological Society of Scotland's Highland Wildlife Park at Kincraig, near Aviemore, the centre will provide facilities for breeding, veterinary care, remote monitoring and training, with wildcats potentially being released into Cairngorms National Park. Over the next six years, RZSS will lead the Saving Wildcats project, working with Scottish Natural Heritage, the Cairngorms National Park Authority, Forestry and Land Scotland, as well as European partners Norden's Ark from Sweden and Spain's Junta De Andalucía, which have led the successful recovery of the Iberian lynx. The plan is to release the first wildcats in 2022, with potential locations being explored in the Cairngorms.
https://www.rzss.org.uk/news/article/16744/european-funding-lifeline-for-wildcats-in-scotland/

Pine marten photographed in Northumberland

For several years there have been anecdotal reports of pine martens in Kielder Forest, and colonisation of the area from known populations in southern Scotland has been anticipated for some time. In 2019, their presence in Kielder was confirmed through still photos and video sequences taken on several occasions by a camera trap placed at a red squirrel feeding station as part of a monitoring project. These images provide the first confirmed evidence of pine martens in Northumberland since 1926. Kielder Forest is the largest forest in England and is a Forestry Commission site.

Pine martens reintroduced into Gloucestershire

Since 2016, Gloucestershire Wildlife Trust, Forestry England, Forest Research, and Vincent Wildlife Trust have been collaborating on a project to reintroduce pine martens to the Forest of Dean, with the support of Forest Holidays and the Woodland Trust. In August and September 2019, 18 pine martens were trapped near Inverness and transferred to Gloucestershire where they were fitted with radio-tracking collars and released at a remote location in the Forest of Dean. Scottish Natural Heritage (SNH) and Forestry and Land Scotland (FLS) were both instrumental in this reintroduction operation as previously in Wales. Between 2015 and 2017, more than 50 Scottish pine martens were captured and transported to Wales, where there is now an established population. It is hoped that the pine marten populations will help to reduce numbers of grey squirrels, which tend to produce fewer young when there is a predator in the area. A reduction in the number of grey squirrels would in turn help to preserve ancient woodland.

Harvest mouse rediscovered in Northumberland

In 2004, PhD student Wendy Fail painstakingly bred 240 harvest mice and released them at East Chevington nature reserve, near Druridge Bay, a coastal site with plenty of reedbed habitat. Wendy Fail's original studies found that harvest mice were vulnerable to predation by wood mice when they were first released. Therefore, the 240 captive-bred harvest mice were 'soft-released' by first using secure cages to acclimatise them to the area. then releasing them incrementally into the wild over the course of eight weeks. Follow-up surveys using specially adapted live traps, caught many wood mice and shrews, but failed to find any trace of harvest mice, despite the same traps successfully catching them in trials. It was concluded that the reintroduction efforts had been unsuccessful. Then in 2019, 15 years later, a search led by Northumberland Wildlife Trust found fresh harvest mouse nests at the site for the first time, showing that the descendants of the original released animals are in fact still thriving.

The harvest mouse is the UK's smallest rodent, weighing about the same as 10 pence piece, and it is not often caught in conventional small mammal traps because this very light weight makes it difficult to set the trigger finely enough. In addition, small mammal traps are usually sited on the ground and harvest mice spend most of their time above the ground in cereals, grasses, and reeds. The most reliable survey and monitoring method is to search methodically through suitable habitat for their very characteristic round, woven nests, about the size of a tennis ball, attached to grass and other stems.

Harvest mouse nests: conventional (left) and unconventional (right)

---

www.derbyshiremammalgroup.org.uk
