

A guide to identifying evidence of pine martens



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What is a pine marten?

The pine marten is a member of the mustelid family. Its relatives include the stoat, weasel, mink and polecat. It has longer legs and tail than a mink or polecat (the species with which it is most commonly confused), and its gait on the ground is characteristically loping or bounding. While mink, stoat and weasel can also climb trees, pine martens are naturally arboreal and their semi-retractable claws mean they are great climbers.



Weasel
Mustela nivalis



Stoat
Mustela erminea



Mink
Neovison vison



Polecat
Mustela putorius



Pine marten
Martes martes

Fig 1 Members of the small mustelid family found in Britain.

Identifying features Cat size, chestnut brown fur, creamy yellow or orange throat patch, long bushy tail.

Breeding Up to five kits born in spring. Kits stay with their mother before dispersing in the autumn.

Diet Berries, fruits, small mammals, invertebrates, birds and amphibians.

Habitat Requires forest or scrub habitats that provide cover.

Behaviour Largely solitary and strictly nocturnal in winter. In summer they can be seen in the day, especially females with kits.

In need of protection

The pine marten had become extinct throughout much of Britain by the early part of the 20th century.

Recent studies had shown that the pine marten in Scotland was making a good recovery, but the situation was different south of the Scottish border, with no convincing evidence of natural recovery.

The pine marten is seen as a priority species in urgent need of conservation action. It is listed under Schedule 5 of the Wildlife and Countryside Act (1981), which means it is illegal to intentionally kill or injure pine martens, or disturb their dens. Any research that could disturb pine martens, such as trapping animals or monitoring den boxes, must be carried out under licence.

Fig 2 The distribution of the pine marten in Britain (2020).



The pine marten in Wales

The Pine Marten Recovery Project

With no sign of the pine marten population recovering in southern Britain, intervention was needed. In 2015, Vincent Wildlife Trust (VWT) launched the Pine Marten Recovery Project to reinforce this dwindling population.

Between 2015 and 2017, the Trust translocated 51 pine martens from Scotland to mid-Wales. These animals have set up territories, are breeding successfully and are now expanding further afield.



During the first year, staff and volunteers were able to radio track the collared pine martens and to locate den sites.



The pine marten in Scotland

Pine martens are widespread in the Highlands of Scotland and most areas north of the Central Belt, thanks to natural population recovery. This population is very slowly spreading south through the Central Belt into southern Scotland where there are also a few discrete populations, particularly in Dumfries and Galloway and the Scottish Borders, as a result of small-scale releases.

Although these regional populations are expanding, there is a long way to go until there are established breeding populations across southern Scotland.



The pine marten in England

With the pine marten population in Scotland recovering and expanding, martens have begun to spread over the English border and re-colonise areas of Northumberland and Cumbria. The rate and success of this re-colonisation will depend on the availability of suitable habitat and the influence of anthropogenic factors, such as mortality on roads.

Vincent Wildlife Trust (VWT) began to pave the way for the recovery of the pine marten in northern England through the national Back from the Brink project. The Trust is now working on a potential new National Lottery Heritage Fund project, Martens on the Move, with the aim of monitoring the re-colonisation of pine martens with help from a network of volunteers and enhancing habitat by installing artificial den boxes to provide resting and breeding sites for pine martens. The project will also help to raise awareness of the species.

While parts of northern England will be re-colonised by the southward expansion of the Scottish pine marten population, pine martens were unlikely to re-colonise southern and central England naturally. As a result, reintroductions were the best solution to restore pine martens to some parts of southern and central England.

In 2016, VWT began a collaborative project with Gloucestershire Wildlife Trust and Forestry England to embark on the reintroduction of the pine marten to the Forest of Dean in Gloucestershire.

Led by Gloucestershire Wildlife Trust, and following a period of research and feasibility studies, the translocation of pine martens to the forest began in 2019 with a total of 35 animals released between 2019 and 2021.

The first camera trap footage of a pine marten in Northumberland (left). One of the first pine martens to be released into the Forest of Dean (right).



Field signs

1 Scats

Scat size

Length: 4cm – 12cm

Width: 0.8cm – 1.8cm

Pine marten scats can look a lot like fox droppings – and without a DNA test it can sometimes be tricky to tell the difference. There are, however, a few guidelines that you can use to help. The ideal pine marten scat is dark and coiled (martens have a curious habit of hip wiggling while scatting, which produces this distinctive shape). Scent can also be a valuable aid in detection as pine marten scats tend to have a musty sweet scent that is not unpleasant.



Common scent comparisons include: floral, damp hay and, bizarrely, parma violets. Fox scats on the other hand are often pungent and tend to be larger than pine marten scats.

Despite being classified as carnivores, martens are highly opportunistic animals with a varied diet and will eat what is locally plentiful. This may include small mammals, fruit, birds and their eggs, insects and carrion. As a result, scats can contain fur, feathers or the delicate bone fragments of field voles. Occasionally you may even find brightly coloured blue or red scats – evidence that a marten has been eating a lot of bilberry or rowan berry.



Have you found a pine marten scat?

With a gradually increasing pine marten population in Wales and parts of England, searching for droppings (scats) in your local woodland is becoming an easy way to establish the presence of pine martens. Pine martens like to scat on clear ground – potentially to make their droppings more noticeable to other martens – so just follow the forest track and keep an eye on the ground.

If you do think you have found a pine marten scat, please take a photo with something for scale and send to VWT's enquiries.

Tel: 01531 636441

Email: enquiries@vwt.org.uk

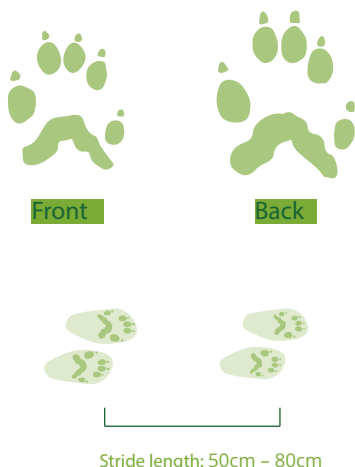
2 Footprints

Footprint size

Females: 4cm x 4.5cm

Males: 5.5cm x 6.5cm

Whilst surveying for scats, it is also a good opportunity to spot pine marten footprints. Dogs and foxes have four toes, but mustelids like badger, stoat, otter, mink and pine marten all have five toes. Some of the best times to look for footprints are in the snow and in fresh mud following rain.



3 Den sites

Pine martens like to utilise woodland habitats, but they will also live in scrub, rocky areas and crags; the latter giving them a chance to use their climbing agility. Pine martens prefer to rest and breed above ground and frequently den in tree cavities, squirrel dreys and wind-throw. They will also use purpose-built den boxes and owl boxes.



Evidence of martens can sometimes be gathered around den sites as pine martens will often bring back prey to their den to cache. This is particularly prevalent when a female has young because the same den site is used for a long period of time. If you suspect a den site is being used by a marten, keep an eye out for bird feathers, small mammal bones and the remains of half-eaten larger prey items. Please do this from a reasonable distance using binoculars as it is an offence to disturb an occupied marten den.

Den boxes

Pine martens have evolved to use tree cavities as den sites for breeding as the elevated site keeps them safe from predators – particularly foxes. In forests with a lack of old trees, they will resort to alternatives such as dense thickets, craggy outcrops and even ground level root boles, but they are all quite difficult to find. VWT's artificial den box has had success in terms of providing an alternative den site for the pine marten; and one that can be monitored under licence from the relevant Statutory Nature Conservation Organisation, or from a safe distance through binoculars.



Instructions for constructing, erecting and monitoring pine marten den boxes are available from: www.vwt.org.uk/downloads



4 Camera traps

Some of the Trust's most exciting evidence of pine martens comes through the use of camera traps. These are motion-activated cameras that are left out in the field to capture photos or video footage of visiting martens.

Video footage is the best way to check on the body condition of any martens and also record interesting natural behaviour. We can usually establish whether the marten on camera is male or female, an adult or juvenile.



Bib shots

Camera trap footage can also allow us to identify individual animals as the spots and edges on the throat patch of martens are unique to each animal.

The use of a 'jiggler' helps to get a clear photograph in the wild of a marten's bib. A jiggler is made from two tea strainers filled with peanut butter, tied together and suspended with wire in front of a camera. When a visiting pine marten stretches up towards the bait, it provides the camera with a perfect 'bib shot'.

VWT has reference photographs of the throat patches ('bib shots') of all of the original translocated animals, and has started a collection of pictures of offspring and their bibs. The Trust is always interested to see photographs that clearly show the individual bib of a marten.

If you do think you have a photograph of a pine marten in England, Wales or southern Scotland, please send it to: enquiries@vwt.org.uk



Get involved

If you are interested in volunteering with Vincent Wildlife Trust and its work on pine martens or would just like some more information, please visit: www.vwt.org.uk

You can also help us in the following ways:

- Report sightings of pine martens in England, Wales or southern Scotland and encourage others to do the same.
- Become a Friend of VWT and receive newsletters and other updates on the Trust's work.
- Donate to VWT to help us continue our work helping the pine marten to recover throughout England, Wales and Scotland.

Visit our website www.vwt.org.uk or email enquiries@vwt.org.uk

Further reading

MacPherson, J. and Wright, P. (2021) *Long-term strategic recovery plan for pine martens in Britain*
Ledbury: Vincent Wildlife Trust

Birks, J. (2017) *Pine Martens*
Stansted: Whittet Books Ltd

MacPherson, J. (2014) *A guide to identifying the small mustelids of Britain and Ireland*
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Vincent Wildlife Trust (2004) *The Pine Marten*
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London: The Mammal Society



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