

A guide to identifying evidence of pine martens in Wales











What is a pine marten?



The pine marten is a member of the small mustelid family and related to 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.

Identifying features: Cat size, chesnut 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 habitat that provides cover

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



Fig 1. The small mustelid family

In need of protection

The pine marten had become extinct throughout much of Britain by the early part of the 20th century. Recent studies show that the pine marten in Scotland is making a good recovery. South of the Scottish border the situation is different; there has been 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). This 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.

Pine Marten Recovery Project

With no sign of the pine marten population recovering in southern Britain, intervention was needed. As a result, The Vincent Wildlife Trust launched the Pine Marten Recovery Project in 2015 to reinforce this dwindling population. Since 2015, the Trust has translocated pine martens from Scotland to mid-Wales. These animals have set up territories and are now breeding successfully in Wales.



Field signs

1. Scats

Scat size

Length: 4 cm – 12 cm Width: 0.8 cm – 1.8 cm

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 custom of hip wiggling while scatting, which produces this distinctive shape). Scent can 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, 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, searching for droppings or '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 collect and freeze it and then contact the Trust.

Tel: 01531 636441

Email: enquiries@vwt.org.uk

2. Footprints

Footprint size

Females: 4 cm x 4.5 cm Males: 5.5 cm x 6.5 cm

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.





Front

Back



Stride length: 50 cm - 80 cm

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 often be gathered around den sites. 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.



Den boxes

Pine martens have evolved to use tree cavities as den sites for breeding. With a growing lack of old trees, they resorted to alternatives such as dense thickets, craggy outcrops and even ground level root bowls, but they are all quite difficult to find. The 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.



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 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 establish whether the marten on camera is male or female, an adult or juvenile.





The Trust is currently running a camera trap loan scheme, where we are providing cameras to individuals who live or work in an area where there may be pine martens. As we remove the radio-collars from our translocated animals, we hope to keep track of each marten through community involvement in this scheme.

Please visit the website or contact us if you would like more information on our camera trap loan scheme.

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.

In order to get a clear photograph in the wild of a marten's bib, the Trust uses a 'jiggler': a tea strainer filled with peanut butter 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'.

The Trust has reference photographs of the throat patches ('bib-shots') of all

of the translocated animals, and is now starting to collect a library of pictures of offspring. 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 or Wales please send it to: enquiries@vwt.org.uk



5. Hair tubes

Evidence of pine martens can also be detected using 'hair-tubes'. These are sections of plastic pipe (wide enough for a marten to squeeze through) placed vertically on a tree trunk and then baited. A marten will enter at the bottom of the tube and brush past a small patch of sticky tape that will collect hair. Any hair collected can be identified using microscopic examination or DNA analysis (this can also establish which individual marten it is).





There are also other hair sampling devices starting to be utilised in the field, including squirrel feeders modified with sticky patches under the lid: when the marten lifts the lid to eat the peanuts its head touches the sticky patches.

A video guide on how to make, mount and monitor pine marten hair tubes is available to watch on The Vincent Wildlife Trust YouTube channel.

Get involved

If you are interested in getting involved with the Trust's work on pine martens, through volunteering, hosting a camera trap or hair tube, or would just like some more information, please visit: www.pine-marten-recovery-project.org.uk

Via the project website you can also help us in the following ways:

- Report sightings of pine martens in England or Wales and encourage others to do the same.
- 'Become a friend' of the VWT and receive newsletters and other updates on the Trust's work.
- Donate to the project to help us continue our work restoring the pine marten to England and Wales.





Further reading

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

Macpherson, J. (2014) *A guide to identifying the small mustelids of Britain and Ireland.* Ledbury: The Vincent Wildlife Trust.

The Vincent Wildlife Trust (2004) *The Pine Marten*. Ledbury: The Vincent Wildlife Trust.

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