



Devon  
Wildlife Trust



EXMOOR  
NATIONAL PARK



Forestry England



Somerset  
Wildlife Trust

## Two Moors Pine Marten Re-introduction

### Summary

A project is underway to investigate the possibility of bringing pine martens back to Exmoor and Dartmoor after an absence of almost 150 years.

Once very much part of our local woodlands, these animals play an important ecological role in our countryside. Through the Two Moors Pine Marten Project, Exmoor National Park Authority, Dartmoor National Park Authority, Devon Wildlife Trust, Woodland Trust, and National Trust are working together to explore the feasibility of reintroducing pine martens to Devon and Somerset as part of a long-term national reintroduction strategy.



Pine Martens Bounce Back: The Two Moors Pine Marten Project is made possible with The National Lottery Heritage Fund. Thanks to National Lottery players, this project aims to restore healthy populations of pine martens to the South West of England.

Alongside the animal's return will be an ambitious programme of community activities which will engage thousands of people in exploring, learning about and caring for the region's woodlands.

### FAQs

#### About pine martens

##### What are pine martens?

Pine martens are members of the weasel family (mustelids). They are arboreal (tree-dwelling) and live at very low densities across large areas. They have rich brown fur with a cream throat and chest and are similar in size to a small domestic cat.

##### What do pine martens eat?

Pine Martens eat what is seasonally and locally abundant. Their diet varies with location and season but comprises mostly small mammals such as field and bank voles. They also feed on birds and their eggs, invertebrates such as beetles and wasps, large quantities of berries in the autumn. Pine martens scavenge carrion too, particularly in the winter. They are known to eat squirrels, although this only makes up a very small proportion of their diet.

##### What habitats do pine martens require?

The pine marten is a woodland specialist and has excellent climbing skills well suited to wooded habitats. They rest and breed in holes in trees, large bird nests, squirrel dreys, fallen trees, thick

for example grassland, alongside woodlands where they can hunt and forage. Pine martens are solitary and can have fairly large territories.

### **What size territories do pine martens need and how far are they likely to disperse?**

Pine marten territory or home range sizes vary depending on the quality of habitat and food availability but are typically in the region of 5km<sup>2</sup> to 10km<sup>2</sup>. Dispersal distances can vary between 0 to 50km. In other reintroduced populations, some individuals have dispersed over 100km from the release point, but this is a rare exception.

### **When and why did pine martens die out in South West England?**

Humans are responsible for the decline of pine martens across the UK. Pine martens were one of the most common carnivores in prehistoric times and remained widespread, albeit rare, in the UK's woodlands until about 150 years ago.

Clearance of woodlands over thousands of years removed much of the pine marten's habitat. Pine marten fur was highly valued in medieval times making them a target for trapping. Tudor laws which lasted until the 19th century demanded many wild animals were killed by parishes, including pine martens. The rise of sporting estates in the 18th and 19th centuries brought the now rare pine marten to the verge of extinction in the UK. The pine marten is thought to have become extinct in Devon, Somerset, and Cornwall between 1870-1880. There has been no evidence of a pine marten population in the South West since the late 19th century.

### **Have there been any sightings of pine martens in Devon and Somerset since they became extinct?**

Yes. There have been occasional sightings of pine martens in Devon and Somerset. Confirmed sightings in recent decades are most likely to result from animals that have escaped from private collections or have been released unofficially. It is unlikely that this type of release would result in a sustainable population of pine martens. The animals are likely to travel large distances in search of other pine martens, leaving them at high risk of mortality, usually through road traffic accident.

Our plan, through the Two Moors Pine Marten Project, is to manage pine marten reintroduction in a controlled manner to avoid or mitigate such risks. This will include working closely with key stakeholders, carefully assessing the release sites for suitability, carrying out health checks on the animals, and obtaining the necessary licences.

### **Are pine martens protected?**

Yes. Pine martens are listed under Schedule 5 of the Wildlife and Countryside Act (1981). It is therefore illegal to intentionally trap, injure or kill pine martens or disturb their dens. Any research that could disturb pine martens, which includes trapping and monitoring den boxes, must be done under a licence from the relevant statutory body (NatureScot, Natural Resources Wales, or Natural England).

## [About the Two Moors pine marten reintroduction project](#)

### **Why reintroduce pine martens?**

Pine martens play an important ecological role in our ecosystem and their reintroduction benefits the restoration of woodlands more broadly. They are a charismatic species and can be a wonderful

sight to see in the wild. Returning such species to this area, where this can be done sustainably and with community support, enriches our world.

Pine martens are part of the UK's rich wildlife heritage. They are one of the rarest mammal species in Britain, following a long history of woodland decline and severe declines in pine marten populations in the 18th and 19th centuries.

In addition to their intrinsic value, pine martens have a significant role to play in recreating natural ecosystems. Along with other similar mid-sized carnivores, pine martens contribute to the natural balance of ecosystems. Pine martens predate invasive species such as grey squirrels, although more research is needed to better understand their potential impact.

Re-establishing pine martens in England also has the potential to benefit the rural economy, as has been the case in Scotland, through the creation of tourism opportunities for people who are keen to see pine martens.

### **How does this project fit with other pine marten activities across the UK?**

Whilst the pine marten population is recovering well in Scotland and is spreading over the border into parts of northern England, the same natural recovery has not occurred in southern England. Large conurbations and areas of unsuitable habitat in parts of north-west and central England is likely to prevent this population spreading to central and southern England naturally.

Conservation translocations (deliberately moving animals from one place to another) have already been used to restore viable pine marten populations to Mid Wales and Gloucestershire and could be used to restore pine martens to other suitable areas of England.

In line with the long-term strategic recovery plan for pine martens in Britain, the Two Moors Pine Marten Project aims to help speed up the return of the pine marten to the South West, which would otherwise take many decades.

### **Will the reintroduction of pine martens definitely go ahead?**

Significant work is still needed before determining whether any reintroduction can, or should, proceed. This includes assessing ecological impacts on other native species and considering the socio-economic impacts on businesses that might be affected (this includes agriculture and commercial shoots). Work will also be carried out to understand whether there is broad support from local communities. In addition, the partnership will need to raise the necessary funds for the project to be effectively run and managed.

### **Where would the pine martens come from, how many would be introduced, and what is the likely impact on the donor population?**

The aim would be to re-introduce a minimum of 30 to 40 pine martens, over two to three years (in total across both National Park release areas). We anticipate that the pine martens would be translocated from donor sites in Scotland. These populations have been carefully monitored by Vincent Wildlife Trust for the past few years and this research has shown that taking a small number of animals from individual forest areas will not have a detrimental impact on the populations. This is subject to satisfactory completion of the necessary licensing applications and meeting all associated conditions, including evidence of no lasting impact on the donor population.

### **How are we working with stakeholders who may be affected by the return of pine marten?**

Bringing back species, particularly a predator like a pine marten, is complicated. It can bring challenges to a range of people – from those interested in vulnerable wildlife that could be preyed upon by pine martens to those whose businesses or livelihoods may be impacted, such as the shooting community, farmers or woodland managers.

One of the key purposes of the 18-month development phase of the Two Moors Pine Marten Project is to work closely with these stakeholders to address their concerns, to avoid or mitigate risks and ensure a sustainable reintroduction.

The project has already started conversations with stakeholders around Dartmoor and Exmoor as well as with national organisations, and we are keen to hear from anyone who may be affected by the return of pine martens to this area.

### **What would a pine marten reintroduction/release involve?**

For a release into South West England, pine martens would be taken in small numbers over a few years from another part of Britain where the population is carefully monitored and continues to thrive. Prior to being released, the animals would be given a full health check by a vet and fitted with a radio-collar to allow them to be tracked. Once the pine martens were released, they would be closely monitored, so that their location and movements would be known.

Any proposed translocation and release of pine martens must be considered very carefully and comply with International Union for Conservation of Nature (IUCN) guidelines on translocations and Defra's code and guidance for reintroductions and other conservation translocations. Specifically, if the reintroduced pine martens come from Scotland, their capture and translocation must comply with the Scottish Code for Conservation Translocations.

Prior to any releases going ahead, a feasibility study including a detailed ecological and social feasibility assessment must be carried out, and appropriate licences granted from the relevant authorities.

### **Is this reintroduction a trial or a permanent reintroduction?**

The proposed re-introduction is intended to help assist the national recovery of pine marten and would begin to establish a permanent and sustainable population in South West England. After completion of the reintroduction project, ongoing work would take place to monitor the expansion and dispersal of pine martens across the South West. Supplementary animal releases may take place in future years to boost numbers if required.

### **Are there any biosecurity risks involved with translocating pine marten?**

Prior to any animals being moved a full Disease Risk Analysis would be undertaken, the animals will be health checked and licences for the translocation will be obtained from NatureScot and Natural England. Only healthy animals will be translocated from Scotland.

### **Will compensation schemes be put in place for potential loss of game birds, chickens, livestock etc?**

During the reintroduction, the Two Moors Pine Marten Project will include a budget for compensation should it be needed. However, based on experiences from the Mid Wales and the Forest of Dean releases, this is unlikely to be required.

See below for more information on the possible pine marten impacts.

### **Which organisations are taking part in this project?**

Five conservation organisations are working in partnership on this project: Devon Wildlife Trust, Woodland Trust, National Trust, Dartmoor National Park Authority and Exmoor National Park Authority. Vincent Wildlife Trust, Forestry England and NatureScot are providing advice and support, the latter is also the licensing authority in Scotland. Devon Wildlife Trust will be leading the project.

### **Pine marten impacts**

#### **Will we become overrun with pine martens?**

No. Pine martens live at low densities and an average density is 0.5 pine martens per km<sup>2</sup>, although the size of their home range can vary considerably depending on the available woodland cover and other resources. Following successful breeding a female pine marten can give birth to between one and four kits each year, but most commonly just a single kit. This means that they will never become overly abundant. Pine martens are primarily solitary and avoid each other, except for breeding. This means that if you see two or three pine martens together, it will most likely be a female with young or juvenile siblings that sometimes stay together in their first year.

#### **What effect might pine martens have on wild birds?**

Pine martens have co-existed with many bird species across their European range for thousands of years and there is no reason they cannot do so in England. Pine martens have a very varied diet and predate the most common bird species in woodlands, such as wood pigeon, jay, and blackbird.

Pine martens are solitary, live at relatively low population densities, have large home ranges and tend to predate what is locally abundant. The impacts of pine martens on rare and more common birds will be lower than widespread predators such as foxes, domestic cats, or crows. This means they are unlikely to affect populations of rare or vulnerable species in a wild environment. However, mitigation measures to protect nest boxes and bat roosts may be needed in some circumstances, especially where specific conservation activities are taking place.

#### **Are pine martens a threat to poultry or game birds?**

Pine martens may take poultry or game birds if they can gain access to pens, but predation can be prevented using simple and effective husbandry techniques.

While pens are already effective at excluding foxes, polecats, stoats, and domestic cats, pine martens can access pens via overhanging branches. Using netting over the top of pens and clearing overhanging branches around poultry pens can effectively reduce the chance of marten accessing a pen.

More information: [How to exclude pine marten from game and poultry pens - Vincent Wildlife Trust](#)

A potential issue that has been observed is pine martens driving gamebirds on, prior to a shoot. Gamekeepers have employed novel approaches to put off predators, such as playing Radio 4 in woodlands! The Two Moors Pine Marten Project is keen to work with stakeholders to explore such techniques.

### **What effect might pine martens have on bats?**

Bats do not play a functional role in pine martens' diet (see 'What habitats and food do pine martens require?' above) and there is very little evidence of frequent bat predation by pine martens.

Elsewhere in Europe where pine martens occur, they are not viewed as a serious threat to bat populations, and the behavioural adaptations of bats roosting in buildings means that the potential for predation by martens is very low. However, pine martens will occasionally access buildings and den (rest) in them, therefore, some bat species that roost in buildings may be at risk of disturbance or predation by pine martens. The Two Moors project will conduct detailed ecological feasibility and impact assessment work (including a Habitat Regulations Assessment) prior to any release.

As part of the reintroduction project, mitigation methods to protect roosting bats would be used around the pine marten release areas and made available to be deployed elsewhere if needed. Pine marten den boxes would also be set up around release areas to provide the pine martens with shelter away from buildings, to reduce the risk to bat roosts.

### **What effect might pine martens have on dormice?**

Hazel dormice are unlikely to be predated by pine martens in natural nest sites or while active.

Dormice could be vulnerable to pine marten predation in a nest box, especially on cooler days when they go into torpor. However, dormouse nest boxes tend to have rear facing entrance holes positioned against a tree, making them very difficult for a pine marten to access. Dormouse nest boxes can also be easily modified to prevent pine martens from opening their lids.

### **What impact do pine martens have on squirrels?**

Pine martens play an important part in a healthy balanced woodland ecosystem.

Grey squirrels have a detrimental impact on woodland and tree health, particularly broadleaf woodland, through bark stripping and other tree damage. A report issued by the Royal Forestry Society estimated that the cost of grey squirrel damage to trees in England and Wales is £37m a year. This was attributed to loss in timber value, reduced carbon capture, damage mitigation, and the cost of tree replacement. The potential impact of pine martens on grey squirrel numbers may enable a greater number of broadleaf trees to be planted and grow into high quality timber.

Research in Scotland suggests that for pine martens to have an impact on grey squirrels, martens must have been present for many years and occur at relatively high densities. Therefore, it will likely be many years before any impact on grey squirrels is seen in England, as the pine marten population will need time to build up to a higher density. It is highly unlikely that pine martens will eradicate grey squirrels in the UK.

### **How will the pine marten re-introduction affect the way I manage grey squirrels in my woodland?**

Once pine martens have established a population, the need for grey squirrel control may be reduced. However, the impact of pine martens is likely to vary from place to place and grey squirrel control will still be needed for the foreseeable future. If this is the case, then live trapping or shooting are the only recommended control methods. Lethal traps must not be used. When live trapping for grey squirrels, traps must be visited at least once every 24 hours, but, where there is a risk of catching pine martens or other non-target species it is a legal requirement that traps are checked twice daily. During the pine marten breeding season (March to the end of June) traps should be closed overnight as there is a risk of trapping a lactating female marten and kits being left unattended.

### **Do pine martens carry or spread bovine tuberculosis (bTB)?**

The likelihood of pine marten exposure to the *Mycobacterium bovis* pathogen (the cause of tuberculosis in cattle), is considered low, based on the solitary nature of pine martens, their preference for woodland habitat and avoidance of other carnivore species such as badgers. These factors also reduce the likelihood of any onward transmission, should a pine marten become infected.

There is a low probability of pine martens sourced from Scottish sites carrying the *Mycobacterium bovis* pathogen (the cause of tuberculosis in cattle), considering Scotland achieved Officially Bovine Tuberculosis Free (OTF) status in 2009. This status does not mean that Scotland has no cases of TB in bovine herds but recognises that there are relatively few cases, below the threshold for that designation.

Pine martens could however be exposed to the pathogen at the release site. Given this and the differing epidemiology of *Mycobacterium bovis* in Exmoor and Dartmoor, we intend to reassess the risk, mainly focusing on the risk of pine marten translocation altering the local TB disease ecology.

### **Do I need to be worried about pine martens visiting my garden?**

Pine martens will visit gardens and may take food left out for birds or squirrels. Many people enjoy watching pine martens and tempt them into their gardens with food such as nuts, peanut butter, and jam!

As a result of scarcity of natural den sites, pine martens may access and den in both inhabited and uninhabited buildings. This is most common in the spring, when a female may use a roof-space of a building to give birth to her young (kits).

The reintroduction project would involve installing pine marten den boxes around release sites to provide plenty of suitable places for the animals to shelter, thereby reducing the likelihood they would enter a local building.

For information on preventing access and excluding pine martens if they are denning in a building see: [Living with pine martens – Vincent Wildlife Trust](#)

### **Would pine martens be a threat to my cat or dog?**

Pine martens are not a threat to cats or dogs and will avoid confrontation with other animals where possible. Pine martens are smaller than most domestic cats and dogs.

### **Are pine martens a threat to lambs?**

Pine martens are not a threat to sheep or other livestock. It is highly unlikely that a pine marten would attack a lamb, and there has never been a recorded case of this behaviour. Pine martens may however scavenge carrion to supplement their diet, particularly in winter when other food sources may be scarce.