



# Gloucestershire

Wildlife Trust

## GWT Pine Marten Mitigation Strategy



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## Summary

This mitigation strategy has been prepared by Gloucestershire Wildlife Trust (GWT) and is adapted from the Vincent Wildlife Trust (VWT) mitigation plan for mid-Wales, with advice and assistance from VWT mustelid experts in the UK and Ireland.

The purpose of the Mitigation Strategy is to provide information about the relationship between pine martens and people. It describes and explains:

- Mission Pine Marten
- The legal protection that pine martens have
- The steps that should be taken if pine martens are found in buildings
- How to manage tree felling in areas where pine martens may be present
- Land management measures regarding traps, livestock and pets
- How to protect poultry and game birds from the risk of predation
- What to do if loss is attributed to pine martens

Further information about this project can be found [here](#).

Mission Pine Marten is a joint venture between Gloucestershire Wildlife Trust (GWT), Forestry England, Woodland Trust and Vincent Wildlife Trust (VWT). The project aims to restore a healthy population of pine martens to part of their original range in the South West of England by translocating animals from Scotland to the Forest of Dean & lower Wye Valley. The establishment of a population in this region will provide an increasing number of individuals and genetic diversity to the expanding Welsh population just over 100km away. GWT aim to continue supporting and facilitating nature's recovery through working with people and places. This mitigation strategy has been developed to deliver information and advice, and to lay out actions to be undertaken by the public and the GWT in response to issue that may arise between human activity and pine martens.

## Mission Pine Marten (MPM) & restoring pine marten populations in Gloucestershire

In 2016, Gloucestershire Wildlife Trust (GWT), Vincent Wildlife Trust (VWT), and Forestry England (FE), supported by Forest Holidays and Woodland Trust, began a collaborative project investigating the feasibility of reintroducing pine martens (*Martes martes*) to the Forest of Dean and lower Wye Valley. In 2018, a project to translocate up to 60 pine martens from Scotland to Gloucestershire (20 each year commencing in 2019) was launched.

Pine martens were once common throughout the UK and Ireland but have undergone an extensive decline over the last two centuries due to habitat loss and fragmentation, hunting and extensive predator control. Over two decades of research by VWT

highlighted the rarity of pine martens in England and Wales and the risk of species extinction. The pine marten is not only a charismatic and attractive part of British fauna, but as a woodland predator it also plays an important role in the natural dynamics of woodland ecosystems. VWT undertook a feasibility study to identify potential locations in England and Wales where the reintroduction of pine martens could be viable. As well as a location in mid-Wales, where the reinforcement of pine marten populations was successfully undertaken by VWT in 2015-2017, the Forest of Dean and lower Wye Valley was identified as another candidate site.

The Dean and lower Wye Valley was listed as a favourable release location due to the total area of woodland found in the area and the high proportion of broadleaved woodland that it comprised. There is particular commercial interest in the Forest of Dean region surrounding the relationship between pine martens and the tree damage associated with grey squirrels (*Sciurus carolinensis*) and, although not a key motivation of the reinforcement project, findings will contribute significantly to current research on the two species. The establishment phase of the project comprises up to three years of pine marten releases in the region, with up to 20 animals being released each year. The animals are being released over a forested region of approx. 75km<sup>2</sup>. Pine martens generally occupy large territories (anything between 2 and 30km<sup>2</sup> depending on the quality of the habitat) and can roam widely after the initial release searching for a suitable territory. They may leave the release region in this time and, in the long-term pine martens should naturally recolonise their former range beyond the initial release sites. Their movements will be closely monitored and what we learn from the early stages will be used to inform subsequent releases. It is predicted that within the next 10 years the expanding pine marten population in Wales will reach the Forest of Dean, joining up both populations and encouraging increased genetic diversity. We hope that this project, if successful, will support the expanding population in Wales and help to restore a viable, self-sustaining population of pine martens in England.

All pine martens are screened and health checked by an experienced wildlife vet before translocation. Each translocated animal has a radio collar fitted. These collars remain on the pine martens for up to one year after their release to enable GWT to keep track of the animals, providing valuable information about the species and the project. Pine martens are elusive animals and seldom seen. Even where they are well established in parts of Scotland and Ireland, people are often unaware of their presence. After the establishment phase of the project (3 years), a further two years of monitoring will take place.

### Pine marten diet and behaviour

Pine martens are omnivores with a seasonal diet. Their main food source is small mammals which make up approximately 40% of their diet, dominated by the field vole (*Microtus agrestis*) which in peak years can be incredibly numerous. Martens will also

predate rabbits, birds, reptiles and amphibians. In the warmer summer months a large proportion of their diet is made up of invertebrates, particularly large ground beetles and dung beetles. In the summer and autumn, fruit and berries are important, constituting approx. 30% of their diet and mainly comprising of blackberries, bilberries and rowan berries. Carrion is scavenged all year round.

Pine martens are adept climbers, and they will preferentially rest in tree cavities, also raising their young (kits) here. They are slow breeders, averaging two to three kits per litter, and might only breed every other year. The young are born in March to April and stay with their mother until their first winter. Pine martens are solitary, territorial and hold relatively large home ranges which they defend against members of the same sex. Males hold larger territories than females. Martens are themselves predated by foxes and large raptors, but the greatest threat comes from road traffic and accidental or illegal trapping, which can make the difference between a thriving and a declining population.

## Legal protection

Pine martens are protected under the Wildlife and Countryside Act 1981, Section 9 and Schedules 5 & 6. It is an offence to:

- intentionally kill, injure or take a pine marten;
- intentionally or recklessly damage or destroy any structure or place which a pine marten uses for shelter or protection;
- intentionally or recklessly disturb a pine marten while it is occupying a structure or place which it uses for shelter or protection; or
- intentionally or recklessly obstruct access to any structure or place which a pine marten uses for shelter or protection.

This Mitigation Strategy describes the most common circumstances in which people may come into contact with pine martens and explains how to minimise the risk of committing an offence.

## Pine martens in buildings

If there is a scarcity of natural sites, pine martens may use both inhabited and uninhabited buildings as dens. This is most common in the spring when a female may use the roof-space of a building to give birth to her young. Although pine martens in buildings may create problems for the householders, it is preferable that they are tolerated until they choose to leave of their own accord in mid-summer (when the females have weaned their kits). This is because excessive disturbance may cause the female to abandon her kits.

Pine martens may be of particular concern when breeding is taking place. Initially, there may be very little evidence of the presence of a pine marten in a building. However, if a den is established then their presence may become apparent as the young grow and become mobile. The animals can become noisy throughout the night and cause smell and hygiene concerns as a result of droppings, urine and the remains of prey that the mother has brought into the den. Structural damage to property can occur, for example if a pine marten enlarges an existing small gap to gain access to a building.

### Excluding a breeding pine marten from a building

In some cases, a breeding female marten may choose to occupy an attic or loft. If this takes place young may be present from March to July, with most births taking place in early April. Adult martens do not live in pairs, so if more than one animal is present this will almost certainly be a female with young. If breeding is suspected, it may be possible to humanely move the whole family out of the building where the young will be taken to an alternative den by the mother. However, ***this should only be attempted by an experienced person*** and is only practical when the young are small and immobile (i.e. up to about 6 weeks old). ***It is illegal to attempt this without an appropriate licence.*** Anyone who suspects that breeding is taking place is strongly advised to seek advice from Natural England (NE), Natural Resources Wales (NRW) or GWT.

### Excluding a non-breeding pine marten from a house

Individual non-breeding pine martens may use buildings at any time of year. These animals can be humanely deterred and/or excluded from a dwelling house without a licence, often without the need for specialist assistance (but see below for guidance). However, exclusion from other structures such as agricultural buildings would require a licence. Certain procedures can be undertaken without a licence to prevent pine martens from entering a dwelling house. Further details on these procedures can be found in a specific leaflet produced by the VWT (Living With Pine Martens), which can be downloaded [here](#).

It is strongly advised that you consult the 'Living With Pine Martens' guidance, and seek specialist advice from NE/ NRW/ VWT/ GWT before taking any action.

### Pine martens and tree felling operations

Pine martens prefer woodlands with a diverse, complex three-dimensional aspect. However, the majority of large, continuous woodland available in the South West, West Midlands and Wales is commercially planted forest, which tends to be managed by rotational clear fell. Pine martens should be subject to the same management

precautions and considerations associated with other protected species that inhabit commercial forests, such as red kites, otters and goshawks, and should be considered in the planning stage. In general, pine martens should not impinge on the management of woodlands, but there are some extra considerations to be aware of if it is thought that pine martens are present. The most important step is to ensure that forest contractors are aware of pine martens in a general sense, and can identify them visually. The GWT has up to date information on the species distribution, and can offer guidance and advice on simple survey methods to detect their presence. The only time when the presence of pine martens can impact on forestry operations is when the female martens give birth to kits, from March to April, and become faithful to one or more natal den sites until the kits are weaned in July. During this time, if forest operations are planned, the planning stage should include a survey of the affected area for pine martens and potential den sites, with mitigation undertaken for their presence where appropriate.

The VWT has produced detailed guidance for woodland owners ('Managing forest and woodlands for pine marten'), in collaboration with Huw Denman (Select for Forestry) for managing woodlands with pine martens present. The guide deals with some more general considerations for managing woodlands with pine martens.

This guidance can be freely downloaded from the [VWT website](#).

### Pine martens and other animals

Pine martens are principally carnivores and therefore predate other animals. Predation is a natural process, and is key to a healthy, balanced ecosystem. Native predators often have a stabilising influence on the food chain below them, preventing common species becoming overabundant and out competing rarer species. Pine martens primarily hunt what is most abundant and easiest to catch: in Britain this is the field vole, which constitutes the bulk of the diet for a wide range of predators, from kestrels to adders.

Pine martens do not hunt in groups. It is a myth that they do. Pine martens are solitary, only interacting through choice briefly in the mating season (June-August). The kits will stay with their mother until they reach maturity and are driven off, and sometimes siblings will stay together for a short time after they have become independent. Pine martens do not share food, nor do they co-operate to hunt and will not generally tolerate each other at a food source. They actively exclude rivals from their territories.

### Pine martens and bat roosts

Bats do not play a functional role in pine marten diet and there is very little evidence of frequent bat predation by pine martens across their range. At a broad scale, martens are not viewed on the continent as a serious threat to horseshoe (or any other) bat

populations. These species have co-evolved and the behavioural adaptations of bats in buildings means that the potential for predation by martens is very low. However, martens will occasionally den in buildings, overlapping with the location of summer bat roosts and causing disturbance. Female martens and their kits make a lot of noise, especially when they are play fighting. This can lead to colonies moving to an alternative roost. In instances where martens are thought to be accessing bat roost sites, trail cameras can be provided to monitor potential entrance points for predator access. If marten disturbance can be evidenced, exclusion devices, such as non-grip surfaces and modified entrances, can be employed to prevent or deter access. If you have evidence that a pine marten may be accessing a bat roost you monitor, seek specialist advice and support from VWT and GWT by contacting: [info@gloucestershirewildlifetrust.co.uk](mailto:info@gloucestershirewildlifetrust.co.uk)

### Landowners and spring traps

As it is an offence to deliberately place a trap or snare in such a manner as it could cause bodily injury or harm to a pine marten, all reasonable precautions must be taken to avoid such contact. Legally approved spring-loaded traps, for targeting stoats, weasels, grey squirrels and rats, must be installed inside a tunnel. Measures can be taken to exclude larger non-target animals by fitting bars across the entrance of the tunnels. A pine marten can squeeze through a 45mm gap, so the space between the bars should be smaller than this.

#### *Will I be liable if I accidentally kill a pine marten?*

Every conceivable effort must be made to exclude pine martens from traps. If this can be demonstrated, there is no liability for accidentally killing a pine marten whilst carrying out legitimate predator control.

It is not an offence to trap or kill a pine marten in order to prevent serious damage to livestock, gamebirds or poultry, if there is no time to apply for a licence. This defence is not available if the threat is simply perceived; it must be a realistic, demonstrable threat.

Further guidance on the correct use of tunnel traps can be found on the [Game and Wildlife Conservation Trusts website](#).

### Pine martens, pets and livestock

Pine martens are not a threat to cats or dogs and will avoid confrontation wherever possible. They are also not a threat to sheep or other livestock. They are the size of a typical small housecat, so 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 are reluctant to venture into open ground away from cover due to the risk they themselves face from larger predators and raptors. If a pine marten is observed feeding on a sheep

carcass it will be scavenging on the carcass of an animal that has already died, rather than an act of predation.

### **Pine martens, poultry and game birds**

Pine martens are excellent climbers and because of this they may gain access to poultry and game pens. As described below, predation can be prevented in most circumstances using appropriate husbandry techniques.

#### *Preventing predation on domestic fowl*

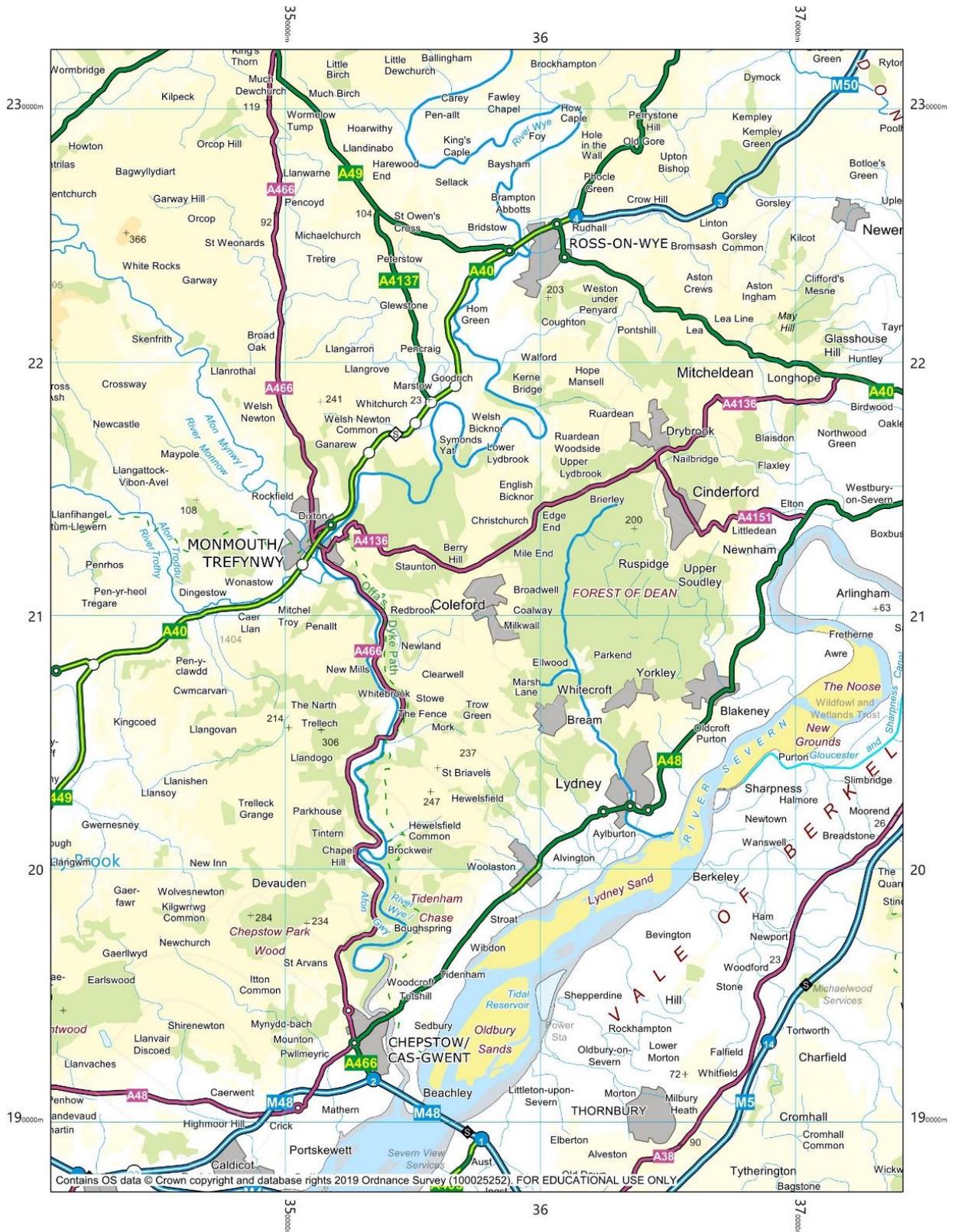
Pine martens can squeeze through a hole of about 45mm in diameter and may access hen houses by enlarging a hole in rotten wood. Therefore, rotten wood should be replaced and any holes in the hen house must be smaller than 45mm in diameter (but also consider that polecats and stoats, which will also predate poultry, can access holes that are smaller still). Hen house doors should be closed during the hours of darkness and the door should be secured to prevent it being lifted by a marten. Devices are commercially available that are sensitive to light levels and automatically open and shut hen house entrances accordingly.

#### *Preventing predation on penned game birds*

The most effective way to deter martens from entering game bird pens is the use of electric fencing. In order to exclude martens effectively, line wire electric fencing is recommended at the top of the enclosure, along with overhanging electric wire. A pen should have no gaps greater than 45mm to prevent martens squeezing through gaps in fencing. Mesh at the bottom of the fence should be well-pegged down or dug into the ground. 'Pop-holes' that are used by birds for access at ground level should be closed at night. Martens can jump a horizontal distance of about 2m, therefore, a gap in tree canopy cover of at least 3m around the pen is recommended. More information on these adaptations is available on [VWT Ireland's website](#).

# The project and how GWT will respond to incidents involving translocated pine martens

## The release region



## Duration

The project lifespan is five years. The establishment phase encompasses the period of translocation and post-release monitoring of all radio collared pine martens. This comprises three planned release phases (one each year) of the release of up to 20 animals in each phase i.e. up to 60 martens in total. The pine martens translocated in the first phase will continue to be monitored non-invasively once radio collars have been shed from May 2020 and all martens will be monitored this way post May 2022.

The GWT will provide expert advice and first response in the study region (see map) until the end of the project in 2024, and, where possible, beyond. Staff will remain in the area to continue working on GWT's commitment to conservation and co-existence with wildlife in the region.

## The GWT response to reports of loss within the release region during the life of the project

The movements of pine martens with radio collars will be monitored by nightly tracking. There will be a period of overlap when the phase one martens have shed their radio collars and are then part of the existing wild population, whilst the phase two animals have radio collars on and are under intensive study. Protection and licence considerations relating to the pine martens fall under the jurisdiction of NE. However, GWT is committed to minimising the potential for conflicts between pine martens and the public, including owners of birds and other animals. The GWT will respond to reports of damage attributed to pine martens whether they concern a pine marten without a collar in the release region or a collared animal.

Throughout the project, guidance, advice and when appropriate, direct action will be available from GWT, and thereafter from NE. In the long-term, GWT is committed to working with all stakeholders to ensure that a balance is maintained that sees the English pine marten population recover range and become self-sustaining, whilst the interests of stakeholders are respected and protected where possible. The pine marten is a legally protected species and GWT is committed to working with NE and NRW in order to identify and make accessible funds that can be used by stakeholders to implement management practices that benefit both people and pine marten.

## Preventative measures

GWT are keen to help devise and implement measures to prevent pine martens from gaining access to poultry and game bird pens. If you would like help and advice then please contact the GWT project staff to arrange a visit.

# Contact us

## **Gloucestershire Wildlife Trust**

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**Email:** [enquiries@vwt.org.uk](mailto:enquiries@vwt.org.uk)

## **Natural England Licensing**

Wildlife licensing  
Natural England  
Horizon House, Deanery Road  
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**Tel:** 020 8026 1089

**Email:** [wildlife@naturalengland.org.uk](mailto:wildlife@naturalengland.org.uk)

## **Natural Resources Wales Licencing**

Natural Resources Wales,  
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