

# Advice note

# Release of pine martens (Martes martes) into the wild in Britain

# **Background**

The pine marten (Martes martes) is a medium-sized, arboreal member of the mustelid (stoat and weasel) family. Pine martens were historically widespread throughout Britain but by 1915 the combined effects of woodland clearance and intensive predator control had resulted in extinction in all but the most remote upland areas of northwest Scotland, northern England and Wales. Today, populations are expanding in number and range in Scotland and Ireland. However, in England and Wales the population has not recovered from its decline and pine martens occur at low densities with a very restricted distribution

# Habitat requirements and ecology

Pine martens are largely solitary and normally exclude members of the same sex from their home ranges. Home range size varies widely according to habitat. In Britain a single male home range can vary from 33km² in upland spruce to 3km² in more productive, lowland woodland. For females this is smaller, from 10km² to just under 1km² in these habitats. This means that many woodlands will not be large enough to sustain sufficient numbers of pine martens to maintain a viable breeding population.

Pine martens are slow breeders, with females not usually breeding until their third year. Mating occurs in July and August and litters of typically one to three young are born in late March or early April. Pine martens rarely excavate their own dens, preferring existing cavities in tree holes, squirrel dreys or rock crevices. As foxes are known to catch and kill martens, these above ground sites are thought to be essential in avoiding such predation.

Pine martens are carnivores, but they eat a variety of foods, including small mammals, birds and their eggs, carrion, invertebrates, fruits and nuts.



A mixed habitat suits the pine marten, which will eat what is available.

#### Pine martens and grey squirrels

There is growing evidence from Ireland and Scotland to suggest that, at high densities, pine martens may have a negative effect on the occupancy of grey squirrels<sup>1-4</sup>. However, it is not certain, or even clear, if grey squirrel numbers will be reduced to extinction where pine martens occur. Furthermore, even if this were the case, grey squirrels are still likely to persist in urban and other habitats that are avoided by, or unsuitable for, pine martens<sup>1</sup>.

#### Pine martens and the law

Pine martens are legally protected by The Wildlife and Countryside Act 1981, which in Scotland is amended by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2011. Under this legislation it is an offence to intentionally kill, injure or take a wild pine marten; or to possess or control, sell, offer for sale or possess, or transport for the purpose of sale, any live or dead wild pine marten. The release of captive bred animals without adequate effort to ensure their future well-being may be an offence under the Abandonment of Animals Act 1960.

#### Vincent Wildlife Trust's Pine Marten Recovery Projects

With no sign of the pine marten population recovering in southern Britain, Vincent Wildlife Trust launched the Pine Marten Recovery Project. Between 2015 and 2017, the Trust translocated 51 pine martens from Scotland to mid-Wales. These animals have established territories, are breeding successfully and the population is now expanding further afield.

The recovering pine marten population in Scotland has also begun to spread southwards into England and re-colonise areas of Northumberland and Cumbria. Vincent Wildlife Trust, with the help of volunteers, has been monitoring and paving the way for natural recovery of the pine marten in northern England through the national Back from the Brink project.

In 2016, VWT began to collaborate on a project led by Gloucestershire Wildlife Trust and Forestry England to explore the potential for reintroduction of the pine marten to the Forest of Dean in Gloucestershire. As a result of research and feasibility studies, the translocation of pine martens to the forest began in 2019, with the initial release of 18 animals.



#### Pine marten translocations

Any proposed translocation of pine martens must be considered very carefully and comply with IUCN guidelines on translocation<sup>5</sup>,

whether for re-introduction or reinforcement (re-stocking). The importance of animal welfare and health screening is emphasised in these guidelines, as is the requirement for a detailed ecological assessment to maintain favourable conservation status of this protected species. Relevant statutory organisations (including Natural England, Natural Resources Wales and Scottish Natural Heritage) should be consulted and all necessary permits and licences obtained.

It is important to protect the recovering pine marten population in Scotland, as well as to monitor and assist natural spread and recolonisation where possible. Therefore, reintroductions should only be to the most optimal regions, identified on the basis of habitat suitability as well as many other factors that will affect survival and reproduction of a reintroduced population.

#### Vincent Wildlife Trust

For more than 40 years, Vincent Wildlife Trust has led the way in supporting the recovery of mammal species such as otter, water vole, horseshoe bats and, more recently, pine marten. VWT is respected internationally as a leader in developing and implementing innovative approaches that halt and reverse declines in threatened mammal species. Our specific niche is as an organisation that undertakes surveys to identify the current status of mammal species of concern, carries out pioneering conservation-led research, publishes the details of this work and offers expert advice to others through practical demonstration. Our innovative research has helped provide solutions to conservation issues locally and internationally. The Trust also manages nearly 40 reserves in England, Wales and Ireland, most of which are horseshoe bat roosts.

### **Useful links**

- IUCN/SSC Reintroduction Specialist Group <a href="http://iucnsscrsg.org">http://iucnsscrsg.org</a>
- Nature Scot <a href="https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/reintroducing-native-species">https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/reintroducing-native-species</a>
- 1 Twining, J. P., Montgomery, W. I. & Tosh, D. G. Declining invasive grey squirrel populations may persist in refugia as native predator recovery reverses squirrel species replacement. Journal of Applied Ecology (2020).
- **2 Flaherty**, M. & Lawton, C. The regional demise of a non-native invasive species: the decline of grey squirrels in Ireland. Biological Invasions 21, 2401-2416 (2019).
- 3 Sheehy, E., Sutherland, C., O'Reilly, C. & Lambin, X. The enemy of my enemy is my friend: native pine marten recovery reverses the decline of the red squirrel by suppressing grey squirrel populations. Proceedings of the Royal Society B: Biological Sciences 285, 20172603 (2018).
- 4 Sheehy, E. & Lawton, C. Population crash in an invasive species following the recovery of a native predator: the case of the American grey squirrel and the European pine marten in Ireland. Biodiversity and conservation 23, 753-774 (2014).
- **5 IUCN (2013) Guidelines for Reintroductions and Other Conservation Translocations IUCN Species Survival** Commission, Gland, Switzerland.