

Feasibility Assessment for Reinforcing Pine Marten Numbers in England and Wales

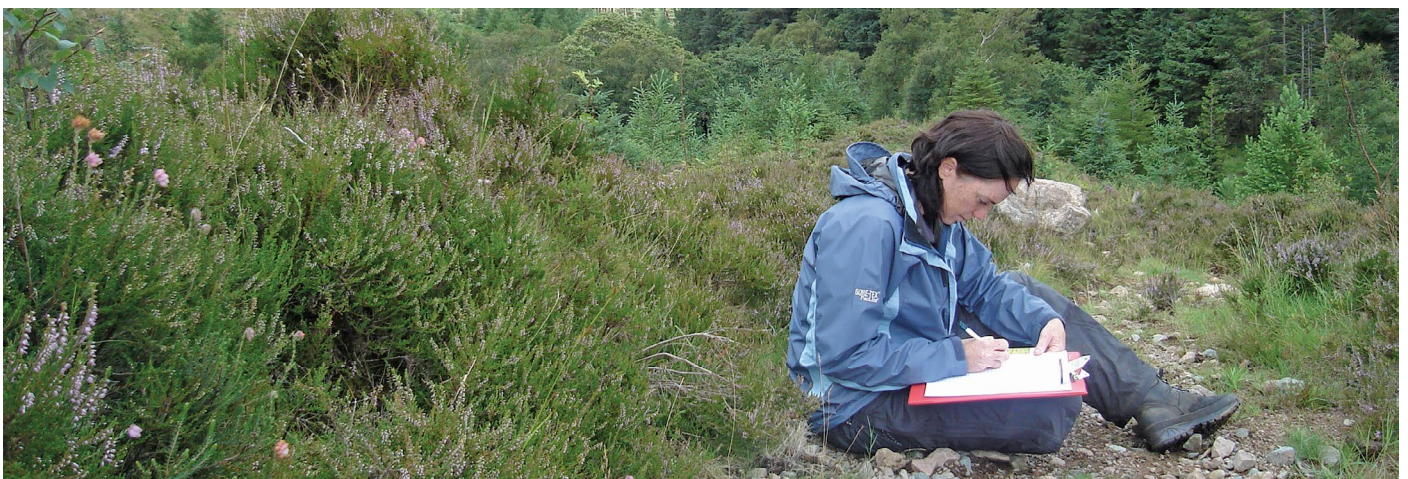
EXECUTIVE SUMMARY

Successful translocations of pine marten to recently and historically occupied, suitable habitat could be a major proactive step towards improving the conservation status and genetic diversity of pine marten in England and Wales. This report provides an initial assessment of the feasibility of undertaking translocations to reinforce existing populations that have failed to recover naturally.

The pine marten, *Martes martes*, was once widespread throughout Britain but during the 18th and 19th century pine martens declined dramatically due to habitat loss, compounded by increases in trapping and predator control associated with the rise in game shooting. By the beginning of the last century pine marten were only found in the far north west of Scotland, with small isolated pockets in some upland areas of northern England and Wales. Populations are now recovering well and expanding back into their former ranges in Scotland, but this is not the case elsewhere in the UK. Sightings reports and occasional unequivocal records suggest that some animals are still present in some parts of southern Britain but in such low numbers that population viability is highly vulnerable.

A landscape modelling approach was used to predict habitat suitability for pine marten across England and Wales at the 10km square resolution. The model identified a number of areas with high suitability values, these were in the north of England (Northumberland, the Lake District and in the Pennines), with some clustered in the West Country and around the Forest of Dean. There was a proportionately greater predicted area of high suitability in Wales, from Snowdonia in the north down the Cambrian Mountains through central Wales and in the Vale of Neath in the south.

Informed by the results of habitat modelling, and our database of reported pine marten sightings collected since 1996, six potential reinforcement regions (PRRs) were identified. These are areas of high predicted habitat suitability in regions where reports of recent sightings and other evidence suggest pine martens are still present in extremely low numbers. For each of these PRRs, initial desk-based analyses of variables that are likely to have an impact on establishment and spread were carried out. Roads are likely to be an important source of mortality affecting the viability of newly reinforced pine marten populations.





The total length of roads in each PRR and the percentage of those within woodland, combined with annual volume of traffic were used to calculate the relative likelihood of marten mortality due to road traffic accidents. Even a low rate of additional mortality will increase extinction risk and jeopardise the establishment of a newly reinforced population. Therefore, translocations should first be to those PRRs identified here that have woodland blocks large enough to support relatively high marten numbers, and where likelihood of additional mortality is low.

The perception that the recovery of a native predator will have a negative effect on native prey species is a major concern for some stakeholders. A thorough risk assessment, evaluating the ecological roles of translocated animals in their new environment, and potential impacts on other species already present in release areas is an essential aspect of the feasibility study. The overlap between PRRs and the UK breeding distribution of rare bird species that might be preyed upon by pine marten was assessed and the implications discussed, along with other wildlife that may be affected by an increase in pine marten numbers.

An integral part of the feasibility stage of any conservation translocation is gauging public attitudes towards the target species. A public opinion survey was carried out to assess public attitudes towards the potential re-stocking of the pine marten to parts of Wales. A total of 617 viable responses were achieved, of which 87.3% would support a restocking of pine marten in Wales. Respondents that worked in farming, game-keeping and estate management were most likely to oppose a re-stocking, while those that worked in leisure & tourism and wildlife conservation were most likely to be supportive. The main reasons given in support of re-stocking pine martens were native status, a perceived positive effect on biodiversity, and its contribution to a balanced environment. The main reasons for opposition were predation of wildlife, prioritising the native population, and lack of suitable habitat/knowledge of the current population status.

Reinforcement of pine marten populations in England and Wales was assessed against criteria for conservation translocations published by the International Union for Conservation of Nature (IUCN). The work that has been carried out so far satisfies the criteria in annexes one to six. Detailed proposals for release and implementation will be produced and evaluated against criteria in Annex 7 of the IUCN guidelines during the second part of the feasibility study (to be completed in 2015).

Six potential reinforcement regions in Wales and England have been identified that contain sufficient areas with high predicted habitat suitability to support viable populations of pine martens. Field surveys will now be carried out to inform the final decision as to where the most optimal release sites will be. Detailed consultation with stakeholders, the general public, government and local agencies and other NGOs will be undertaken in potential reinforcement regions before proposals for pine marten translocations are finalised. The information gathered during the consultation process will inform the selection of release sites that have maximum local support.