Report under The Conservation of Habitats and Species Regulations 2017 (as amended), Regulation 9A

2019-2024

Conservation status assessment for the species:

S1357 - Pine marten

(*Martes martes*)

Wales

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JNCC

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Important note - Please read

- The information in this document represents the Wales Report under The Conservation of Habitats and Species Regulations 2017 (as amended), Regulation 9A, for the period 2019-2024.
- It is based on supporting information provided by Natural Resources Wales, which is documented separately.
- The Habitats Regulations reporting 2019-2024 Approach Document provides details on how this supporting information contributed to the UK Report and the fields that were completed for each parameter.
- Maps showing the distribution and range of the species are included.
- Explanatory notes (where provided) are included at the end. These provide additional audit trail information to that included within the assessments. Further underpinning explanatory notes are available in the related country reports.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; (ii) completion of the field was not obligatory; and/or (iii) the field was not relevant to this species (section 12 National Site Network coverage for Annex II species).

Further details on the approach to the Habitats Regulations Reporting 2019-2024 are available on the JNCC website.

Assessment Summary: Pine marten

Distribution Map

Range Map

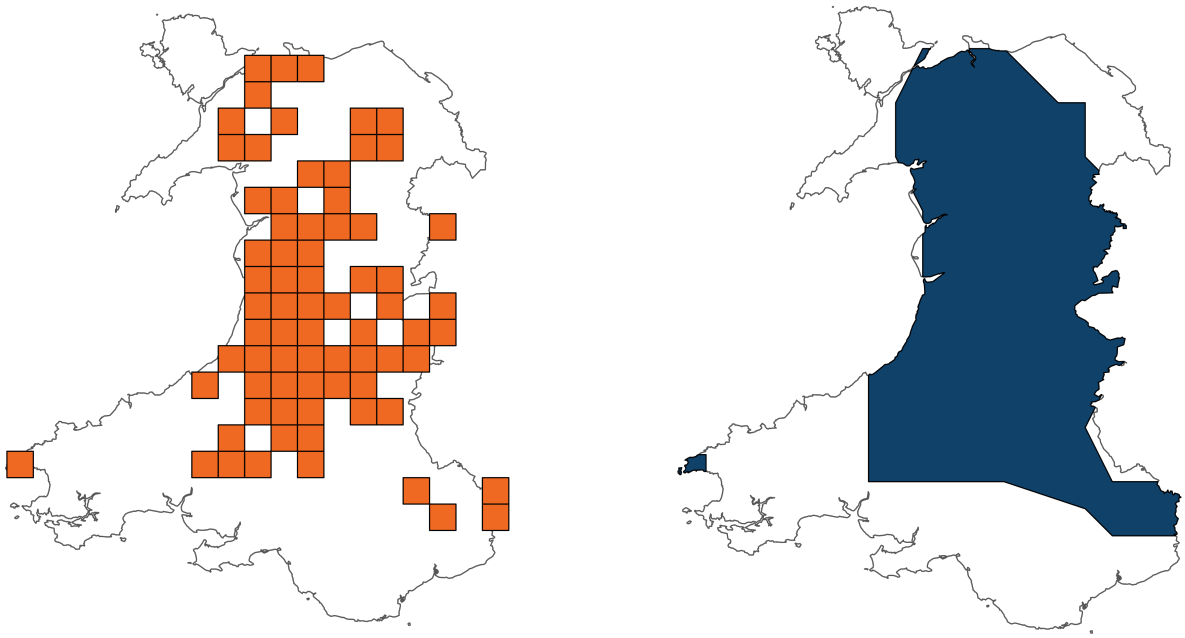

Figure 1: Wales distribution and range map for S1357 - Pine marten (*Martes martes*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority. The 10km grid square distribution map is based on available species records within the current reporting period.

Table 1: Table summarising the conservation status for S1357 - Pine marten (*Martes martes*). Overall conservation status for species is based on assessments of range, population, habitat for the species, and future prospects.

Overall Conservation Status (see section 11)

Unfavourable-inadequate (U1)

Breakdown of Overall Conservation Status

Range (see section 5)	**Favourable (FV)**
Population (see section 6)	**Unfavourable-inadequate (U1)**
Habitat for the species (see section 7)	**Unknown (XX)**
Future prospects (see section 10)	**Favourable (FV)**

List of Sections

National Level

1. General information

1.1 Country	Wales
1.2 Species code	S1357
1.3 Species scientific name	*Martes martes*
1.4 Alternative species scientific name	
1.5 Common name	Pine marten
Annex(es)	V

2. Maps

2.1 Sensitive species	No
2.2 Year or period	1995-2024
2.3 Distribution map	Yes
2.4 Distribution map; Method used	Based mainly on extrapolation from a limited amount of data

2.5 Additional information

No additional information

3. Information related to Annex V Species

3.1 Is the species taken in the wild / exploited?	No

3.2 What measures have been taken?

a) Regulations regarding access to property	No
b) Temporary or local prohibition on the taking of specimens in the wild and exploitation	No
c) Regulation of the periods and/or methods of taking specimens	No
d) Application of hunting and fishing rules which take account of the conservation of such populations	No

e) Establishment of a system of licences for taking specimens or of quotas	No
f) Regulation of the purchase, sale, offering for sale, keeping for sale, or transport for sale of specimens	No
g) Breeding in captivity of animal species as well as artificial propagation of plant species	No
Other measures	No
Other measures description	

3.3: Hunting bag or quantity taken in the wild for Mammals and Acipenseridae (Fish)

a) Unit No unit - not reported

Table 2: Quantity taken from the wild during the reporting period (see 3.3a for units). For species with defined hunting seasons, Season 1 refers to 2018/2019 (autumn 2018 to spring 2019), and Season 6 to 2023/2024. For species without hunting seasons, data are reported by calendar year: Year 1 is 2019, and Year 6 is 2024.

	Season/ year 1	Season/ year 2	Season/ year 3	Season/ year 4	Season/ year 5	Season/ year 6
b) Minimum	-	-	-	-	-	-
c) Maximum	-	-	-	-	-	-
d) Unknown	No	No	No	No	No	No

3.4: Hunting bag or quantity taken in the wild; Method used

3.5: Additional information

No additional information

Biogeographical Level

4. Biogeographical and marine regions

4.1 Biogeographical or marine region where the species occurs ATL

4.2 Sources of information

See section 14 References

5. Range

5.1 Surface area (km²)	11,904.36
5.2 Short-term trend; Period	2013-2024
5.3 Short-term trend; Direction	Increasing
5.4 Short-term trend; Magnitude	
a) Estimated minimum	
b) Estimated maximum	
c) Pre-defined range	
d) Unknown	
e) Type of estimate	
f) Rate of decrease	
5.5 Short-term trend; Method used	Based mainly on extrapolation from a limited amount of data
5.6 Long-term trend; Period	
5.7 Long-term trend; Direction	
5.8 Long-term trend; Magnitude	
a) Minimum	
b) Maximum	
c) Rate of decrease	

5.9 Long-term trend; Method used	

5.10 Favourable Reference Range (FRR)

a) Area (km²)	
b) Pre-defined increment	Current range is less than 2% smaller than the FRR
c) Unknown	No
d) Method used	Expert opinion
e) Quality of information	

5.11 Change and reason for change in surface area of range

a) Change	Yes
b) Genuine change	Yes
c) Improved knowledge or more accurate data	No
d) Different method	Yes
e) No information	No
f) Other reason	No
g) Main reason	Genuine change

5.12 Additional information

No additional information

6. Population

6.1 Year or period	1995-2024

6.2 Population size (in reporting unit)

a) Unit	number of individuals
b) Minimum	
c) Maximum	

d) Best single value	100
6.3 Type of estimate	Best estimate
6.4 Quality of extrapolation to reporting unit	

6.5 Additional population size (using population unit other than reporting unit)

a) Unit	
b) Minimum	
c) Maximum	
d) Best single value	
e) Type of estimate	
6.6 Population size; Method used	Based mainly on expert opinion with very limited data
6.7 Short-term trend; Period	2018-2024
6.8 Short-term trend; Direction	Increasing
6.9 Short-term trend; Magnitude	
a) Estimated minimum	
b) Estimated maximum	
c) Pre-defined range	Increasing 51 - 100%
d) Unknown	No
e) Type of estimate	Pre-defined range
f) Rate of decrease	
6.10 Short-term trend; Method used	Based mainly on expert opinion with very limited data
6.11 Long-term trend; Period	1994-2024
6.12 Long-term trend; Direction	Increasing
6.13 Long-term trend; Magnitude	

a) Minimum	
b) Maximum	
c) Confidence interval	
d) Rate of decrease	
6.14 Long-term trend; Method used	Based mainly on expert opinion with very limited data

6.15 Favourable Reference Population (FRP)

ai) Population size	
aii) Unit	
b) Pre-defined increment	Current population is between 5% and 25% smaller than the FRP
c) Unknown	No
d) Method used	Expert opinion
e) Quality of information	

6.16 Change and reason for change in population size

a) Change	Yes
b) Genuine change	Yes
c) Improved knowledge or more accurate data	No
d) Different method	No
e) No information	No
f) Other reason	No
g) Main reason	Genuine change

6.17 Additional information

No additional information

6.18 Age structure, mortality and reproduction deviation	Unknown

7. Habitat for the species

7.1 Sufficiency of area and quality of occupied habitat (for long-term survival)

a) Is area of occupied habitat sufficient?	Unknown
b) Is quality of occupied habitat sufficient?	Unknown
c) If No or Unknown, is there a sufficiently large area of unoccupied habitat of suitable quality?	Unknown

7.2 Sufficiency of area and quality of occupied habitat; Method used

a) Sufficiency of area of occupied habitat; Method used	Insufficient or no data available
b) Sufficiency of quality of occupied habitat; Method used	Insufficient or no data available

7.3 Short-term trend; Period	2013-2024
7.4 Short-term trend; Direction	Unknown
7.5 Short-term trend; Method used	Insufficient or no data available
7.6 Long-term trend; Period	
7.7 Long-term trend; Direction	
7.8 Long-term trend; Method used	

7.9 Additional information

No additional information

8. Main pressures

8.1 Characterisation of pressures

Table 3: Pressures affecting the species, including timing and importance/impact ranking. Pressures are defined as factors acting currently and/or during the reporting period (2019–2024). Rankings are: High (direct/immediate influence and/or large spatial extent) and Medium (moderate direct/immediate influence, mainly indirect and/or regional extent).

Pressure	Timing	Ranking
PB02: Conversion from one type of forestry land use to another	Ongoing and likely to be in the future	Medium (M)
PB05: Logging without replanting or natural regrowth	Ongoing and likely to be in the future	Medium (M)
PB07: Removal of dead and dying trees (including debris)	Ongoing and likely to be in the future	High (H)
PB08: Removal of old trees (excluding dead or dying trees)	Ongoing and likely to be in the future	High (H)
PE01: Roads, paths, railroads and related infrastructure	Ongoing and likely to be in the future	Medium (M)
PG11: Illegal shooting/killing	Ongoing and likely to be in the future	High (H)
PG13: Bycatch and incidental killing (due to fishing and hunting activities)	Ongoing and likely to be in the future	Medium (M)
PM07: Natural processes without direct or indirect influence from human activities or climate change	Ongoing and likely to be in the future	Medium (M)

8.2 Sources of information

See section 14 References

8.3 Additional information

No additional information

9. Conservation measures

9.1: Status of measures

a) Are measures needed?	Yes
b) Indicate the status of measures	Measures identified and taken

9.2 Main purpose of the measures taken	Increase the population size and/or improve population dynamics (related to 'Population')
9.3 Location of the measures taken	Both inside and outside National Site Network
9.4 Response to measures	Medium-term results (within the next two reporting periods, 2025–2036)

9.5 List of main conservation measures

Table 4: Key conservation measures addressing current pressures and/or anticipated threats during the next two reporting periods (2025–2036). Measures are ranked by importance/impact: High (direct/immediate influence and/or large spatial extent) and Medium (moderate direct/immediate influence, mainly indirect and/or regional extent).

Conservation measure	Ranking
MB05: Adapt/change forest management and exploitation practices	Medium (M)
MG04: Control/eradication of illegal killing, fishing and harvesting of wild plants, fungi and anmals	Medium (M)
MG05: Reduce bycatch and incidental killing of non-target species	Medium (M)

9.6 Additional information

No additional information

10. Future prospects

10.1a Future trends of parameters

ai) Range	Positive - increasing <=1% (one percent or less) per year on average
bi) Population	Very Positive - increasing >1% (more than one percent) per year on average
ci) Habitat for the species	Unknown

10.1b Future prospects of parameters

aii) Range	Good

bii) Population	Good
cii) Habitat for the species	Unknown

10.2 Additional information

No additional information

11. Conclusions

11.1 Range	Favourable (FV)
11.2 Population	Unfavourable-inadequate (U1)
11.3 Habitat for the species	Unknown (XX)
11.4 Future prospects	Favourable (FV)
11.5 Overall assessment of Conservation Status	Unfavourable-inadequate (U1)
11.6 Overall trend in Conservation Status	Stable

11.7 Change and reason for change in conservation status

This field is not reported as the period 2019-2024 marks the first instance in which conservation status has been assessed at the national level, meaning no comparisons to previous reports can be drawn.

11.7 Change and reason for change in conservation status trend

This field is not reported as the period 2019-2024 marks the first instance in which conservation status has been assessed at the national level, meaning no comparisons to previous reports can be drawn.

11.8 Additional information

No additional information

12. UK National Site Network (pSCIs, SCIs, SACs) coverage for Annex II species

12.1 Population size inside the pSCIs, SCIs and SACs network

a) Unit
b) Minimum
c) Maximum
d) Best single value
12.2 Type of estimate
12.3 Population size inside the network; Method used
12.4 Short-term trend of population size within the network; Direction
12.5 Short-term trend of population size within the network; Method used
12.6 Short-term trend of habitat for the species inside the pSCIs, SCIs and SACs network; Direction
12.7 Short-term trend of habitat for the species inside the pSCIs, SCIs and SACs network; Method used

12.8 Additional information

No additional information

13. Complementary information

13.1 Justification of percentage thresholds for trends

No justification information

13.2 Trans-boundary assessment

No trans-boundary assessment information

13.2 Other relevant information

No other relevant information

14. References

Biogeographical and marine regions

4.2 Sources of information

Aderyn Local Environmental Records Centre data, accessed May 2024

Balharry D. 1993. Factors affecting the distribution and population density of pine martens (Martes martes) in Scotland. PhD, University of Aberdeen.

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Battersby J (ed) & Tracking Mammals Partnership. 2005. UK Mammals: Species Status and Population Trends. Joint Nature Conservation Committee/Tracking Mammals Partnership.

Birks J & Messenger J. 2010. Evidence of pine martens in England and Wales 1996-2007. The Vincent Wildlife Trust, Ledbury

Birks JDS, Messenger JE & Halliwell E. 2005. Diversity of den sites used by pine martens Martes martes: a response to the scarcity of arboreal cavities? Mammal Review 35: 313-320.

Caryl FM, Quine CP & Park KJ. 2012. Martens in the matrix: the improtance of nonforested habitats for forest carnivores in fragmented landscapes. Journal of Mammalogy, 93: 464 – 474

Caryl FM. 2008. Pine marten diet and habitat use within a managed coniferous forest, PhD, University of Stirling.

Clews-Roberts, R & Halliwell, E. C (2025). Evidence Pack for the Conservation Status Assessment of S1357 Pine marten (Martes martes) – First Habitats Regulations 9A Report for Wales. Unpublished internal document, Natural Resources Wales.

Croose E, Birks JDS, Schofield HW & O'Reilly C. 2014. Distribution of the pine marten (Martes martes) in southern Scotland in 2013. Scottish Natural Heritage Commissioned Report, No.740

Davison A, Birks JDS, Brookes RC Messenger JE and Griffiths HI. 2001. Mitochondrial phylogeography and population history of pine martens Martes martes compared with polecats Mustela putorius. Molecular Ecology 10: 2479- 2488.

Gloucestershire Wildlife Trust Project Pine Marten https://www.gloucestershirewildlifetrust.co.uk/project-pine-marten – accessed 27 March 2025)

Halliwell, E.C. (2019) 2013-2018 Supporting evidence pack for Annex B & D feature reports S1357 Pine marten (Martes martes). Bangor, Natural Resources Wales.

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Kubasiewicz LM. 2014. Monitoring European pine martens (Martes martes) in Scottish forested landscapes. PhD, University of Stirling.

Langley PJW & Yalden DW. 1977. The decline of the rarer carnivores in Great Britain during the nineteenth century. Mammal Review 7: 95-116.

MacPherson J. 2014. Feasibility assessment for reinforcing pine marten numbers in England and Wales. Vincent Wildlife Trust.

MacPherson J., VWT, pers. comm – population estimate based upon on the number of occupied 10km squares and Population Viability Analysis (PVA) modelling.

Mathews F, et al. 2018. A review of the population and conservation status of British Mammals. A report by The Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough. ISBN 978-1-78354-494-3.

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Messenger J, Croose E,Turner P & O'Reilly C. 2010. The Vincent Wildlife Trust and Waterford Institute of Technology Pine Marten Scat DNA Survey of England and Wales 2008-2009. Vincent Wildlife Trust, Ledbury.

Moll RJ, Kilshaw K, Montgomery RA, Abade L, Campbell RD, Harrington LA, Millspaugh JJ, Birks JDS & Macdonald DW. (2016). Clarifying habitat niche width using broad-scale, hierachial occupancy models a case study with a recovering mesocarnivore, Journal of Zoology, 300: 177-185

Pereboom V, Mergey M, Villerette N, HelderR, Gerard JF, Lode T. 2008. Movement patterns, habitat selection and corridor use of a typical woodland-dweller species, the European pine marten Martes martes, in fragmented landscape. Can J Zool 86: 983-991

Twining JP, Montgomery I, Fitzpatrick V. et al. Seasonal, geographical, and habitat effects on the diet of a recovering predator population: the European pine marten (Martes martes) in Ireland. Eur J Wildl Res 65, 51 (2019). https://doi.org/10.1007/s10344-019-1289-z

Vincent Wildlife Trust pers. comm.

Main pressures

8.2 Sources of information

No sources of information

15. Explanatory Notes

Field label	Note
2.4: Distribution map; Method used	The map updates the recorded distribution with new data since the previous reporting round and covers the years 1995-2024.
5.3: Short-term trend; Direction	See 5.11 .
5.11: Change and reason for change in surface area of range	The change is both a product of different criteria for the data used to map range, and an increase in the range of pine marten in Wales. In the last reporting round range was taken from Mathews et al. (2018), whereby an alpha hull value of 20km was drawn around the presence records, which represented the best balance between the inclusion of unoccupied sites (i.e. where records are sparse but close enough for inclusion) and the exclusion of occupied areas due to gaps in the data (i.e. where records exist but are too isolated for inclusion). An additional 10km buffer was added to the final hull polygon to provide smoothing to the hull and to ensure that the hull covered the areas recorded rather than intersecting them. This differs from the approach taken in this reporting round whereby a 45km alpha hull value was used for all species with a starting range unit of individual 10km squares. The mapped range for Wales used in the last reporting round was considered to a substantial overestimate due to the establishment phase of the released martens – see map in Mathews et al. (2018). However, there has now been a genuine expansion of pine marten range in Wales compared to the previous reporting round due to the reestablishment of pine martens following population reinforcement. During 2015-2017 51 pine martens were translocated from Scotland to mid-Wales.

	The martens established territories across Wales with successful breeding recorded (Mathews et al 2018; VWT Pine Marten Recovery Project). In addition c.6 captive-bred pine martens were released in Gwynedd between 2018-2020. The difference between the range mapped by Mathews et al. (2018) using records from 1996-2016 and the likely probable current range is shown in Figure 1 (Pine marten range 2024 as mapped by Vincent Wildlife Trust from Clews-Roberts & Halliwell 2025).
6.2: Population size	Pine martens have been the subject of population reinforcement in Wales. The Vincent Wildlife Trust (pers. comm.) estimate population size as 100-200 based on the number of occupied 10km squares and Population Viability Modelling (PVA) modelling. For the previous reporting round VWT estimated population size in 2018 as 60 which accounted for the number of animals released and confirmed births and deaths (Halliwell 2019) Population size is likely to increase as pine martens continue to re-establish in Wales. Pine martens are also likely to be spreading into southwest Wales from the Gloucestershire Wildlife Trust pine marten reintroduction in the Forest of Dean (GWT Project Pine Marten)
6.10: Short-term trend; Method used	The VWT population estimate in 2018 was 60 (based on the number of released animals and confirmed births and deaths). The revised current estimate is now between 100 and 200. The pine marten population is therefore expanding, but there is insufficient data to calculate a current rate of change.
6.14: Long-term trend; Method used	A collation of sightings records from 1996-2007 (Birks & Messenger 2010) suggested that the distribution of pine

	martens in Wales could be quite wide. But scat surveys of areas with high quality sightings failed to provide DNA-verified evidence of the presence of pine martens. More general scat hunts were also been completed in areas with a high concentration of sightings between 2008 and 2009 (Messenger et al 2010), but none of these returned positive records. In Wales there were just two unequivocal records of pine martens dating from 2006 and 2007 (Birks and Messenger 2010). A further verified record dates from 1996 (Davison et al 2001). Late in 2012 the corpse of a male pine marten was found to the west of Newtown (VWT pers comm.), although the origin of this animal is unknown. This evidence indicates that prior to the start of the VWT and Gwynedd Pine Marten reinforcement projects, pine marten populations in Wales were in long term decline. Since the reinforcement projects, there have been local environment record centre records of pine marten across Wales with trail camera footage proving breeding.
6.16: Change and reason for change in population size	In the last reporting round the pine marten population was in the early stages of reestablishment following the VWT reinforcement project. Since that time there has been good evidence of pine marten breeding in Wales, with most activity in the mid-Wales area. Longer term monitoring data will be needed to determine whether these populations will continue to increase in size and expand their range.
7.1: Sufficiency of area and quality of occupied habitat	Sufficiency of habitat and quality of habitat has not been determined for this report as there is insufficient information on both the extent of habitat and quality of that habitat available to the species to make an assessment. In contrast to the specialism for closed canopy forests by eastern European populations, pine martens in western Europe are less dependent on woodland (Pereboom et al., 2008, Mergey et al., 2011) and occur in areas with as little as 4% forest cover (Balharry, 1993). In Scotland, pine martens have adapted to a landscape with low levels of forest cover, with the highest recorded population densities

	in areas with intermediate levels of forest fragmentation (Caryl et al., 2012, Kubasiewicz, 2014). Pine martens have also been recorded in non-wooded habitats such as the upland montane areas, heather grassland and semi-natural grassland in the Cairngorms (Croose et al., 2014, Moll et al.,2016). Pine martens in Scotland adapt their diet to the seasonal availability of different food sources, including small mammals, carrion, berries and insects (Caryl, 2008). As opposed to a dietary preference for the bank vole which is observed in eastern European populations, pine martens in Scotland show a strong preference for the field vole (Caryl, 2008). This preference is reflected by the incorporation of scrub and tussock grassland into the pine marten's home range (Pereboom et al., 2008, Caryl et al., 2012). Pine martens can live alongside human habitation, occupying wood stacks, farm buildings and the lofts of dwelling houses. Scarcity of arboreal cavities may result in a shortage of suitable den sites and could in turn limit populations (Balharry et al, 2008).
8.1: Characterisation of pressures	Jordan (2011) has considered the factors likely to be limiting pine marten recovery in England and Wales. Forest and plantation management (PB02, PB05) – pine martens need habitat that provides sufficient foraging and breeding/resting sites. Pine martens have a relatively catholic diet and have adapted to a range of habitat types and associated prey availability in, for example, Ireland and NW Scotland. However, appropriate forest management is necessary to ensure suitable conditions for foraging and breeding, and to ensure breeding martens are not disturbed from harvesting operations. The availability of suitable arboreal den sites, and hence the removal of dead and dying trees, may be limiting factor (PB07, PB08; Birks et al. 2005). Predation risk of young can increase if breeding dens are at ground level. The provision of den boxes in woodlands can ameliorate this

	problem, but requires intervention over a wide area. Pine martens are at risk of road traffic accidents (PE01), and whilst the VWT project selected the sites for releases with lower traffic flow (MacPherson 2014) as the pine marten's range in Wales expands into more populated areas the risk of road traffic accidents will increase. The historical decline in pine marten populations has been attributed to persecution by gamekeepers and as numbers recover the species is likely to increasingly come into conflict with game ventures/establishments (PG11, PG13). Education on techniques to protect game, such as preventing access to pheasant pens, will be key to reducing threat. It has been suggested that competition with the more generalist fox (Vulpes vulpes) may be a factor in the previous lack of recovery of pine marten populations in Wales (Jordan 2011) and thus increased fox numbers resulting from habitat changes and insufficient fox control may also be a pressure on remnant pine marten populations in Wales (PM06). However, recent research has pointed towards the adaptability of pine marten diet in different habitat types (Twining et al. 2019). The low population of pine martens in Wales will have resulted in a loss of genetic diversity and may have contributed to the lack of population recovery (PM05; Jordan 2011). However, the translocation of 51 pine martens from Scotland by the VWT will have significantly increased the genetic diversity of the pine marten population in Wales. Individuals were taken from a number of different sites to avoid using related animals.
9.5: List of main conservation measures	Sympathetic woodland management is required (MB05) to provide suitable habitat for foraging, a supply of suitable den locations and to ensure pine martens are not adversely affected by harvesting operations.

	Education is needed to prevent illegal persecution (MG04) and avoid incidental killing during pest management operations (MG05).
10.1: Future trends and prospects of parameters	Future prospects of - Range Future trend in range is likely to be positive given the re-establishment of a breeding pine marten population in Wales which is expected to consolidate and expand in future years. However, since the project is still at an early stage and pine marten populations are slow to increase due to only breeding between 2 or 3 years of age, this trend cannot be assumed. Future prospects of - Population The VWT pine marten reinforcement project has led to a significant improvement in the species' status in Wales. There is good evidence that the reinforcement project has been successful and pine martens are now well established over a wide area from Coed y Brenin to the Tywi forest with martens also recorded in areas beyond this. However, it is less than 10 years since the completion of the VWT reinforcement project and ongoing monitoring is required to determine the continued establishment and expansion of the population.
11.1: Range	Conclusion on Range reached because: (i) the short-term trend direction in Range surface area is increasing; and (ii) the current Range surface area is approximately equal to the Favourable Reference Range.
11.2: Population	Conclusion on Population reached because:(i) the short-term trend direction in Population size is increasing; (ii) the current Population size is not more than 25% below the Favourable Reference Population; and iii) reproduction, mortality and age structure does not have data available.
11.3: Habitat for the species	Conclusion on Habitat for the species reached because: (i) it is unknown whether the area of occupied habitat is sufficiently large for long-term survival (ii) it is unknown whether the quality of occupied habitat is suitable for the

	long-term survival of the species; and iii) it is unknown whether there is a sufficiently large area of occupied and unoccupied habitat of suitable quality for long term survival (iv) the short-term trend in area of habitat is unknown.
11.4: Future prospects	Conclusion on Future prospects reached because: (i) the Future prospects for Range are good; (ii) the Future prospects for Population are good; and (iii) the Future prospects for Habitat for the species are unknown.
11.5: Overall assessment of Conservation Status	Overall assessment of Conservation Status is Unfavourable-inadequate because one of the conclusions is Unfavourable-inadequate.
6.15: Favourable Reference Population (FRP)	The UK-level FRV for population was developed by JNCC using an audit trail based on the year the FRV was first established and any changes made in subsequent reporting rounds. The audit may draw from any combination of the 2007, 2013, or 2019 Habitats Directive reports and reflects the full rationale used for the 2019 Article 17 reporting. Following expert review, a Wales-level FRV was derived based on population trend and abundance data specific to Wales, rather than adopting the UK-level value. The revised FRV has been set as Pine marten population is recovering following population reinforcement (estimated population is between 100- 200 individuals). The lower end of this range is not considered to be large enough to support a viable population.
5.10: Favourable Reference Range (FRR)	The UK-level FRV for range was developed by JNCC using an audit trail based on the year the FRV was first established and any changes made in subsequent reporting rounds. The audit may draw from any combination of the 2007, 2013, or 2019 Habitats Directive reports and reflects the full rationale used for the 2019 Article 17 reporting. Following expert review, a Wales-level FRV was derived based on distribution and trend evidence specific to Wales, rather than adopting the UK-level value. The revised FRV has been set as Pine marten range is

recovering following population reinforcement, and is considered to be large enough to support a viable population.