

**European Community Directive  
on the Conservation of Natural Habitats  
and of Wild Fauna and Flora  
(92/43/EEC)**

Supporting documentation for the  
Third Report by the United Kingdom under  
Article 17

on the implementation of the Directive  
from January 2007 to December 2012  
Conservation status assessment for

Species:

S1358 - Polecat (*Mustela putorius*)

**IMPORTANT NOTE – PLEASE READ**

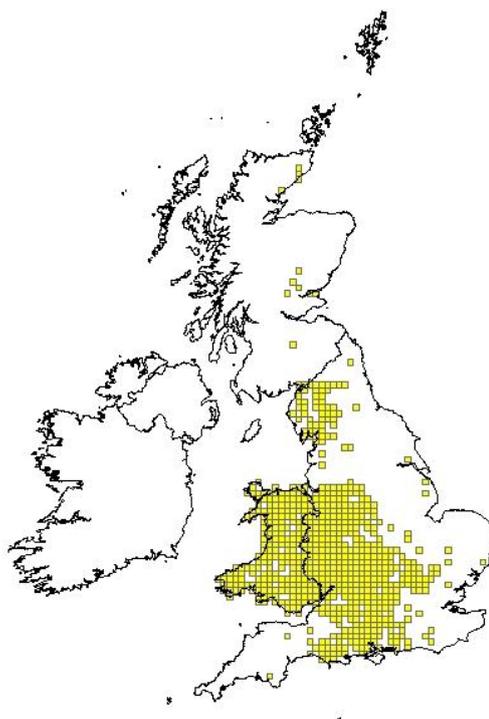
- The country-level reporting information contained in this document is a contribution to the Article 17 UK report for the habitat/species concerned.
- It has been provided by **Scottish Natural Heritage** and refers only to the state of the habitat/species in **Scotland** - it does not constitute an assessment for the whole of the UK.
- The Article 17 UK Approach document provides details on how this information has been used and, combined with information supplied by other Statutory Nature Conservation Bodies
- The format of the document is closely aligned to that set out by the European Commission for Member State reporting – as a result, some of the fields are not applicable at a country-level and have deliberately been left blank – in addition, the content of most fields is constrained by the EC reporting categories.

## Reporting format on the 'main results of the surveillance under Article 11' for Annex II, IV & V species

<i>Field name</i>	<i>Brief explanations</i>	
<b>0.2 Species</b>	<b>0.2.1 Species code</b>	<b>S1358</b>
	<b>0.2.2 Species scientific name</b>	<b><i>Mustela putorius</i></b>
	<b>0.2.3 Alternative species scientific name</b> Optional	
	<b>0.2.4 Common name</b> Optional	<b>Polecat</b>

### 1.1 Maps

<b>1.1.1 Distribution map</b>		<b>Sensitive</b>	<b>False</b>
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<b>1.1.2 Method used - map</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b> NBN Gateway <a href="http://www.searchnbn.net">www.searchnbn.net</a> SOLOW, A.R., KITCHENER, A.C., ROBERTS, D.L. & BIRKS, J.D.S. 2006. Rediscovery of the Scottish polecat, <i>Mustela putorius</i> : survival or reintroduction? <i>Biological Conservation</i> 128: 574-575 <a href="http://www.drdaavidroberts.com/docs/Solow_etal_2006_polecat.pdf">www.drdaavidroberts.com/docs/Solow_etal_2006_polecat.pdf</a> .
<b>1.1.3 Year or period</b>	<b>2000-2012</b> Distribution recording is complicated by confusion with polecat-ferret hybrids, but methods for identifying true polecats by pelage

	<p>characteristics are now well-established. Nevertheless, it is likely that some hybrids are still reported as true polecats, particularly when independent verification is not possible (e.g. sightings) and records outside the main distribution should be treated with caution.</p> <p>Scotland: The polecat was extirpated from Scotland by about 1915. Covert reintroductions, probably between the 1970s and 1990s, led to the establishment of perhaps 3 populations in Caithness &amp; Sutherland, Perthshire and Argyll . One of these, the well-documented Argyll population (Craik &amp; Brown, 1997), may have gone extinct since 2007, as there have been no recent records.</p> <p>England: 1.1.2 Analysis of polecat distribution (and population estimates) rely largely on national polecat surveys undertaken by the Vincent Wildlife Trust (VWT) between 1993-1997 (Birks and Kitchener 1999) and 2004-2006 (Birks 2008).The polecat is continuing to extend its range eastwards from Wales and the Welsh borders, now reaching the Eastern Counties and the south coast. This process may have been assisted by covert reintroductions, notably in Cumbria, which remains separate from the main distribution .</p> <p>1.1.3 The date range used, 2000-2012 was chosen to include VWT national survey and data from English LRCs.</p> <p>Wales: 1.1.2 Analysis of polecat distribution (and population estimates) rely largely on national polecat surveys undertaken by the Vincent Wildlife Trust (VWT) between 1993-1997 (Birks and Kitchener 1999) and 2004-2006 (Birks 2008). When combined with other records there is good coverage of Wales. There are some hectads that previously contained records that are now blank in the present distribution map. This is considered to be due to lack of data rather than the loss of polecats in those areas. However, overall the 10 km square data is considered to provide a 'good' representation of polecat distribution in Wales.</p> <p>1.1.3 The date range used, 2000-2012 was chosen to include VWT national survey and data from Welsh LRCs.</p>
<b>1.1.4 Additional distribution map</b>	<b>False</b>
<b>1.1.5 Range map</b>	

<b>2.1 Biogeographical region &amp; marine regions</b>	<b>ATL</b>
<b>2.2 Published sources</b>	<p><b>"BATTERSBY, J (ed.) &amp; TRACKING MAMMALS PARTNERSHIP. 2005. UK Mammals: Species Status and Population Trends. Joint Nature Conservation Committee/Tracking Mammals Partnership <a href="http://jncc.defra.gov.uk/page-3311">http://jncc.defra.gov.uk/page-3311</a>.</b></p> <p><b>BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London.</b></p> <p><b>BIRKS, JDS 2008. The polecat survey of Britain 2004-2006. Vincent Wildlife Trust, Ledbury</b></p>

	<p><b>BIRKS, J.D.S. and KITCHENER, A.C. 2008. Polecat <i>Mustela putorius</i>. Pp. 476-487 in HARRIS, S &amp; YALDEN, D.W. Mammals of the British Isles: Handbook, 4th edition. The Mammal Society, Southampton.799pp.</b></p> <p><b>CRAIK, J.C.A. &amp; BROWN, D. 1997. Polecats in the west of Scotland. Glasgow Naturalist 23(2): 50-53.</b></p> <p><b>HARRIS, S., MORRIS, P., WRAY, S. AND YALDEN, D. 1995. A Review of British Mammals: population estimates and conservation status of British mammals other than cetaceans. Joint Nature Conservation Committee, Peterborough <a href="http://jncc.defra.gov.uk/page-2759">http://jncc.defra.gov.uk/page-2759</a></b></p> <p><b>MACDONALD, D.W. AND TATTERSALL, F.T. 2001 Britain's Mammals: The Challenge for Conservation. Mammals Trust UK/WildCru.</b></p> <p><b>SOLOW, A.R., KITCHENER, A.C., ROBERTS, D.L. &amp; BIRKS, J.D.S. 2006. Rediscovery of the Scottish polecat, <i>Mustela putorius</i>: survival or reintroduction? Biological Conservation 128: 574-575</b></p> <p><b><a href="http://www.drdavidroberts.com/docs/Solow_etal_2006_polecat.pdf">www.drdavidroberts.com/docs/Solow_etal_2006_polecat.pdf</a>.</b></p> <p>"</p>
	<p>BATTERSBY, J (ed.) &amp; TRACKING MAMMALS PARTNERSHIP. 2005. UK Mammals: Species Status and Population Trends. Joint Nature Conservation Committee/Tracking Mammals Partnership <a href="http://jncc.defra.gov.uk/page-3311">http://jncc.defra.gov.uk/page-3311</a>.</p> <p>BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London.</p> <p>BIRKS, JDS 2008. The polecat survey of Britain 2004-2006. Vincent Wildlife Trust, Ledbury</p> <p>BIRKS, J.D.S. and KITCHENER, A.C. 2008. Polecat <i>Mustela putorius</i>. Pp. 476-487 in HARRIS, S &amp; YALDEN, D.W. Mammals of the British Isles: Handbook, 4th edition. The Mammal Society, Southampton.799pp.</p> <p>CRAIK, J.C.A. &amp; BROWN, D. 1997. Polecats in the west of Scotland. Glasgow Naturalist 23(2): 50-53.</p> <p>HARRIS, S., MORRIS, P., WRAY, S. AND YALDEN, D. 1995. A Review of British Mammals: population estimates and conservation status of British mammals other than cetaceans. Joint Nature Conservation Committee, Peterborough <a href="http://jncc.defra.gov.uk/page-2759">http://jncc.defra.gov.uk/page-2759</a></p> <p>MACDONALD, D.W. AND TATTERSALL, F.T. 2001 Britain's Mammals: The Challenge for Conservation. Mammals Trust UK/WildCru.</p> <p>SOLOW, A.R., KITCHENER, A.C., ROBERTS, D.L. &amp; BIRKS, J.D.S. 2006. Rediscovery of the Scottish polecat, <i>Mustela putorius</i>: survival or reintroduction? Biological Conservation 128: 574-575</p> <p><a href="http://www.drdavidroberts.com/docs/Solow_etal_2006_polecat.pdf">www.drdavidroberts.com/docs/Solow_etal_2006_polecat.pdf</a>.</p>

## 2.3 Range

### 2.3.1 Surface area Range

NOTE: The range estimate for 2007 report was wildly optimistic for Scotland and pretty optimistic for England. The difficulty is separating residents from transients/colonisers

Wales: recolonisation of Wales is now almost complete, with *M. putorius* being recorded in almost every 10 km square.

<b>2.3.2 Method used</b> <b>Surface area of Range</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b> BIRKS, JDS 2008. The polecat survey of Britain 2004-2006. Vincent Wildlife Trust, Ledbury SOLOW, A.R., KITCHENER, A.C., ROBERTS, D.L. & BIRKS, J.D.S. 2006. Rediscovery of the Scottish polecat, <i>Mustela putorius</i> : survival or reintroduction? <i>Biological Conservation</i> 128: 574-575 <a href="http://www.drdaavidroberts.com/docs/Solow_etal_2006_polecat.pdf">www.drdaavidroberts.com/docs/Solow_etal_2006_polecat.pdf</a> . Scotland: Because populations have arisen from covert reintroductions (Solow et al, 2006), <i>M. putorius</i> has a small fragmented range in Scotland. The status and long-term survival of these populations is unclear.  England: <i>M. putorius</i> is currently expanding its distribution in England and could be expected to occur in all suitable habitats within a few decades.  Wales: recolonisation of Wales is now almost complete, with <i>M. putorius</i> being recorded in almost every 10 km square.	
<b>2.3.3 Short-term trend Period</b>	<b>1997-2012</b>	
<b>2.3.4 Short term trend Trend direction</b>	<b>unknown</b>	
<b>2.3.5 Short-term trend Magnitude</b>	<b>a) Minimum</b>	BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London. BIRKS, JDS 2008. The polecat survey of Britain 2004-2006. Vincent Wildlife Trust, Ledbury Scotland: The polecat is only present in a small number of hectads, where populations have been reintroduced. Insufficient data are available to determine a short-term trend in range.  GB (essentially E&W): in 1997 the polecat was recorded in 473 hectads (6 of which were in Scotland); by 2004, this was estimated to have increased to 744 hectads (Birks, unpublished data 2004; UK Article 17 report 2007)  Wales: 2.3.5 The VWT national polecat surveys (Birks & Kitchener 1999 – table 5.3, Birks 2008 – table 5.13) considered the total number of occupied 10 km squares to be 206 in 1997 (cumulative total from records between 1959-1997) and 219 in 2006 (cumulative total from records between 1959-2006). This represents an increase in 10 km square occupancy from 73% to 77% (from a total of 283 10 km squares in Wales). Recolonisation of Wales by <i>M. putorius</i> is now almost complete.
<b>2.3.6 Long-term trend</b>	<b>b) Maximum</b>	<b>1989-2012</b>

<b>Period</b>		
<b>2.3.7 Long-term trend</b>	<b>unknown</b>	
<b>Trend direction</b>		
<b>2.3.8 Long-term trend</b>		
<b>Magnitude</b>	<b>a) Minimum</b>	
Optional	BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London. BIRKS, JDS 2008. The polecat survey of Britain 2004-2006. Vincent Wildlife Trust, Ledbury	
	<b>b) Maximum</b>	
<b>2.3.9 Favourable reference range</b>	<b>a) Value in km<sup>2</sup></b>	
	Wales: polecat range has been gradually expanding since their nadir in the early 20th century. There are inadequate data to calculate range expansion since 1989.	
	<b>b) Operator for FRR</b>	
	<b>c) FRR is unknown (indicated by "true")</b>	<b>False</b>
	<b>d) Method used to set FRR</b>	
<b>2.3.10 Reason for change</b>	<b>a) Genuine change?</b>	<b>True</b>
Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to...	Species is expanding its range in England. The presence of polecat-ferret hybrids, the ability of individuals to move long distances and previous covert reintroductions confuse the picture.  Wales: Polecat distribution has been recovering since its nadir in the early 20th century and recolonisation of Wales is now almost complete.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>

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2.4 Population	
<b>2.4.1 Population size estimation</b> (using individuals or agreed exceptions where possible)	<b>a) Unit</b> <b>number of individuals</b>
	2006 estimate from Birks 2008 (see page 42) Scotland: 345 based on published minimum average estimate England: 27,991 Wales: 18,448
	<b>b) Minimum</b> <b>345</b>
	<b>c) Maximum</b> <b>345</b>
<b>2.4.2 Population size estimation</b> (using population unit other than individuals) Optional ( <i>if 2.4.1 filled in</i> )	<b>a) Unit</b>
	<b>b) Minimum</b>
	<b>c) Maximum</b>
<b>2.4.3 Additional information on population estimates / conversion</b> Optional	<b>a) Definition of "locality"</b>
	<b>b) Method to convert data</b>
	<b>c) Problems encountered to provide population size estimation</b>
<b>2.4.4 Year or period</b>	<b>2006-2006</b>
<b>2.4.5 Method used Population size</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b> BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London. BIRKS, JDS 2008. The polecat survey of Britain 2004-2006. Vincent Wildlife Trust, Ledbury Population size was calculated for 1997 based on the number of occupied hectads and assigning them to 'core' or 'fringe' populations, with differing densities of polecats. The estimated densities were based on live-trapping studies. This estimate was then updated in 2004, to take into account the expansion of the range of the species. (J Birks, unpublished data)

	<p>Suggested text:</p> <p>In order to improve understanding of <i>M. putorius</i>' recovery in the mid-1990s, a monitoring system based upon co-ordinated live-trapping by volunteers was developed and tested. 136 1km squares were each live-trapped for seven days within the species' current range (Birks and Kitchener 1999). These data were used to derive winter population density estimates for the 'current core' of <i>M. putorius</i>' range (101 <i>M. putorius</i> per 10-km square) and for the 'current fringe' (69 <i>M. putorius</i> per 10km square). Results of the distribution survey were used to calculate the total GB population size in 1997, which was estimated to be 38,381 (Scotland 483, Wales 17,691, England 20,207).</p> <p>This estimate was then updated using the range data from the 2004-2006 survey, to take into account the expansion of the range of the species (Birks, 2008 – table 5.14). Population size in Wales was estimated to be 18,448 (Scotland 345, England 27,991), an increase of 4.3% (Scotland -28.6%, England +38.5%) since 1997.</p> <p>Population size in Scotland was estimated to be 345, a decrease of 28.6%.</p> <p>The 2006 population estimate uses density estimates based on live trapping results from the 1990s. It assumes that the densities previously calculated still apply and that the vice-counties previously assigned as 'current core' and 'current fringe' still apply. It is possible that in some areas, particularly parts of Wales, densities have increased so that fringe areas would now be considered part of the core range. The 2006 population estimate may therefore have underestimated the total population size.</p>	
<p><b>2.4.6 Short-term trend Period</b></p>	<p><b>1997-2006</b></p>	
<p><b>2.4.7 Short-term trend Trend direction</b></p>	<p><b>decrease</b></p> <p>% change between 1997 and 2006</p> <p>Scotland: -28.6%</p> <p>England: +38.5%</p> <p>Wales: +4.3%</p> <p>Scotland: x</p> <p>England: +</p> <p>Wales: +</p> <p>[UK: +]</p>	
<p><b>2.4.8 Short-term trend Magnitude</b></p>	<p><b>a) Minimum</b></p>	
	<p>Scotland: 483 Wales: 17,691 England: 20,207</p>	
	<p><b>b) Maximum</b></p>	
	<p><b>c) Confidence interval</b></p>	

<b>2.4.9 Short-term trend Method used</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b>	
	<p>BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London.</p> <p>Birks, J.D.S (2008)</p> <p>Scotland: Little information is available about the small introduced populations.</p> <p>England: the distributional area of this species is expanding, so it can reasonably be inferred that the population is increasing, although there are no direct surveillance data to support this assumption..</p> <p>Wales: the short term population trend has been calculated using the changes in the population estimates from 1997 and 2006. See 2.4.1 for details on the caveats for these estimates.</p>	
<b>2.4.10 Long-term trend – Period</b>		
<b>2.4.11 Long-term trend Trend direction</b>	<b>decrease</b>	
<b>2.4.12 Long-term trend Magnitude</b>		
Optional	<b>a) Minimum</b>	
	<b>b) Maximum</b>	
	<b>c) Confidence interval</b>	
<b>2.4.13 Long term trend Method used</b>	<b>2</b>	
<b>2.4.14 Favourable reference population</b>	<b>a) Number of individuals/agreed exceptions/other units</b>	<b>483</b>
	<p>BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London.</p> <p>The favourable reference population value has been derived using 1994 as the baseline and making a judgement on whether the population in 1994 was viable in the long-term, using the decision tree in Note 1 (see 'Assessing Conservation Status: UK Approach') as a guide. Historic and current information on population size, distribution and trends have</p>	

	<p>been used in order to assess viability and, if the 1994 level was not viable, then consideration has been given to what would constitute a viable population. Surveys of range and population size have indicated that <i>M. putorius</i> populations have been increasing since the early 1980s and have continued to increase since 1994. It is probable that the population in 1994 was viable. The 1997 population estimate, which is the closest estimate to 1994 available has, therefore, been set as the favourable reference value for this species.</p>								
	<table border="1"> <tr> <td><b>b) Operator</b></td> <td></td> </tr> <tr> <td><b>c) FRP is unknown indicated by "true"</b></td> <td><b>False</b></td> </tr> <tr> <td><b>d) Method used to set FRP</b></td> <td></td> </tr> </table>	<b>b) Operator</b>		<b>c) FRP is unknown indicated by "true"</b>	<b>False</b>	<b>d) Method used to set FRP</b>			
<b>b) Operator</b>									
<b>c) FRP is unknown indicated by "true"</b>	<b>False</b>								
<b>d) Method used to set FRP</b>									
<p><b>2.4.15 Reason for change</b> Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:</p>	<table border="1"> <tr> <td><b>a) Genuine change?</b></td> <td><b>True</b></td> </tr> <tr> <td colspan="2">The recent spread of <i>M. putorius</i> into England has been accelerated by the recovery of rabbit numbers and also the reduction of deliberate persecution by game keepers (Macdonald &amp; Tattersall 2001).</td> </tr> <tr> <td><b>b) Improved knowledge/more accurate data?</b></td> <td><b>False</b></td> </tr> <tr> <td><b>c) Use of different method (e.g. "Range tool")?</b></td> <td><b>False</b></td> </tr> </table>	<b>a) Genuine change?</b>	<b>True</b>	The recent spread of <i>M. putorius</i> into England has been accelerated by the recovery of rabbit numbers and also the reduction of deliberate persecution by game keepers (Macdonald & Tattersall 2001).		<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
<b>a) Genuine change?</b>	<b>True</b>								
The recent spread of <i>M. putorius</i> into England has been accelerated by the recovery of rabbit numbers and also the reduction of deliberate persecution by game keepers (Macdonald & Tattersall 2001).									
<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>								
<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>								

<b>2.5 Habitat for the species</b>	
<b>2.5.1 Area estimation</b>	<p><b>1010</b></p> <p>Occupies a wide range of habitats, with general association with lowlands. A radio-tracking study (Birks and Kitchener, 1999) found that woodland edges, field boundaries and farm buildings were preferred habitats, with open fields and suburban areas least favoured; farm buildings were most used during winter months. An association was also identified between <i>M. putorius</i> and rabbit warrens. The study found that the mean home range was 213 ha and 125 ha for males and females, respectively. <i>M. putorius</i> are primarily nocturnal; 72.4 % of activity is undertaken in the dark. Activity during the day was typically recorded from individuals that were underground in rabbit warrens, in farm buildings, or in thick cover.</p>

	<p>It is unknown whether the amount of habitat in the UK is sufficient to support a viable population of the species.</p> <p>Scotland: 1,010 England: 54,200 Wales: 20,826</p> <p>It is unknown whether the amount of habitat in the UK is sufficient to support a viable population of the species.</p>	
<b>2.5.2 Year or period</b>	<b>2012-2012</b>	
<b>2.5.3 Method used Habitat for the species</b>	<b>Estimate based on expert opinion with no or minimal sampling</b>	
<b>2.5.4 Quality of the habitat</b>	<b>a) Habitat quality</b>	
	<p>No or insufficient reliable information available</p> <p>BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London.</p> <p>BIRKS, J.D.S. and KITCHENER, A.C. 2008. Polecat <i>Mustela putorius</i>. Pp 476-487 in HARRIS, S &amp; YALDEN, D.W. Mammals of the British Isles: Handbook, 4th edition. The Mammal Society, Southampton.799pp.</p> <p>Birks and Kitchener's (1999) review of this species comprised a detailed analysis of habitat use. <i>M. putorius</i> is not strongly associated with a single habitat, making it difficult to assess the impact of habitat change.</p> <p>As the species prefers dense cover and avoids open fields and suburban areas, loss of woodland and hedgerows and an increase in urbanisation might be expected to have a negative effect. The current spread of the species, following a relaxation of persecution, obscures the impact of these factors.</p>	
	<b>b) Assessment method</b>	
<b>2.5.5 Short-term trend Period</b>	Unknown	
<b>2.5.6 Short-term trend Trend direction</b>	<b>unknown</b>	
<b>2.5.7 Long-term trend Period</b>		
<b>2.5.8 Long-term trend Trend direction</b>		
<b>2.5.9 Area of suitable habitat for the species</b>	<b>a) Value in km<sup>2</sup></b>	<b>1010</b>
	Scotland: 1,010	
	<b>b) Absence of data indicated as '0'</b>	
<b>2.5.10 Reason for change</b> Is the difference between the	<b>a) Genuine change?</b>	<b>False</b>

value reported at 2.5.1 and the previous reporting round mainly due to		
	<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>

2.6 Main pressures		
a) Pressure	b) Ranking	c) Pollution qualifier
	H = high importance M = medium importance L = low importance	
A07: use of biocides, hormones and chemicals	H	
A10: Restructuring agricultural land holding	H	
F03: Hunting and collection of wild animals (terrestrial)	H	
I03: introduced genetic material, GMO	H	
A02: modification of cultivation practices	M	
D01: Roads, paths and railroads	M	
E01: Urbanised areas, human habitation	L	

Issues that continue to affect *M. putorius* include road accidents, secondary rodenticide poisoning, and the loss of genetic integrity through hybridisation with feral domestic ferret *M. furo*. Low public awareness and ambiguous legal protection are also a concern. Although it is thought that persecution (both deliberate and non-deliberate) continues in some areas, there is no evidence that this has hindered *M. putorius*' recovery (Birks & Kitchener 1999, Birks 2008).

In Scotland, the small size and fragmented nature of the reintroduced populations means they may be susceptible to local extinction through stochastic causes, so pressures that are less important in England and Wales may be significant. It is possible that one apparently well-established population has gone extinct, as there are no recent records from the area.

<b>2.6.1 Method used – Pressures</b>	<b>mainly based on expert judgement and other data</b> BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London. BIRKS, J.D.S. and KITCHENER, A.C. 2008. Polecat <i>Mustela putorius</i> . Pp 476-487 in HARRIS, S & YALDEN, D.W. Mammals of the British Isles: Handbook, 4th edition. The Mammal Society, Southampton.799pp. SHORE, R.F., BIRKS, J.D.S., AFSAR, A., WIENBURG, C.L., KITCHENER, A.C. 2003. Spatial and temporal analysis of second-generation
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	anticoagulant rodenticide residues in polecats ( <i>Mustela putorius</i> ) from throughout their range in Britain, 1992-1999. Environmental Pollution 122:183-193 <a href="http://www.vwt.org.uk/docs/polecat/spatial-and-temporal-analysis-of-rodenticide-residues-in-polecats-shore-et-al.pdf">www.vwt.org.uk/docs/polecat/spatial-and-temporal-analysis-of-rodenticide-residues-in-polecats-shore-et-al.pdf</a>
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2.7 Threats		
a) Threat	b) Ranking	c) Pollution qualifier
	H = high importance M = medium importance L = low importance	
A07: use of biocides, hormones and chemicals	H	
A10: Restructuring agricultural land holding	H	
F03: Hunting and collection of wild animals (terrestrial)	H	
I03: introduced genetic material, GMO	H	
A02: modification of cultivation practices	M	
D01: Roads, paths and railroads	M	
E01: Urbanised areas, human habitation	L	

Issues that continue to affect *M. putorius* include road accidents, secondary rodenticide poisoning, and the loss of genetic integrity through hybridisation with feral domestic ferret *M. furo*. Low public awareness and ambiguous legal protection are also a concern. Although it is thought that persecution (both deliberate and non-deliberate) continues in some areas, there is no evidence that this has hindered *M. putorius*' recovery (Birks & Kitchener 1999, Birks 2008).

In Scotland, the small size and fragmented nature of the reintroduced populations means they may be susceptible to local extinction through stochastic causes, so pressures that are less important in England and Wales may be significant. It is possible that one apparently well-established population has gone extinct, as there are no recent records from the area.

<b>2.7.1 Method used – Threats</b>	<b>expert opinion</b>
	<p>BIRKS, J.D.S. and KITCHENER, A.C. 1999. The Distribution and Status of the Polecat <i>Mustela putorius</i> in Britain in the 1990s. Vincent Wildlife Trust, London.</p> <p>BIRKS, J.D.S. and KITCHENER, A.C. 2008. Polecat <i>Mustela putorius</i>. Pp 476-487 in HARRIS, S &amp; YALDEN, D.W. Mammals of the British Isles: Handbook, 4th edition. The Mammal Society, Southampton.799pp.</p> <p>SHORE, R.F, BIRKS, J.D.S., AFSAR, A., WIENBURG, C.L., KITCHENER, A.C. 2003. Spatial and temporal analysis of second-generation anticoagulant rodenticide residues in polecats (<i>Mustela putorius</i>) from throughout their range in Britain, 1992-1999. Environmental Pollution</p>

122:183-193 [www.vwt.org.uk/docs/polecat/spatial-and-temporal-analysis-of-rodenticide-residues-in-polecats-shore-et-al.pdf](http://www.vwt.org.uk/docs/polecat/spatial-and-temporal-analysis-of-rodenticide-residues-in-polecats-shore-et-al.pdf)

## 2.8 Complementary information

### 2.8.1 Justification of % thresholds for trends

### 2.8.2 Other relevant information

### 2.8.3 Trans-boundary assessment

## 2.9 Conclusions (*assessment of conservation status at end of reporting period*)

Please refer to the United Kingdom assessment for this species.

## 3 Natura 2000 coverage & conservation measures - Annex II species (*only applies to species listed under Annex II of the Directive*)

### 3.1 Population

#### 3.1.1 Population size

Estimation of population size included in the SAC network

#### a) Unit

#### b) Minimum

#### c) Maximum

#### 3.1.2 Method used

#### 3.1.3 Trend of population size within the network (short-term trend)

### 3.2 Conservation measures

Conservation measures taken (i.e. already being implemented) within the reporting period and provided information about their importance, location and evaluation.

3.2.1 Measure	3.2.2 Type					3.2.3 Ranking  H = high importance M = medium importance L = low importance	3.2.4 Location  where the measure is PRIMARILY applied			3.2.5 Broad evaluation of the measure					
	a) Legal/statutory	b) Administrative	c) Contractual	d) Recurrent	e) One-off		a) Inside	b) Outside	c) Both inside & outside	a) Maintain	b) Enhance	c) Long term	d) No effect	e) Unknown	f) Not evaluated

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