

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

**Second Report by the United Kingdom under
Article 17
on the implementation of the Directive
from January 2001 to December 2006**


**Conservation status assessment for
Species:**

S1326 - *Plecotus auritus* - Brown long-eared bat

The information in this assessment corresponds to the "species fact sheet" submitted by the UK to the European Union in February 2008 (second and final submission). Please note that this is a section of the UK's report. For the complete report visit <http://www.jncc.gov.uk/article17>

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Species Name: *Plecotus auritus*

1. National level	
Species Code	S1326
Member State	United Kingdom
Biogeographic regions concerned within the Member state	ATL
1.1 Range map	

1.2 Distribution map



2. Biogeographic level

2.1 Biogeographic region

ATL

2.2 Published sources and/or websites

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BAT CONSERVATION TRUST. 2006. The National Bat Monitoring Programme Annual Report 2005. Available to download from Bat Conservation Trust website (www.bats.org.uk) and Tracking Mammals Partnership website (www.trackingmammals.org).

BATTERSBY, J. 1999. A comparison of the roost ecology of the brown long-eared bat *Plecotus auritus* and the serotine bat *Eptesicus serotinus*. Unpublished PhD thesis, University of Sussex.

BATTERSBY, J (Ed.) & TRACKING MAMMALS PARTNERSHIP. 2005. UK Mammals: Species Status and Population Trends. JNCC/Tracking

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BRIGGS, P. 2002 A study of bats in barn conversions in Hertfordshire in 2000. Hertfordshire Biological Records Centre, Hertford.

ENTWISTLE, A.C., RACEY, P.A. & SPEAKMAN, J.R. 1996. Habitat exploitation by a gleaning bat, *Plecotus auritus*. *Philosophical Transactions of the Royal Society, London B*, 351: 921-931.

ENTWISTLE, A.C., RACEY, P.A. & SPEAKMAN, J.R. 1997. Roost selection by the brown long-eared bat *Plecotus auritus*. *Journal of Applied Ecology*, 34: 399-408.

HAINES-YOUNG, R.H., BARR, C.J., BLACK, H.I.J., BRIGGS, D.J., BUNCE, R.G.H.,

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M.T., GILLESPIE, M.K., HILL, R., HORNUNG, M., HOWARD, D.C., McCANN, T.,

MORECROFT, M.D., PETIT, S., SIER, A.R.J., SMART, S.M., SMITH, G.M., STOTT,

A.P., STUART, R.C. & WATKINS, J.W. 2000. Accounting for nature: assessing habitats in

the UK countryside. *Countryside Survey 2000*. DETR, HMSO, London.

HARRIS, S., MORRIS, P., WRAY, S. & YALDEN, D. 1995. A review of British Mammals: population estimates and conservation status of British mammals other than cetaceans. JNCC, Peterborough.

MITCHELL-JONES, A.J. 2004. Bat Mitigation Guidelines. English Nature, Peterborough.

RICHARDSON, P. (2000) Distribution atlas of bats in Britain and Ireland 1980-1999. Bat Conservation Trust, London.

RUSS, J.M. (1999) The Microchiroptera of Northern Ireland: community composition, habitat associations and ultrasound. Unpublished PhD thesis. Queen's University, Belfast.

SPEAKMAN, J.R. 1991. The impact of predation by birds on bat populations in the British Isles. *Mammal Review*, 21, 123-142.

SPENCER, J.W. & KIRBY, K.J. 1992 An inventory of ancient woodland for England and Wales. *Biological Conservation*, 62, 77-93.

STEBBINGS, R.E. 1966. A population study of the bats of the genus *Plecotus*. *Journal of Zoology, London*, 150, 53-75.

	<p>SWIFT, S.M. 1998. Long-eared bats. T & A.D. Poyser Ltd, London.</p> <p>Map Data Sources</p> <p>BATS & The Millennium Link - Bat species distribution in Central Belt of Scotland (2000 to 2005); Biological Records Centre - Mammals Database 100m; Environment and Heritage Service - Species Dataset; Highland Biological Recording Group Mammals dataset; Natural England - Batsites inventory for Britain (via National Biodiversity Network (NBN) Gateway).</p> <p>Scottish Natural Heritage bat records: update, J. Haddow (pers. comm).</p> <p>Bat Conservation Trust - National Bat Monitoring Programme (NBMP) data to 2005 including: Colony survey (2000 -2005), Hibernation survey (1997-2005).</p> <p>Bat Conservation Trust - Distribution atlas of bats in Britain and Ireland 1980-1999, GB data only.</p>
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2.3 Range of species in the biogeographic region or marine region

2.3.1 Surface range of the species (sq km)	234142
2.3.2 Date of range determination	1980-2006
2.3.3 Quality of data concerning range	Moderate
2.3.4 Range trend	Stable (=)
2.3.5 Range trend magnitude (%)	Not applicable
2.3.6 Range trend period	1980-2006
2.3.7 Reasons for reported trend	Not applicable

2.4 Population

2.4.1 Population size estimation	Minimum	245000	Maximum	245000
	Units	Individuals		
2.4.2 Date of population estimation	1999			
2.4.3 Method used for population estimation	2 - Extrapolation from surveys of part of the population			
2.4.4 Quality of population data	Poor			
2.4.5 Population trend	Stable (=)			
2.4.6 Population trend magnitude (%)	Not applicable			
2.4.7 Population trend period	1997-2005			
2.4.8 Reasons for reported trend	1 - Improved knowledge/more accurate data; 3 - Direct human influence; 4 - Indirect anthropo or zoogenic influence;			
2.4.9 Justification of % thresholds for trends (optional)	Not applicable			

2.4.10 Main pressures	151 - Removal of hedges and copses; 160 - General Forestry management; 164 - Forestry clearance; 165 - Removal of undergrowth; 166 - Removal of dead and dying trees; 167 - Exploitation without replanting; 490 - Other urbanisation, industrial and similar activities; 502 - routes, autoroutes; 624 - mountaineering, rock climbing, speliology; 803 - infilling of ditches, dykes, ponds, pools, marshes or pits;
2.4.11 Threats	151 - Removal of hedges and copses; 160 - General Forestry management; 164 - Forestry clearance; 165 - Removal of undergrowth; 166 - Removal of dead and dying trees; 167 - Exploitation without replanting; 490 - Other urbanisation, industrial and similar activities; 502 - routes, autoroutes; 624 - mountaineering, rock climbing, speliology; 803 - infilling of ditches, dykes, ponds, pools, marshes or pits;
2.5 Habitat for the species in the biogeographic region or marine region	
2.5 Habitats for the species	<p><i>P. auritus</i> requires a complex mosaic of habitats to support foraging, roosting and commuting behaviour. Boye & Dietz (2005) provide a good overview of this species' habitat requirements.</p> <p>Deciduous forests with different ages of trees are preferred as foraging habitats, but less structured woodlands (including coniferous forests), forest edges, bushes and hedges, orchards, parks and gardens are used for insect hunting, where the highly manoeuvrable species can glean insects from the foliage. The species also likes to have a source of water nearby maternity roosts.</p> <p>Individual home ranges are related to habitat structures and prey abundance and vary between one and 40 hectares. Individual foraging areas overlap to a minor extent and during foraging flights bats usually stay close to the roost, travelling a maximum distance of about 3 kilometres, with core areas up to 1.5 kilometres from the roost.</p> <p><i>P. auritus</i> is a woodland bat that naturally roosts in tree holes, but has adapted very well to using loft spaces of large old buildings such as churches, barns and old houses. The species is also frequently found in bat boxes where they are located in woodland. Colonies move roosts regularly throughout the summer when roosting in woodlands, but tend to be highly philopatric to building roosts.</p> <p>Winter roosts are in caves, mines and cellars, where, animals prefer a temperature around 7°C, and occasionally in tree holes.</p>
2.5.2 Area estimation (sq km)	Unknown
2.5.3 Date of estimation	2006
2.5.4 Quality of data	Poor
2.5.5 Trend of the habitat	Unknown (X)
2.5.6 Trend period	1990-1998
2.5.7 Reasons for reported trend	Not applicable
2.6 Future prospects	
2.6 Future prospects for the species	Good prospects_Species expected to survive and prosper
2.7 Complementary information	

2.7.1 Favourable reference range (sq km)	234142
2.7.2 Favourable reference population	200000
2.7.3 Suitable Habitat for the species	Unknown
2.7.4 Other relevant information	
2.8 Conclusions <i>(assessment of conservation status at end of reporting period)</i>	
(2.3) Range	(FV) - Favourable
(2.4) Population	(FV) - Favourable
(2.5) Habitat for the species	(XX) - Unknown
(2.6) Future prospects	(FV) - Favourable
Overall assessment	(FV) - Favourable