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:

S1330 - *Myotis mystacinus* - Whiskered 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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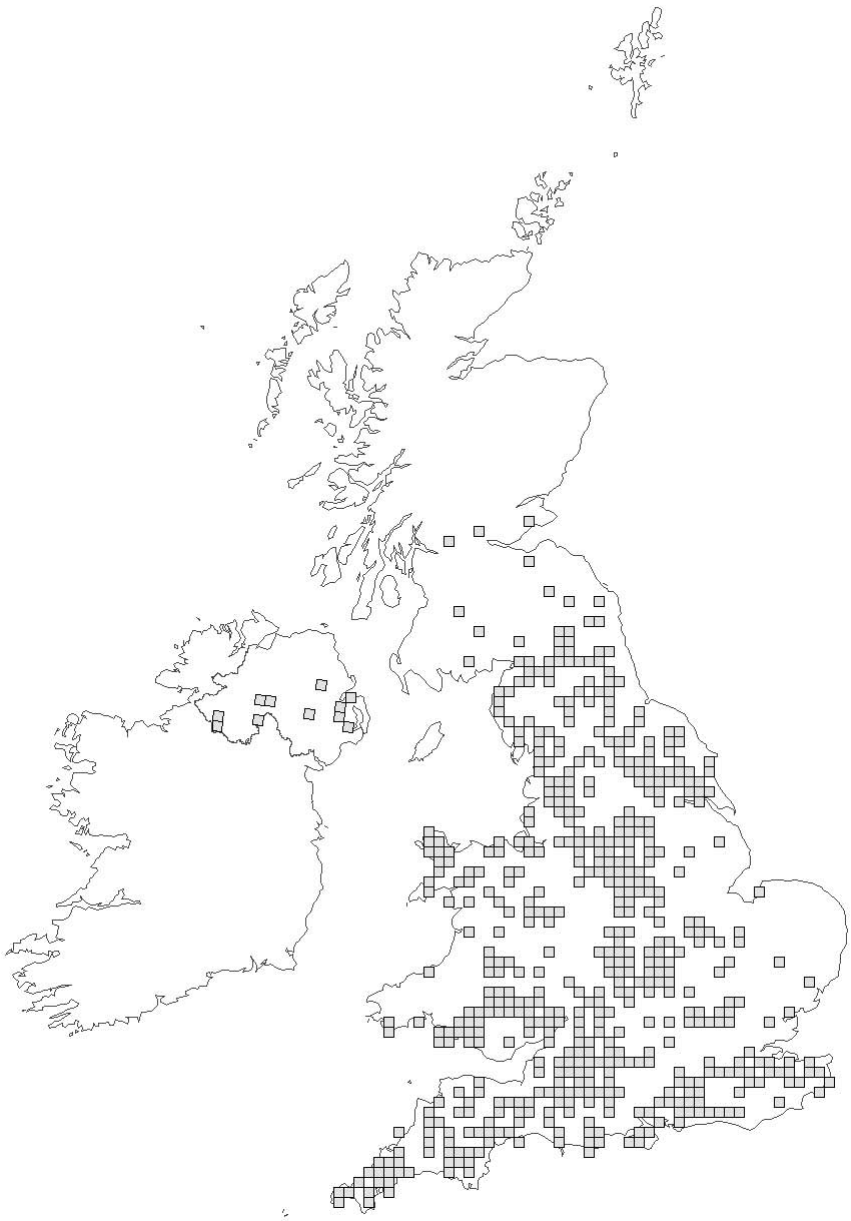
Species Name: *Myotis mystacinus*

1. National level	
Species Code	S1330
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	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 (Ed.) & TRACKING MAMMALS PARTNERSHIP. 2005. UK Mammals: Species Status and Population Trends. JNCC/Tracking Mammals Partnership. BOYE, P. & DIETZ, M. 2005. Research Report No 661: Development of good practice guidelines for woodland management for bats. English Nature, Peterborough. HAINES-YOUNG, R.H., BARR, C.J., BLACK, H.I.J., BRIGGS, D.J., BUNCE, R.G.H.,

	CLARKE, R.T., COOPER, A., DAWSON, F.H., FIRBANK, L.G., FULLER, R.M., FURSE, 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. and YALDEN, D. 1995. A review of British Mammals: population estimates and conservation status of British mammals other than cetaceans. JNCC, Peterborough. JOHANSSON, M. & DE JONG, J. 1996. Bat species diversity in a lake archipelago in central Sweden. Biodiversity & Conservation, 5, 1221-1229. JONES, K.E., ALTRINGHAM, J.D. & DEATON, R. 1996. Distribution and population densities of seven species of bat in northern England Journal of Zoology, 240, 788-798 NORBERG, U.M. & RAYNER, J.M.V. 1987. Ecological morphology and flight in bats (Mammalia: Chiroptera): Wing adaptations, flight performance, foraging strategy and echolocation. Philosophical Transactions of the Royal Society, London B, 316, 335-427. 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. VON HELEVERSON, O., HELLER, K.G., NEMETH. A., VOLLETH, M. & GOMBKOTO, P. 2001. Cryptic mammalian species: a new species of whiskered bat (Myotis aclathoe n sp) in Europe. Naturwissenshaft 88: 5, 217 – 223 Map Data Sources Biological Records Centre - Mammals Database 100 m; Environment and Heritage Service - Species Dataset; Natural England - Batsites inventory for Britain; via National Biodiversity Network (NBN) Gateway. Bat conservation Trust National Bat Monitoring Programme (NBMP) data to 2005 including: Hibernation Survey (1997-2005). Bat Conservation Trust Distribution atlas of bats in Britain and Ireland 1980-1999, GB data only.
2.3 Range of species in the biogeographic region or marine region	
2.3.1 Surface range of the species (sq km)	157982

2.3.2 Date of range determination	1980-2006			
2.3.3 Quality of data concerning range	Poor			
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	64000	Maximum	64000
	Units	Individuals		
2.4.2 Date of population estimation	1999			
2.4.3 Method used for population estimation	1 - Based on expert opinion			
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	3 - Direct human influence;			
2.4.9 Justification of % thresholds for trends (optional)	The 3.3% annual increase recorded here is not significant because of small sample sizes and wide confidence limits and is, therefore, not reported as an increase even though it is above the 1% threshold. For this reason the trend is considered currently stable.			
2.4.10 Main pressures	110 - Use of pesticides; 141 - Abandonment of pastoral systems; 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; 401 - continuous urbanisation; 502 - routes, autoroutes; 624 - mountaineering, rock climbing, speliology; 701 - water pollution; 803 - infilling of ditches, dykes, ponds, pools, marshes or pits;			
2.4.11 Threats	110 - Use of pesticides; 141 - Abandonment of pastoral systems; 151 - Removal of hedges and copses; 160 - General Forestry management; 164 - Forestry clearance; 165 - Removal of undergrowth; 166 - Removal of dead and dying trees; 401 - continuous urbanisation; 502 - routes, autoroutes; 624 - mountaineering, rock climbing, speliology; 701 - water pollution; 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	*M. mystacinus* requires a complex mosaic of habitats to support foraging, roosting and commuting behaviour. Boye & Dietz (2005) provides a good overview of this species' habitat requirements. Wing morphology and echolocation calls indicate that *M. mystacinus* forage in edge or cluttered habitats (Norberg & Rayner 1987), in dense woodlands, park-like forests, along forest edges, banks, hedges and in gardens, often in close proximity to water (von Helversen et al. 2001). Maximum foraging distance is approximately 1,250 metres from the roost, but in most cases less than 700 metres. A minimum population density of about 1.5 individuals/			

	km2 has been estimated in northern England, based on counts from maternity colonies (n=15) (Jones et al. 1996). The species is negatively affected by increased forest patchiness (Johansson & de Jong 1996). Summer roosts are mostly in buildings, in crevices and holes in buildings, more rarely in trees, in tree holes, and behind loose bark. In many cases the entrance to a roost is a very small opening. Bird or bat boxes are used by single individuals or as mating roosts, and only occasionally are boxes used by a maternity colony. In northern England, the mean size of maternity roosts was found to be 23.3 individuals (Jones et al. 1996). Caves, mines and cellars are used for hibernation. In most underground hibernation sites other bat species are also present, especially of the genus Myotis and Plecotus. The species can be found swarming at underground sites from August until October. The purpose is not fully understood, with mating or information transfer as possible explanations (Parsons et al. 2003).
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	Unknown
2.7 Complementary information	
2.7.1 Favourable reference range (sq km)	157982
2.7.2 Favourable reference population	
2.7.3 Suitable Habitat for the species	Unknown
2.7.4 Other relevant information	
2.8 Conclusions ***(assessment of conservation status at end of reporting period)***	
(2.3) Range	(FV) - Favourable
(2.4) Population	(XX) - Unknown
(2.5) Habitat for the species	(XX) - Unknown
(2.6) Future prospects	(XX) - Unknown
Overall assessment	(XX) - Unknown