**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**

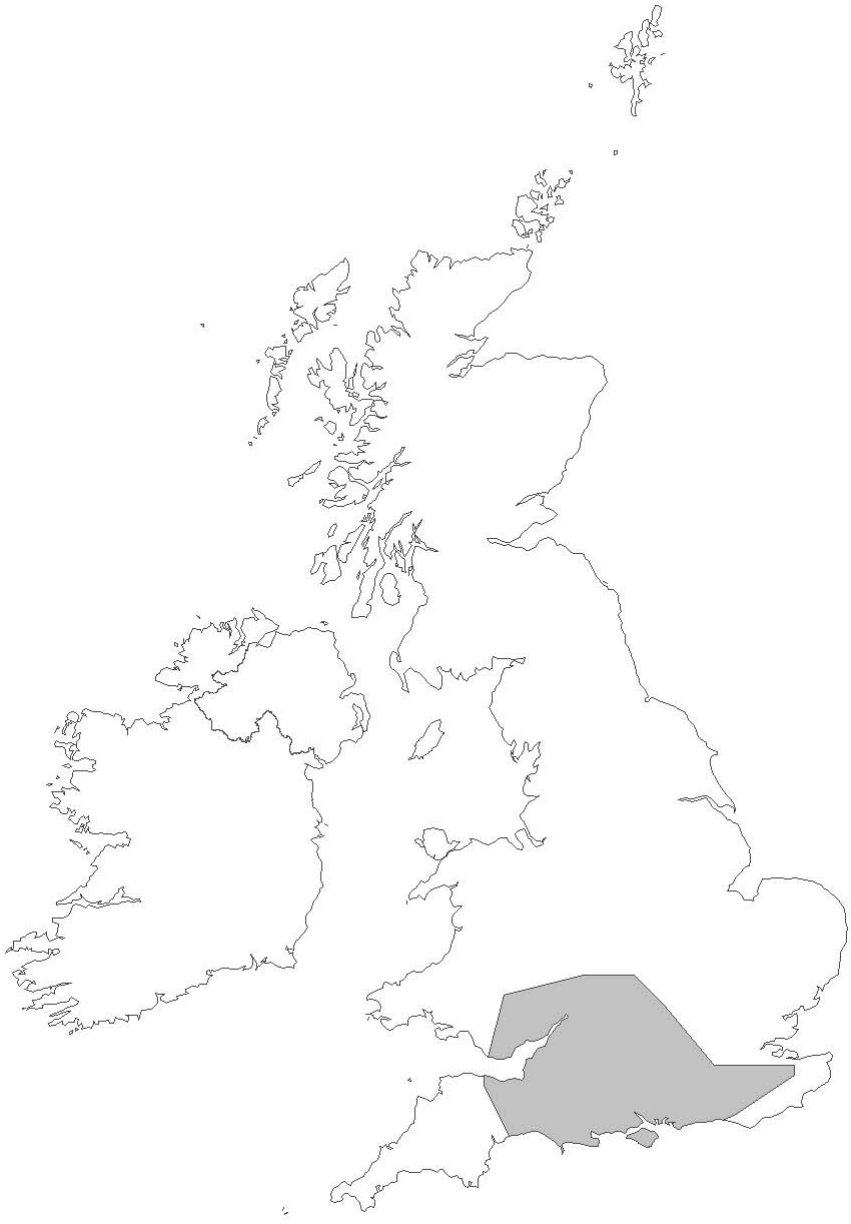
## Species:

## S1323 - *Myotis bechsteinii* - Bechstein's 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

Please cite as: Joint Nature Conservation Committee. 2007. *Second Report by the UK under Article 17 on the implementation of the Habitats Directive from January 2001 to December 2006*. Peterborough: JNCC. Available from: www.jncc.gov.uk/article17

## Species Name: *Myotis bechsteinii*

| 1. National level | |
|---|---|
| Species Code | S1323 |
| Member State | United Kingdom |
| Biogeographic regions concerned within the Member state | ATL |
| 1.1 Range map |  |

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|---|---|
| 1.2 Distribution map |  |
| **2. Biogeographic level** | |
| 2.1 Biogeographic region | ATL |
| 2.2 Published sources and/or websites | BARR, C.J. & GILLESPIE, M.K. 2000. Estimating hedgerow length and pattern characteristics in Great Britain using Countryside Survey data. Journal of Environmental Management, 60, 23-32.<br><br>BAT CONSERVATION TRUST. 2005. The National Bat Monitoring Programme Annual Report 2004. Available to download from Bat Conservation Trust website (www.bats.org.uk) and Tracking Mammals Partnership website (www.trackingmammals.org).<br><br>BATTERSBY, J. (Ed.) and Tracking Mammals Partnership 2005. UK Mammals: Species Status and Population Trends. JNCC/Tracking Mammals Partnership.<br><br>BOYE, P. & DIETZ, M. 2005. Research Report No 661: Development of good practice guidelines for woodland management for bats. English Nature, |

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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
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MCLEOD, C.R., YEO, M., BROWN, A.E., BURN, A.J., HOPKINS, J.J. & WAY, S.F., eds. 2002. The Habitiats Directive: Selection of Special Areas of Conservation in the UK, 2nd edn. Joint Nature Conservation Committee, Peterborough.

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

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

UK Species Action Plan available online at www.ukbap.org.uk. Information originally published in: UK Biodiversity Group Tranche 2 Action Plans - Volume I: Vertebrates and vascular plants (June 1998, Tranche 2, Vol I, p39)

Map Data Sources

Biological Records Centre - Mammals Database 100m; Natural England - Batsites inventory for Britain (via National Biodiversity Network (NBN) Gateway).

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| | Bat Conservation Trust - National Bat Monitoring Programme, Hibernation Survey (1997- 2005).<br><br>Bat Conservation Trust - Distribution atlas of bats in Britain and Ireland 1980-1999. Great Britain data only. | | | |
| **2.3 Range of species in the biogeographic region or marine region** | | | | |
| 2.3.1 Surface range of the species (sq km) | 31850 | | | |
| 2.3.2 Date of range determination | 1980-2006 | | | |
| 2.3.3 Quality of data concerning range | Poor | | | |
| 2.3.4 Range trend | Unknown (X) | | | |
| 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 | 1500 | Maximum | 1500 |
| | Units | Individuals | | |
| 2.4.2 Date of population estimation | 1995 | | | |
| 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 | Unknown (X) | | | |
| 2.4.6 Population trend magnitude (%) | Not applicable | | | |
| 2.4.7 Population trend period | 1994-2006 | | | |
| 2.4.8 Reasons for reported trend | Not applicable | | | |
| 2.4.9 Justification of % thresholds for trends (optional) | Not applicable | | | |
| 2.4.10 Main pressures | 110 - Use of pesticides; 151 - Removal of hedges and copses; 160 - General Forestry management; 164 - Forestry clearance; 165 - Removal of undergrowth; 166 - Removal of dead and dying trees; | | | |
| 2.4.11 Threats | 110 - Use of pesticides; 151 - Removal of hedges and copses; 160 - General Forestry management; 164 - Forestry clearance; 165 - Removal of undergrowth; 166 - Removal of dead and dying trees; | | | |
| **2.5 Habitat for the species in the biogeographic region or marine region** | | | | |
| 2.5 Habitats for the species | *M. bechsteinii* requires a complex mosaic of habitats to support foraging, roosting and commuting behaviour. The favoured habitat for maternity colonies is unevenly aged, ancient or semi-natural deciduous woodland with a high number of oaks in the species mix and a dense mixed species understorey. A minimum of 40-50 hectares of woodland is required to maintain an average maternity colony and very large continuous areas of high forest are less favoured than slightly fragmented structurally diverse woodlands. Small streams that have at least some water in the summer are an important requirement for most woodlands with maternity colonies, as is connectivity of woodland patches by hedgerows (Greenaway & Hill, 2004). | | | |

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| | Orchards with old trees also provide good foraging habitat, where they exist (Boye & Dietz 2005).<br><br>The size of individual home ranges differs in relation to habitat quality: In optimal areas a home range might be smaller than 3 hectares (old oak forests or oak and beech forests), at other places its size is 15-30 hectares. However, in coniferous forests home ranges of more than 100 hectares have been recorded. Females of a maternity colony seem to use individual foraging areas exclusively for several years. Home ranges of neighbouring colonies are separated. The species shows a comparatively small range of movement around the summer roost, sometimes less than 1 kilometre. Main foraging areas are usually at distances of 500-1,500 metres from the roost, but can be nearly 4km and tend to be smaller in continuous woodlands than fragmented forests (Boye & Dietz 2005).<br><br>Most summer roosts are in woodpecker holes, sometimes behind loose bark or in tree crevices. Maternity colonies also use bat boxes and move roost sites frequently throughout the season. Roosts are found at a height of 0.5-18 metres. An excellent woodland would provide in excess of a dozen large available roosts within the forage woodland and many other smaller holes (Greenaway & Hill, 2004)<br><br>In winter the species usually roosts singly in underground hibernation sites (caves, mines, cellars) Most of the population may hibernate in tree holes or behind loose bark, but this is not proven. Usually distances between summer and winter roosts are quite small but can be as much as 39 km. |
| 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) | 31850 |
| 2.7.2 Favourable reference population | 2000 |
| 2.7.3 Suitable Habitat for the species | Unknown |
| 2.7.4 Other relevant information | |
| ***2.8 Conclusions***<br>***(assessment of conservation status at end of reporting period)*** | |
| (2.3) Range | (FV) - Favourable |
| (2.4) Population | (U1) - Inadequate |
| (2.5) Habitat for the species | (XX) - Unknown |

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| (2.6) Future prospects | (XX) - Unknown |
| Overall assessment | (U1) - Inadequate |