

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

**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

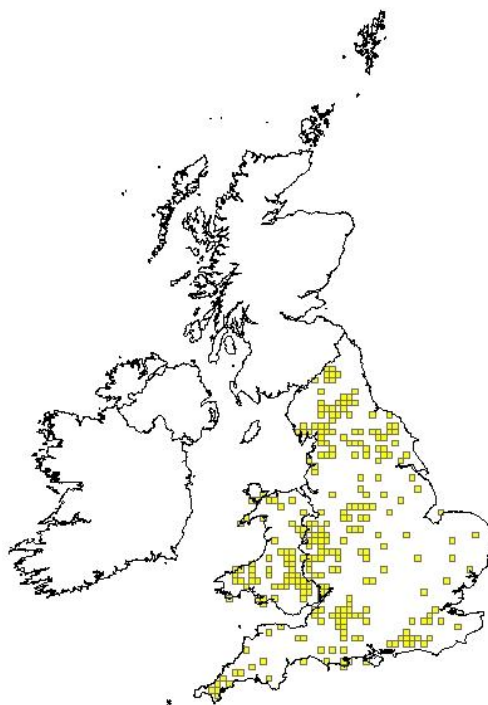
Species:

S1320 - Brandt's bat (*Myotis brandtii*)

## 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>S1320</b>
	<b>0.2.2 Species scientific name</b>	<b><i>Myotis brandtii</i></b>
	<b>0.2.3 Alternative species scientific name</b> Optional	
	<b>0.2.4 Common name</b> Optional	

<b>1.1 Maps</b>			
<b>1.1.1 Distribution map</b>	<b>True</b>	<b>Sensitive</b>	<b>False</b>
	The distribution map is based on species records which are considered to be representative of the range within the current reporting period. For further details see the 2013 Article 17 UK Approach document.		



<b>1.1.2 Method used - map</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information
<b>1.1.3 Year or period</b>	<b>1982-2012</b>
	The distribution map is based on species records which are considered to be representative of the range within the current reporting period. For further details see the 2013 Article 17 UK Approach document.

<b>1.1.4 Additional distribution map</b> Optional	<b>False</b>
<b>1.1.5 Range map</b>	<b>True</b> The range map was produced by applying the UK range mapping tool to the distribution map presented in 1.1.4. The alpha value for this species was 45km. For further details see the 2013 Article 17 UK Approach document.



<b>2.1 Biogeographical region &amp; marine regions</b>	<b>ATL</b>
<b>2.2 Published sources</b>	<p><b>BAT CONSERVATION TRUST, 2012. The National Bat Monitoring Programme. Annual Report 2011. Bat Conservation Trust, London. (<a href="http://www.bats.org.uk">www.bats.org.uk</a>)</b></p> <p><b>BATTERSBY, J (Ed.). 2005. UK Mammals: Species Status and Population Trends. JNCC/Tracking Mammals Partnership.</b></p> <p><b>BERGE, L &amp; JONES, G. 2008. Brandt's bat <i>Myotis brandtii</i>. Pp 315-319 in HARRIS, S. &amp; YALDEN, D.W. Mammals of the British Isles: Handbook, 4th edition. The Mammal Society, Southampton.799pp.</b></p> <p><b>BERGE, L. 2007. The effects of phylogenetic differences on resource partitioning between the cryptic species whiskered bat (<i>Myotis mystacinus</i>) and Brandt's bat (<i>M. brandtii</i>). Unpublished Thesis, University of Bristol, School of Biological Sciences, Bristol, UK, 162 pp.</b></p> <p><b>BOYE, P. &amp; DIETZ, M. 2005. Research Report No 661: Development of good practice guidelines for woodland management for bats. English Nature, Peterborough.</b></p> <p><b>CAREY, P.D., WALLIS, S.M., EMMETT, B.E., MASKELL, L.C., MURPHY, J., NORTON, L.R., SIMPSON, I.C., SMART, S.S. 2008. Countryside Survey: UK headline messages from 2007. Centre</b></p>

for Ecology & Hydrology, Wallingford.  
**GLOVER, A.M. & ALTRINGHAM, J.D. 2008.** Cave selection and use by swarming bat species. *Biological Conservation* 141(6):1493-1504.  
**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.  
**PARSONS, K.N, JONES, G., DAVIDSON-WATTS, I. GREENAWAY, F. 2003.** Swarming of bats at underground sites in Britain-implications for conservation, *Biological Conservation* 111(1): 63-70.  
**RICHARDSON, P. 2000.** Distribution atlas of bats in Britain and Ireland 1980-1999. Bat Conservation Trust, London.  
**SPEAKMAN, J.R. 1991.** The impact of predation by birds on bat populations in the British Isles. *Mammal Review*, 21, 123-142.  
**VON HELVERSEN, O., HELLER, K.G., NEMETH, A., VOLLETH, M. & GOMBKÖTÖ, P. 2001.** Cryptic mammalian species: a new species of whiskered bat (*Myotis aethiops* n sp) in Europe. *Naturwissenschaften* 88: 5, 217 - 223

#### UK distribution map data sources

##### Batsites inventory for Britain

**Distribution Atlas of Bats in Britain and Ireland (1980-1999): data spreadsheet**

**NBN Gateway Biological Records Centre GA000074** Extracted 21/08/2012 Mammal records from Britain from the Atlas of Mammals (1993), with some subsequent records

**NBN Gateway Biological Records In Essex GA001035** Extracted 21/08/2012 Bat records for Essex from 1971 - present.

**NBN Gateway Bristol Regional Environmental Records Centre GA001100** Extracted 21/08/2012 BRERC JNCC May 2012

**NBN Gateway Cumbria Biodiversity Data Centre GA000871** Extracted 21/08/2012 Cumbria Biodiversity Data Centre.

**Vertebrate Observation Records, other than Birds. Pre-2010 for Cumbria**

**NBN Gateway Derbyshire Biological Records Centre GA000622** Extracted 21/08/2012 Derbyshire & Peak District Protected

**Species Database (Summary of available records 1970- 2008)**

**NBN Gateway Devon Biodiversity Records Centre GA000688** Extracted 21/08/2012 Devon bat roost data

**NBN Gateway Dorset Environmental Records Centre GA001010** Extracted 21/08/2012 Dorset Important Species 2012 for Natural England use only

	<p><b>NBN Gateway EcoRecord GA000722 Extracted 21/08/2012 Mammal Records held by EcoRecord</b></p> <p><b>NBN Gateway Environmental Records Information Centre North East GA000604 Extracted 21/08/2012 ERIC North East sensitive species records</b></p> <p><b>NBN Gateway Herefordshire Biological Records Centre GA001084 Extracted 21/08/2012 Herefordshire Biological Records Centre Species Records</b></p> <p><b>NBN Gateway Lancashire Environment Record Network GA001068 Extracted 21/08/2012 West Lancashire Bat Records</b></p> <p><b>NBN Gateway Lincolnshire Biodiversity Partnership GA000921 Extracted 21/08/2012 Lincolnshire Bats (sightings)</b></p> <p><b>NBN Gateway National Trust GA001105 Extracted 21/08/2012 Extract of National Trust species database covering Article 17 species</b></p> <p><b>NBN Gateway Natural England GA000161 Extracted 21/08/2012 Batsites inventory for England (1949-2011)</b></p> <p><b>NBN Gateway North &amp; East Yorkshire Ecological Data Centre GA000840 Extracted 21/08/2012 North and East Yorkshire Ecological Data Centre - Sensitive Records from all taxonomic groups</b></p> <p><b>NBN Gateway Nottinghamshire Biological and Geological Records Centre GA000542 Extracted 21/08/2012 Nottinghamshire bat dataset</b></p> <p><b>NBN Gateway Shropshire Ecological Data Network GA000693 Extracted 21/08/2012 Shropshire Ecological Data Network Database</b></p> <p><b>NBN Gateway Suffolk Biological Records Centre GA000623 Extracted 21/08/2012 Suffolk Biological Records Centre (SBRC) dataset</b></p> <p><b>NBN Gateway Sussex Biodiversity Record Centre GA001076 Extracted 21/08/2012 SxBRC Full dataset for Environment Agency and Natural England use only.</b></p> <p><b>NBN Gateway Thames Valley Environmental Records Centre GA000739 Extracted 21/08/2012 Natural England Bat Records for Berkshire and Oxfordshire (Held by Thames Valley Environmental Records Centre)</b></p> <p><b>NBN Gateway The Bat Conservation Trust GA000612 Extracted 21/08/2012 Hibernation Survey</b></p> <p><b>NBN Gateway The Bat Conservation Trust GA000616 Extracted 21/08/2012 Colony Count Survey</b></p> <p><b>NBN Gateway Wiltshire and Swindon Biological Records Centre GA000630 Extracted 21/08/2012 Wiltshire &amp; Swindon Incidental Species Records</b></p> <p><b>NBN Gateway Wiltshire and Swindon Biological Records Centre GA001098 Extracted 21/08/2012 Wiltshire and Swindon Habitats Directive (Article 17) Species - Reporting Group Use Only</b></p> <p><b>NBN Gateway Worcestershire Biological Records Centre GA000712 Extracted 21/08/2012 WBRC Species data for Worcestershire collated by date.</b></p> <p><b>The Vincent Wildlife Trust Bat Box data. Sent to JNCC (LH) via Jean Matthews (CCW) 23/08/2012</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer exported from Cofnod Database on 27/04/2012</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Ad</b></p>
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	<p> <b>hoc records LRC_REF BIS</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat data, National Trust, Ceredigion &amp; Carmarthenshire WWBIC</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat data, National Trust, Pembrokeshire WWBIC</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat roosts database, Pembrokeshire WWBIC</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat roosts database, Pembrokeshire LRC_REF WWBIC</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat Sites in BBNP - Brecknock Wildlife Trust LRC_REF BIS</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Bats CCW Llandeilo LRC_REF WWBIC</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV BIS casual records -verified LRC_REF BIS</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Brecknockshire Mammals VC42 2008 LRC_REF BIS</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Breconshire Mammals Update</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW (Cardiff) Map Info Data</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW Bat Database</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW Ceredigion Bats</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW- HQ - Terr- Bat Roosts Database</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW Montgomeryshire BAP Species Files</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW Montgomeryshire General Bat Files</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Gwent Bat Survey [SEWBReC]</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Mammals Carmarthenshire</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Radnorshire Mammal Records</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV SEWBReC Casual Records</b>  <b>Wales LRC Priority &amp; Protected Species layer Survey_DMV Torfaen Miscellaneous Reports LRC_REF SEWBReC</b> </p> <p>UK Distribution Map data sources</p> <p>           Batsites inventory for Britain            Distribution Atlas of Bats in Britain and Ireland (1980-1999): data spreadsheet            NBN Gateway Biological Records Centre GA000074 Extracted 21/08/2012 Mammal records from Britain from the Atlas of Mammals (1993), with some subsequent records            NBN Gateway Biological Records In Essex GA001035 Extracted 21/08/2012 Bat records for Essex from 1971 - present.            NBN Gateway Bristol Regional Environmental Records Centre GA001100 Extracted 21/08/2012 BRERC JNCC May 2012         </p>
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	<p>Matthews (CCW) 23/08/2012  Wales LRC Priority &amp; Protected Species layer exported from Cofnod Database on 27/04/2012  Wales LRC Priority &amp; Protected Species layer Survey_DMV Ad hoc records LRC_REF BIS  Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat data, National Trust, Ceredigion &amp; Carmarthenshire WWBIC  Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat data, National Trust, Pembrokeshire WWBIC  Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat roosts database, Pembrokeshire WWBIC  Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat roosts database, Pembrokeshire LRC_REF WWBIC  Wales LRC Priority &amp; Protected Species layer Survey_DMV Bat Sites in BBNP - Brecknock Wildlife Trust LRC_REF BIS  Wales LRC Priority &amp; Protected Species layer Survey_DMV Bats CCW Llandeilo LRC_REF WWBIC  Wales LRC Priority &amp; Protected Species layer Survey_DMV BIS casual records -verified LRC_REF BIS  Wales LRC Priority &amp; Protected Species layer Survey_DMV Brecknockshire Mammals VC42 2008 LRC_REF BIS  Wales LRC Priority &amp; Protected Species layer Survey_DMV Breconshire Mammals Update  Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW (Cardiff) Map Info Data  Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW Bat Database  Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW Ceredigion Bats  Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW- HQ - Terr- Bat Roosts Database  Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW Montgomeryshire BAP Species Files  Wales LRC Priority &amp; Protected Species layer Survey_DMV CCW Montgomeryshire General Bat Files  Wales LRC Priority &amp; Protected Species layer Survey_DMV Gwent Bat Survey [SEWBReC]  Wales LRC Priority &amp; Protected Species layer Survey_DMV Mammals Carmarthenshire  Wales LRC Priority &amp; Protected Species layer Survey_DMV Radnorshire Mammal Records  Wales LRC Priority &amp; Protected Species layer Survey_DMV SEWBReC Casual Records  Wales LRC Priority &amp; Protected Species layer Survey_DMV Torfaen Miscellaneous Reports LRC_REF SEWBReC</p>
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### 2.3 Range

#### 2.3.1 Surface area Range

**134344.86**

The surface area of the range was calculated from the map presented in 1.1.5. For further details see the 2013 Article 17 UK Approach document.

#### 2.3.2 Method used

**Estimate based on partial data with some extrapolation and/or**



<b>Surface area of Range</b>	<b>modelling</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
<b>2.3.3 Short-term trend Period</b>	<b>2001-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
<b>2.3.4 Short term trend Trend direction</b>	<b>stable</b>	
	The short term trend direction was derived by comparing the range map in 1.1.5 with the range map produced in the 2007 report, by considering the range trend in the 2007 report, and by considering any further information provided by the UK country conservation agencies. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.3.5 Short-term trend Magnitude</b> Optional	<b>a) Minimum</b>	
	<b>b) Maximum</b>	
<b>2.3.6 Long-term trend Period</b> Optional	<b>1989-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
<b>2.3.7 Long-term trend Trend direction</b> Optional	<b>unknown</b>	
	The long term trend direction was derived by comparing the range map in 1.1.5 with the range map produced in the 2007 report, by considering the range trend in the 2007 report, and by considering any further information provided by the UK country conservation agencies. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.3.8 Long-term trend Magnitude</b> Optional	<b>a) Minimum</b>	
	<b>b) Maximum</b>	
<b>2.3.9 Favourable reference range</b>	<b>a) Value in km<sup>2</sup></b>	<b>126401</b>
	The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. For further details see the 2013 Article 17 UK Approach document.	
	<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>The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. The value is considered to be large enough to support a viable population and no lower than the range estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document.</b>
	The FRV reported in 2007 has been updated by running the data used for reporting in 2007 through the revised UK range mapping tool. The value is considered to be large enough to support a viable population and no lower than the range estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document.	
<b>2.3.10 Reason for change</b> Is the difference between the reported value in 2.3.1 and the previous reporting round mainly due to...	<b>a) Genuine change?</b>	<b>False</b>
	The small increase in range is probably due to better data.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>True</b>
	The small increase in range is probably due to better data.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
Use of a revised UK range mapping tool had little effect on the calculation for surface area of range.		

<b>2.4 Population</b>		
<b>2.4.1 Population size estimation</b> (using individuals or agreed exceptions where possible)	<b>a) Unit</b>	<b>number of individuals</b>
	The population unit is the same as reported in 2007.	
	<b>b) Minimum</b>	<b>29500</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
	<b>c) Maximum</b>	<b>29500</b>
For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information		
<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>1995-2011</b>	The population estimate was made in 1995, but monitoring until 2011 suggests the population has remained stable, so the estimate remains applicable, albeit a low reliability estimate. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.
<b>2.4.5 Method used</b> <b>Population size</b>	<b>Estimate based on expert opinion with no or minimal sampling</b>	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information
<b>2.4.6 Short-term trend</b> <b>Period</b>	<b>1999-2011</b>	Time period assessed by the National Bat Monitoring Programme.
<b>2.4.7 Short-term trend</b> <b>Trend direction</b>	<b>stable</b>	Short term trend is based on the National Bat monitoring Programme hibernation count for whiskered/brandts bats. The trend analysis between 1999 and 2011 suggested an increase (Smoothed index change min: 8, max: 97). However, because this is a combined trend there is uncertainty of the trend for each individual species. The two species which will have differing ecological requirements and therefore potentially different factors affecting their populations. The trend reported is stable, on the basis that it is likely that both the whiskered and brandt's bat populations are at least stable, and there is no evidence for a decline.
<b>2.4.8 Short-term trend</b> <b>Magnitude</b> Optional	<b>a) Minimum</b>	<b>8</b>
		Smoothed trend from National Bat Monitoring Programme hibernation survey for whiskered/brandts bats.
	<b>b) Maximum</b>	<b>97</b>
		Smoothed trend from National Bat Monitoring Programme hibernation survey for whiskered/brandts bats.
	<b>c) Confidence interval</b>	<b>95</b>

<b>2.4.9 Short-term trend Method used</b>	<b>Estimate based on partial data with some extrapolation and/or modelling</b>
	The species is reasonably well recorded by the NBMP. However, it is very hard to distinguish from the Whiskered bat so the NBMP survey treats them together.
<b>2.4.10 Long-term trend – Period</b>	<b>1989-2012</b>
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information
<b>2.4.11 Long-term trend Trend direction</b>	<b>unknown</b>
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information
<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>Absent data</b>
Optional	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information
<b>2.4.14 Favourable reference population</b>	<b>a) Number of individuals/agreed exceptions/other units</b>
	<b>29500</b>
	The FRV for population has been set at the current estimate as this is believed to be big enough to be viable and is no lower than the population in 1994.
	<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>The FRV for population has been set at the current estimate as this is believed to be big enough to be viable and is no lower than the population in 1994.</b>
	The FRV for population has been set at the current estimate as this is believed to be big enough to be viable and is no lower than the

	population in 1994.	
<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:	<b>a) Genuine change?</b>	<b>False</b>
	There is negligible difference between the current population estimate and the population reported in 2007. Any difference is thought to be due to better data.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>True</b>
	There is negligible difference between the current population estimate and the population reported in 2007. Any difference is thought to be due to better data.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
	There is negligible difference between the current population estimate and the population reported in 2007. Any difference is thought to be due to better data.	

<b>2.5 Habitat for the species</b>		
<b>2.5.1 Area estimation</b>	<b>27479</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.  There is thought to be a sufficient amount of habitat in the UK to support a viable population of the species.	
<b>2.5.2 Year or period</b>	<b>1980-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.3 Method used Habitat for the species</b>	<b>Estimate based on expert opinion with no or minimal sampling</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.4 Quality of the habitat</b>	<b>a) Habitat quality</b>	<b>Unknown</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<b>b) Assessment method</b>	<b>This species uses a mosaic of different habitats. There is insufficient information available to assess quality.</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.5 Short-term trend Period</b>	<b>2001-2012</b>	
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	

<b>2.5.6 Short-term trend</b>	<b>unknown</b>	
<b>Trend direction</b>	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.7 Long-term trend</b>	<b>1989-2012</b>	
<b>Period</b>	Optional For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.8 Long-term trend</b>	<b>unknown</b>	
<b>Trend direction</b>	Optional For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.5.9 Area of suitable habitat for the species</b>	<b>a) Value in km<sup>2</sup></b>	<b>27479</b>
	<b>b) Absence of data indicated as '0'</b>	
<b>2.5.10 Reason for change</b> Is the difference between the value reported at 2.5.1 and the previous reporting round mainly due to	<b>a) Genuine change?</b>	<b>False</b>
	Surface area of habitat was reported as unknown in 2007 so no comparison is possible.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>
	Surface area of habitat was reported as unknown in 2007 so no comparison is possible.	
	<b>c) Use of different method (e.g. "Range tool")?</b>	<b>False</b>
	Surface area of habitat was reported as unknown in 2007 so no comparison is possible.	

<b>2.6 Main pressures</b>		
<b>a) Pressure</b>	<b>b) Ranking</b>	<b>c) Pollution qualifier</b>
	H = high importance (max 5 entries) M = medium importance L = low importance	
A04: grazing	H	
A07: use of biocides, hormones and chemicals	H	
A10: Restructuring agricultural land holding	H	
B02: Forest and Plantation management & use	H	
G05: Other human intrusions and disturbances	H	
B03: forest exploitation without replanting or natural regrowth	M	

D01: Roads, paths and railroads	M	
E01: Urbanised areas, human habitation	M	
E06: Other urbanisation, industrial and similar activities	M	
J02: human induced changes in hydraulic conditions	M	
G01: Outdoor sports and leisure activities, recreational activities	L	

Note, the category E01 - Urbanised areas, human habitation, - includes the disturbance caused by artificial lighting. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

**2.6.1 Method used – Pressures**

**based only on expert judgements**

For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

<b>2.7 Threats</b>		
<b>a) Threat</b>	<b>b) Ranking</b>	<b>c) Pollution qualifier</b>
	H = high importance (max 5 entries) M = medium importance L = low importance	
A04: grazing	H	
A07: use of biocides, hormones and chemicals	H	
A10: Restructuring agricultural land holding	H	
B02: Forest and Plantation management & use	H	
E06: Other urbanisation, industrial and similar activities	M	
G05: Other human intrusions and disturbances	M	
J02: human induced changes in hydraulic conditions	M	
B03: forest exploitation without replanting or natural regrowth	L	
D01: Roads, paths and railroads	L	
E01: Urbanised areas, human habitation	L	

G01: Outdoor sports and leisure activities, recreational activities	L	

Note, the category E01 - Urbanised areas, human habitation, - includes the disturbance caused by artificial lighting. For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

<b>2.7.1 Method used – Threats</b>	<b>expert opinion</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information.

## 2.8 Complementary information

### 2.8.1 Justification of % thresholds for trends

### 2.8.2 Other relevant information

**This species has been reasonably well recorded by local bat groups and during monitoring surveys organised by the National Bat Monitoring Programme. However, there is difficulty in separating this species from *M. mystacinus*, resulting in the NBMP reporting a joint trend.**

### 2.8.3 Trans-boundary assessment

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

### 2.9.1 Range

**a) Conclusion**      **Favourable**

Range has been assessed as Favourable because range is greater than FRV and the short term range trend is stable.

**b) Qualifier**

### 2.9.2 Population

**a) Conclusion**      **Favourable**

Population has been assessed as Favourable because it is equal to the favourable reference population and the short term trend is thought to be at least stable. However, care should be taken over the interpretation of the short term trend due to difficulties distinguishing between the Whiskered and Brandt's bat in the National Bat Monitoring Programme's Hibernation Survey. This survey reports a combined trend for both species.

**b) Qualifier**

### 2.9.3 Habitat for the species

**a) Conclusion**      **Favourable**

Habitat has been assessed as Favourable because there is thought to be sufficient amount of habitat for the species to be viable, and although



	habitat quality and trend are unknown, the fact that range and population are favourable suggests that habitat is not a major problem for this species.	
	<b>b) Qualifier</b>	
<b>2.9.4 Future prospects</b>	<b>a) Conclusion</b>	<b>Favourable</b>
	Future prospects is assessed as Favourable on the basis of assessments of the future prospects of the three parameters, range, population and habitat for species: Range future prospects: Good Population future prospects: Good Habitat future prospects: Good Overall future prospects: Favourable.  This species is offered full protection under national and European legislation.	
	<b>b) Qualifier</b>	
<b>2.9.5 Overall assessment of Conservation Status</b>	<b>Favourable</b>	
	Overall assessment is Favourable because all parameter assessments are Favourable.	
<b>2.9.6 Overall trend in Conservation Status</b>		

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

<b>3.1 Population</b>		
<b>3.1.1 Population size</b>  Estimation of population size included in the SAC network	<b>a) Unit</b>	
	<b>b) Minimum</b>	
	<b>c) Maximum</b>	

<b>3.1.2 Method used</b>	
<b>3.1.3 Trend of population size within the network</b> (short-term trend)	
Optional	

<b>3.2 Conservation measures</b>															
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