

**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

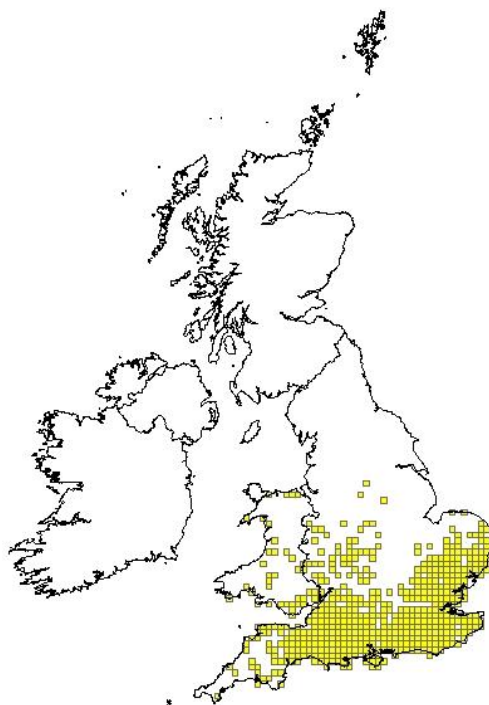
Species:

S1327 - Serotine (*Eptesicus serotinus*)

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

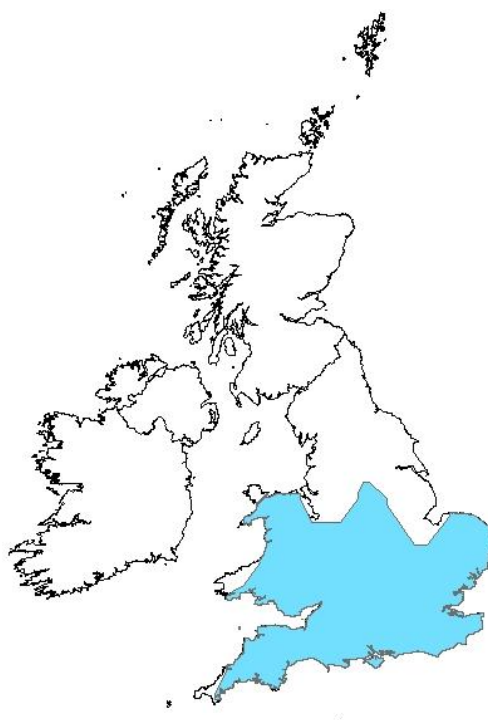
<i>Field name</i>	<i>Brief explanations</i>	
<b>0.2 Species</b>	<b>0.2.1 Species code</b>	<b>S1327</b>
	<b>0.2.2 Species scientific name</b>	<b><i>Eptesicus serotinus</i></b>
	<b>0.2.3 Alternative species scientific name</b> Optional	
	<b>0.2.4 Common name</b> Optional	

<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>2000-2011</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. (www.bats.org.uk)</b></p> <p><b>BATTERSBY, J (Ed.). 2005. UK Mammals: Species Status and Population Trends. JNCC/Tracking Mammals Partnership.</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>CATTO, C.M.C., HUTSON, A.M. &amp; RACEY, P.A. 1994. The diet of <i>Eptesicus serotinus</i> in southern England. Journal of Zoology, London, 238, 623-632.</b></p> <p><b>CATTO, C.M.C., HUTSON, A.M., RACEY, P.A. &amp; STEPHENSON, P.J. 1996. Foraging behaviour and habitat use of the serotine bat (<i>Eptesicus serotinus</i>) in southern England. Journal of Zoology, London, 235, 635-644</b></p>

**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.**

**HUTTERER, R., IVANOVA, T., MEYER-CORDS, C. & RODRIGUES, L. 2005. Bat Migrations in Europe: A review of banding data and literature. Federal Agency for Nature Conservation, Bonn.**

**HUTSON, A.M. 2008. Serotine *Eptesicus serotinus*. Pp 356-360 in HARRIS, S. & YALDEN, D.W. Mammals of the British Isles: Handbook, 4th edition. The Mammal Society, Southampton.799pp.**

**MITCHELL-JONES, T.J. 2010. Bats in houses - the conservation challenge. Pp 365-378 in Species Management: challenges and solutions for the 21st century. BAXTER, J.M. & GALBRAITH, C.A. TSO Scotland, Edinburgh.**

**MITCHELL-JONES, T.J. & CARLIN, C. 2009 Bats and onshore wind turbines, Interim Guidance. Natural England Technical Information Note TIN051.[www.naturalengland.org.uk](http://www.naturalengland.org.uk)**

**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. UK distribution map data sources**

**Bat colony survey data**  
**Bats and Mammals Road Survey Data**  
**CCW HQ & Licence reports. CCW licence returns Sent to JNCC 17/10/2012**  
**CCW HQ & Licence reports. CCW licence returns Sent to JNCC 21/08/2012**  
**Devon incidental species records 1950-2002**  
**Distribution Atlas of Bats in Britain and Ireland (1980-1999): data spreadsheet**  
**Mammals Database**  
**NBN Gateway BCT Noctule pip & serotine field survey Sent to JNCC 21/08/2012**  
**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 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 GA000049 Extracted 21/08/2012 Devon incidental species records 1950-2002**  
**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**

	<p><b>Natural England use only</b></p> <p><b>NBN Gateway EcoRecord GA000722 Extracted 21/08/2012</b></p> <p><b>Mammal Records held by EcoRecord</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 National Trust GA001105 Extracted 21/08/2012</b></p> <p><b>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 Nottinghamshire Biological and Geological Records Centre GA000542 Extracted 21/08/2012</b></p> <p><b>Nottinghamshire bat dataset</b></p> <p><b>NBN Gateway Shropshire Ecological Data Network GA000693</b></p> <p><b>Extracted 21/08/2012 Shropshire Ecological Data Network Database</b></p> <p><b>NBN Gateway Suffolk Biological Records Centre GA000623</b></p> <p><b>Extracted 21/08/2012 Suffolk Biological Records Centre (SBRC) dataset</b></p> <p><b>NBN Gateway Sussex Biodiversity Record Centre GA001058</b></p> <p><b>Extracted 21/08/2012 UK Habitat Directive data</b></p> <p><b>NBN Gateway Sussex Biodiversity Record Centre GA001076</b></p> <p><b>Extracted 21/08/2012 SxBRC Full dataset for Environment Agency and Natural England use only.</b></p> <p><b>NBN Gateway The Bat Conservation Trust GA000437</b></p> <p><b>Extracted 21/08/2012 The BCT/MTUK Bats &amp; Roadside Mammals Survey</b></p> <p><b>NBN Gateway The Bat Conservation Trust GA000570</b></p> <p><b>Extracted 21/08/2012 Bechstein's Bat Survey Project</b></p> <p><b>NBN Gateway The Bat Conservation Trust GA000577</b></p> <p><b>Extracted 21/08/2012 Noctule, Serotine and Pipistrelle Field Survey</b></p> <p><b>NBN Gateway The Bat Conservation Trust GA000612</b></p> <p><b>Extracted 21/08/2012 Hibernation Survey</b></p> <p><b>NBN Gateway The Bat Conservation Trust GA000616</b></p> <p><b>Extracted 21/08/2012 Colony Count Survey</b></p> <p><b>NBN Gateway Wiltshire and Swindon Biological Records Centre GA000630</b></p> <p><b>Extracted 21/08/2012 Wiltshire &amp; Swindon Incidental Species Records</b></p> <p><b>NBN Gateway Wiltshire and Swindon Biological Records Centre GA001098</b></p> <p><b>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</b></p> <p><b>Extracted 21/08/2012 WBRC Species data for Worcestershire collated by date.</b></p> <p><b>NBN Gateway. BCT bats &amp; Roadside Mammals Sent to JNCC 21/08/2012</b></p> <p><b>Reported to CCW W region. A477 Road Scheme Survey Report not yet sent to LRC. Sent to JNCC 18/10/2012</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. Bat data, National Trust, Ceredigion &amp; Carmarthenshire WWBIC Sent to JNCC 21/08/2012</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. Bat roosts database, Pembrokeshire WWBIC. Sent to JNCC 21/08/2012</b></p>
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	<p><b>Wales LRC Priority &amp; Protected Species layer. Bats &amp; Roadside Mammals Survey SEWBRcC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. Bats CCW Llandeilo WWBIC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. BIS Casual Records</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. Cardiff SEWBRcC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. CCW (Cardiff) Bat Casework File 2007 SEWBRcC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. CCW Ceredigion Bats WWBIC</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. Glamorgan Mammal Records SEWBRcC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. Gwent Bat Survey SEWBRcC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. Gwent Wildlife Trust Misc SEWBRcC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. Link Ecology-Misc records SEWBRcC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. Monmouthshire Mammal Records SEWBRcC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. Neath Port Talbot Margam Quarry SEWBRcC</b></p> <p><b>Wales LRC Priority &amp; Protected Species layer. Pembrey Coast WWBIC</b></p> <p><b>Welsh Government Tir Gofal bat data 2009-2011. Sent to JNCC 18/10/2012</b></p> <p>UK Distribution Map data sources</p> <p>Bat colony survey data</p> <p>Bats and Mammals Road Survey Data</p> <p>CCW HQ &amp; Licence reports. CCW licence returns Sent to JNCC 17/10/2012</p> <p>CCW HQ &amp; Licence reports. CCW licence returns Sent to JNCC 21/08/2012</p> <p>Devon incidental species records 1950-2002</p> <p>Distribution Atlas of Bats in Britain and Ireland (1980-1999): data spreadsheet</p> <p>Mammals Database</p> <p>NBN Gateway BCT Noctule pip &amp; serotine field survey Sent to JNCC 21/08/2012</p> <p>NBN Gateway Biological Records In Essex GA001035 Extracted 21/08/2012 Bat records for Essex from 1971 - present.</p> <p>NBN Gateway Bristol Regional Environmental Records Centre GA001100 Extracted 21/08/2012 BRERC JNCC May 2012</p> <p>NBN Gateway Derbyshire Biological Records Centre GA000622 Extracted 21/08/2012 Derbyshire &amp; Peak District Protected Species Database (Summary of available records 1970- 2008)</p> <p>NBN Gateway Devon Biodiversity Records Centre GA000049 Extracted 21/08/2012 Devon incidental species records 1950-2002</p> <p>NBN Gateway Devon Biodiversity Records Centre GA000688 Extracted</p>
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	<p>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  NBN Gateway EcoRecord GA000722 Extracted 21/08/2012 Mammal  Records held by EcoRecord  NBN Gateway Herefordshire Biological Records Centre GA001084  Extracted 21/08/2012 Herefordshire Biological Records Centre Species  Records  NBN Gateway National Trust GA001105 Extracted 21/08/2012 Extract of  National Trust species database covering Article 17 species  NBN Gateway Natural England GA000161 Extracted 21/08/2012 Batsites  inventory for England (1949-2011)  NBN Gateway Nottinghamshire Biological and Geological Records Centre  GA000542 Extracted 21/08/2012 Nottinghamshire bat dataset  NBN Gateway Shropshire Ecological Data Network GA000693 Extracted  21/08/2012 Shropshire Ecological Data Network Database  NBN Gateway Suffolk Biological Records Centre GA000623 Extracted  21/08/2012 Suffolk Biological Records Centre (SBRC) dataset  NBN Gateway Sussex Biodiversity Record Centre GA001058 Extracted  21/08/2012 UK Habitat Directive data  NBN Gateway Sussex Biodiversity Record Centre GA001076 Extracted  21/08/2012 SxBRC Full dataset for Environment Agency and Natural  England use only.  NBN Gateway The Bat Conservation Trust GA000437 Extracted  21/08/2012 The BCT/MTUK Bats &amp; Roadside Mammals Survey  NBN Gateway The Bat Conservation Trust GA000570 Extracted  21/08/2012 Bechstein's Bat Survey Project  NBN Gateway The Bat Conservation Trust GA000577 Extracted  21/08/2012 Noctule, Serotine and Pipistrelle Field Survey  NBN Gateway The Bat Conservation Trust GA000612 Extracted  21/08/2012 Hibernation Survey  NBN Gateway The Bat Conservation Trust GA000616 Extracted  21/08/2012 Colony Count Survey  NBN Gateway Wiltshire and Swindon Biological Records Centre  GA000630 Extracted 21/08/2012 Wiltshire &amp; Swindon Incidental Species  Records  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  NBN Gateway Worcestershire Biological Records Centre GA000712  Extracted 21/08/2012 WBRC Species data for Worcestershire collated  by date.  NBN Gateway. BCT bats &amp; Roadside Mammals Sent to JNCC  21/08/2012  Reported to CCW W region. A477 Road Scheme Survey Report not yet  sent to LRC. Sent to JNCC 18/10/2012  The Vincent Wildlife Trust Bat Box data. Sent to JNCC (LH) via Jean  Matthews (CCW) 23/08/2012  Wales LRC Priority &amp; Protected Species layer. Bat data, National Trust,  Ceredigion &amp; Carmarthenshire WWBIC Sent to JNCC 21/08/2012  Wales LRC Priority &amp; Protected Species layer. Bat roosts database,  Pembrokeshire WWBIC. Sent to JNCC 21/08/2012  Wales LRC Priority &amp; Protected Species layer. Bats &amp; Roadside Mammals  Survey SEWBReC  Wales LRC Priority &amp; Protected Species layer. Bats CCW Llandeilo</p>
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	<p>WWBIC</p> <p>Wales LRC Priority &amp; Protected Species layer. BIS Casual Records</p> <p>Wales LRC Priority &amp; Protected Species layer. Cardiff SEWBRcC</p> <p>Wales LRC Priority &amp; Protected Species layer. CCW (Cardiff) Bat Casework File 2007 SEWBRcC</p> <p>Wales LRC Priority &amp; Protected Species layer. CCW Ceredigion Bats WWBIC</p> <p>Wales LRC Priority &amp; Protected Species layer. Exported from Cofnod Database on 27/04/2012</p> <p>Wales LRC Priority &amp; Protected Species layer. Glamorgan Mammal Records SEWBRcC</p> <p>Wales LRC Priority &amp; Protected Species layer. Gwent Bat Survey SEWBRcC</p> <p>Wales LRC Priority &amp; Protected Species layer. Gwent Wildlife Trust Misc SEWBRcC</p> <p>Wales LRC Priority &amp; Protected Species layer. Link Ecology- Misc records SEWBRcC</p> <p>Wales LRC Priority &amp; Protected Species layer. Monmouthshire Mammal Records SEWBRcC</p> <p>Wales LRC Priority &amp; Protected Species layer. Neath Port Talbot Margam Quarry SEWBRcC</p> <p>Wales LRC Priority &amp; Protected Species layer. Pembrey Coast WWBIC</p> <p>Welsh Government Tir Gofal bat data 2009-2011. Sent to JNCC 18/10/2012</p>

<b>2.3 Range</b>					
<b>2.3.1 Surface area Range</b>	<p><b>100171</b></p> <p>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.</p>				
<b>2.3.2 Method used Surface area of Range</b>	<p><b>Estimate based on partial data with some extrapolation and/or modelling</b></p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information</p>				
<b>2.3.3 Short-term trend Period</b>	<p><b>2001-2012</b></p> <p>For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information</p>				
<b>2.3.4 Short term trend Trend direction</b>	<p><b>stable</b></p> <p>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.</p>				
<b>2.3.5 Short-term trend Magnitude</b>	<table border="1" style="width: 100%;"> <tr> <td style="background-color: #e0e0e0;"><b>a) Minimum</b></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>	<b>a) Minimum</b>			
<b>a) Minimum</b>					
Optional					



	<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>100171</b>
	The Favourable Reference Value has been increased to the current value for surface area of range. This is because the species was under recorded in the past and the current estimate of range is thought to be a better representation of the range in 1994.	
	<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 Favourable Reference Value has been increased to the current value for surface area of range. This is because the species was under recorded in the past and the current estimate of range is thought to be a better representation of the range in 1994.</b>
	The Favourable Reference Value has been increased to the current value for surface area of range. This is because the species was under recorded in the past and the current estimate of range is thought to be a better representation of the range in 1994.	
<b>2.3.10 Reason for change</b> Is the difference between the	<b>a) Genuine change?</b>	<b>False</b>

reported value in 2.3.1 and the previous reporting round mainly due to...	The apparent increase in range is probably mostly due to greater use of bat detectors in structured surveys. This conclusion is supported by the fact that the increase in range has not been accompanied by a significant increase in population.	
	<b>b) Improved knowledge/ more accurate data?</b>	<b>True</b>
	The apparent increase in range is probably mostly due to greater use of bat detectors in structured surveys. This conclusion is supported by the fact that the increase in range has not been accompanied by a significant increase in population.	
	<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>15000</b>
	For further details see the 2013 Article 17 UK Approach document and relevant country-level reporting information	
	<b>c) Maximum</b>	<b>15000</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>Estimate based on partial data with some extrapolation and/or modelling</b>
<b>Population size</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 Period</b>		<b>1999-2011</b>
		Assessment period analysed in the National Bat Monitoring Programme.
<b>2.4.7 Short-term trend Trend direction</b>		<b>stable</b>
		Both NBMP field survey and colony counts show no significant trend. Field Survey smoothed index change min: -6, max: 89. Colony count survey smoothed index change min: 47, max: 9.
<b>2.4.8 Short-term trend Magnitude</b>	Optional	
		<b>a) Minimum</b>
		<b>b) Maximum</b>
		<b>c) Confidence interval</b>
<b>2.4.9 Short-term trend Method used</b>		<b>Estimate based on partial data with some extrapolation and/or modelling</b>
		This species is reasonably well recorded through the NBMP.
<b>2.4.10 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>2.4.11 Long-term trend Trend direction</b>	Optional	<b>unknown</b>
		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</b>

	<b>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>15000</b>
	The FRV for population is the same as reported in 2007. The value is considered to be large enough for the population to be viable and no lower than the population estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
	<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 is the same as reported in 2007. The value is considered to be large enough for the population to be viable and no lower than the population estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.</b>
	The FRV for population is the same as reported in 2007. The value is considered to be large enough for the population to be viable and no lower than the population estimate from when the Habitats Directive came into force in the UK. For further details please see the 2013 Article 17 UK Approach document and relevant country-level reporting information.	
<b>2.4.15 Reason for change</b>	<b>a) Genuine change?</b>	<b>False</b>
Is the difference between the value reported at 2.4.1 or 2.4.2 and the previous reporting round mainly due to:	There is no difference between the current population estimate and the population reported in 2007.	
	<b>b) Improved knowledge/more accurate data?</b>	<b>False</b>
	There is no difference between the current population estimate and the population reported in 2007.	
	<b>c) Use of different method (e.g.</b>	<b>False</b>

	<b>"Range tool")?</b>	
There is no difference between the current population estimate and the population reported in 2007.		

<b>2.5 Habitat for the species</b>		
<b>2.5.1 Area estimation</b>	<b>52382</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>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>It is hard to assess the quality of habitat because this is a generalist species using a mosaic of habitats.</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 Trend direction</b>	<b>unknown</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 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>2.5.8 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>2.5.9 Area of suitable habitat for the species</b>	<b>a) Value in km<sup>2</sup></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	<b>a) Genuine change?</b>	<b>False</b>
	Surface area of habitat was reported as unknown in 2007 so no	

due to	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.	

2.6 Main pressures		
a) Pressure	b) Ranking	c) Pollution qualifier
	H = high importance (max 5 entries) M = medium importance L = low importance	
A10: Restructuring agricultural land holding	H	
G05: Other human intrusions and disturbances	H	
A02: modification of cultivation practices	M	
A07: use of biocides, hormones and chemicals	M	
B02: Forest and Plantation management & use	M	
B07: Forestry activities not referred to above	M	
E06: Other urbanisation, industrial and similar activities	L	
H01: Pollution to surface waters (limnic & terrestrial, marine & brackish)	L	

<b>2.6.1 Method used – Pressures</b>	<b>mainly based on expert judgement and other data</b> mainly based on expert judgement and other data (2)
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2.7 Threats		
a) Threat	b) Ranking	c) Pollution qualifier
	H = high importance (max 5 entries) M = medium importance	

	L = low importance	
A10: Restructuring agricultural land holding	H	
G05: Other human intrusions and disturbances	H	
A02: modification of cultivation practices	M	
A07: use of biocides, hormones and chemicals	M	
B02: Forest and Plantation management & use	M	
B07: Forestry activities not referred to above	M	
C03: Renewable abiotic energy use	M	
E06: Other urbanisation, industrial and similar activities	L	
H01: Pollution to surface waters (limnic & terrestrial, marine & brackish)	L	

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

**2.7.1 Method used – Threats**

**expert opinion**

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**

Legislation - *E. serotinus* is fully protected by European and UK legislation.

Conservation action - Range and population status appear to be favourable at present and there are habitat action plans in place to relieve many of the main pressures and threats to the species, such as loss of woodland and riparian habitat. This species may benefit from

	<p>wider countryside agri-environment schemes.</p> <p>Threats - One of the primary historic pressures for <i>E. Serotinus</i> has been the disturbance and destruction of roost sites. This species roosts almost exclusively in buildings, and is therefore particularly vulnerable to anthropogenic factors, such as development, building renovation and timber treatment. On the other hand, increases in human dwellings may have provided more suitable roost sites for this species over time.</p> <p>Traditionally the south and particularly the south east of England have been strongholds of its distribution, and this region is under great development pressure, which is likely to result in greater loss of suitable foraging habitat over time. Increased intensity farming practices may also have led to reductions in insect prey abundance, because this species is thought to be reliant on different types of insect prey at certain stages of the reproductive cycle (Catto et al. 1994, 1996).</p>
<b>2.8.3 Trans-boundary assessment</b>	

<b>2.9 Conclusions (<i>assessment of conservation status at end of reporting period</i>)</b>		
<b>2.9.1 Range</b>	<b>a) Conclusion</b>	<b>Favourable</b>
	Range has been assessed as Favourable because Favourable as range is equal to the FRV for range, and short term trend is stable.	
	<b>b) Qualifier</b>	
<b>2.9.2 Population</b>	<b>a) Conclusion</b>	<b>Favourable</b>
	Population has been assessed as Favourable because the population estimate is equal to the FRV for population, and the short term trend direction is stable.	
	<b>b) Qualifier</b>	
<b>2.9.3 Habitat for the species</b>	<b>a) Conclusion</b>	<b>Favourable</b>
	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>Unknown</b>
	Future prospects is assessed as Unknown on the basis of assessments of the future prospects of the three parameters, range, population and habitat for species:	



	<p>Range future prospects: Good</p> <p>Population future prospects: Unknown</p> <p>Habitat future prospects: Unknown</p> <p>Overall future prospects: Unknown</p> <p>E. serotinus is fully protected by European and UK legislation, range and population status are favourable at present, and there are habitat action plans in place to relieve many of the main pressures and threats to the species, such as loss of woodland and riparian habitat. This species may benefit from wider countryside agri-environment schemes. Traditionally the south and particularly the south east of England have been strongholds of its distribution, and this region is under great development pressure, which is likely to result in greater loss of suitable foraging habitat over time. Habitat and population have therefore been assessed as unknown.</p>				
	<table border="1"> <tr> <td><b>b) Qualifier</b></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>	<b>b) Qualifier</b>			
<b>b) Qualifier</b>					
<b>2.9.5 Overall assessment of Conservation Status</b>	<p><b>Favourable</b></p> <p>The overall assessment is Favourable because Range, Population and Habitat for species are Favourable.</p>				
<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	<table border="1"> <tr> <td><b>a) Unit</b></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td><b>b) Minimum</b></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td><b>c) Maximum</b></td> <td></td> </tr> </table>	<b>a) Unit</b>				<b>b) Minimum</b>				<b>c) Maximum</b>	
	<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	

**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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