



UK priority species pages – Version 2

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SPECIES PAGES FOR 2007 UK BAP PRIORITY SPECIES

(see endnotes for an explanation of the various components of this compilation).

Nyctalus noctula (Schreber, 1774)

Noctule

1 General information

Level 1	Terrestrial mammals
Level 2	terrestrial mammal
On 1997 UK BAP list	

2 UK BAP criteriaⁱ

1. International threat	2. International responsibility (2a) + moderate decline in UK (2b)	3. Marked decline in the UK	4. Other important factor(s)
False	False	True	False

3 Evidence for Criteriaⁱⁱ

Criterion 1	
Criterion 2a	
Criterion 2b	
Criterion 3	21% decline over 6 years (National Bat Monitoring Programme 2004 report).
Criterion 4	

4 Distribution by Country

England	Scotland	Wales	Northern Ireland	International Waters
Y	Y	Y	N	

5 Distribution Information

Distribution data source	Stage 1 information
Distribution data notes	The majority of the UK's population is in England (estimated in 1995 to be 90%), with a smaller proportion in Wales (estimated in 1995 to be 9.5%) and a very small proportion in Scotland (estimated in 1995 to be 0.5%).
number of sites (where less than or equal to 10)	
Units used for number	

of sites	
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6 Actions identified by expertsⁱⁱⁱ

Action number	Action text	Reporting category
1	<p>LAND USE POLICY Ensure the needs of the noctule bat are considered in agri-environment, water quality, tree protection (including health and safety considerations), woodland and windfarm policy.</p> <p>Ensure the retention and protection of older trees for noctule roosts is included in land-use policies (especially woodland and planning)</p> <p>Take action to increase insect biodiversity in a variety of habitats benefiting this aerial hawking, fast flying species. Improved water quality and wetland creation should also enhance foraging resources.</p> <p>Consider the impact of a potential range shift of noctule due to climate change in relevant policy.</p> <p>The requirements of H&S policy in relation to mature trees in many areas (e.g. parks / roads / paths etc) can impact noctule roosts. Collaborative working between bat workers, H&S inspectors and arboriculturalists is required to avoid this conflict.</p> <p>Consider impact of this high flying species in policy relating to wind turbine developments (European evidence exists of wind turbine fatalities of this species).</p>	Wider "landscape" action
2	<p>ROOST PROTECTION AND MONITORING Proactive protection of all roosts (trees and buildings) is needed including accurate recording on local and national recording schemes and local authority tree records so they are flagged up during planning searches/tree safety routines.</p> <p>Mitigation for loss of tree (and other) roosts needs to be effective to maintain populations.</p> <p>Survey should also be conducted before tree-felling, to look for roosts and potential roosts. Locating noctule roosts in trees can be difficult (depending on the size) and should be supported by training and guidance.</p>	Species-specific management action

	<p>Ensure provision of appropriate advice (via the volunteer network and education as well as the private consultancy sector) in relation to proposed tree work, felling and associated mitigation.</p> <p>Continue and enhance existing monitoring scheme (via the National Bat Monitoring Programme (NBMP)) in the long term to provide robust population trends.</p> <p>Baseline survey information has been recently aided by the newly developed car survey. (This is coordinated nationally by BCT but surveys are conducted locally by NBMP volunteers. It requires ongoing investment in national coordination, regional training and local volunteer engagement). Contrasting trends in different regions of UK need further exploration, and investment in increasing site network to provide finer resolution trends.</p> <p>Locating and recording roosts (usually in trees) can be more difficult and would need to be undertaken at a local level through local bat groups/LBAP partnerships/local records centres.</p>	
3	<p>RESEARCH</p> <p>There has been some research into this species (including a recent study on how habitat use varies with reproductive status). However more information is required on this species particularly to understand other conservation actions needed.</p> <p>It is unclear which priority habitats this species definitively requires (noctules are known to use numerous habitats for foraging, see comments section).</p> <p>Research into the affects of climate change and roost availability on range change Research into the potential impacts of windfarms.</p> <p>A greater understanding of the types of roosts used is needed (what species, ages of trees, number of roosts required by colony, what buildings, and how often, throughout the year).</p> <p>Survey for new roosts is required throughout its range to better understand the distribution of this species (particularly in Scotland).</p>	Species-specific research

4	<p>HABITAT BASED ACTION - CREATION Habitat improvement should focus on woodland and lowland agriculture habitats at the landscape level .</p> <p>Increasing the quality of existing habitats (e.g. insect-rich wetlands) will probably aid noctules but it is of note that they are mosaic species (see comments section).</p> <p>Recent research by Mackey & Racey 2007 recommends farming practices promoting insect diversity should be encouraged by reduction of practices that reduce the number and diversity of insects (e.g. reseedling, applying fertilisers, hedge removal and use of systemic endectocides).</p>	Priority habitat action
5	<p>DESIGNATION Consider designating areas of woodland that encompass several tree roosts used by a colony (a method used for other species including barbastelle). Identification of good foraging areas could be subject to specific action for improvement for this species.</p>	Species-specific legislative action (protection or site designation)
6	<p>HABITAT MANAGEMENT Improved management of urban, suburban, rural, riverine and woodland landscapes for insect production and roost protection.</p>	Priority habitat action

7 Signpost to Priority Habitat^{iv}

Priority Habitat Name
Standing Open Water: Ponds
Woodland (broad lvd): Lowland Mixed Deciduous Woodland
Woodland (broad lvd): Wet Woodland
Woodland (broad lvd): Wood-Pasture & Parkland

8 Additional information from specialists^v

Attribute	Value
NBN current scientific name	Nyctalus noctula
NBN common name	Noctule
classification level 1	Terrestrial mammals
classification level 2	terrestrial mammal
Latest UK Population/extent Estimate	50000 (E: 45000, S: 250, W: 4750)

Units of measurement	Individuals
Start date (year)	1998
Starting estimate	100
End date (year)	2004
Ending estimate	78.3
Proportion left	0.783
decline	22
over observed years	6
decline over 25 years	64
decline over 25% in UK	yes
Crit2 satisfied Yes/No/ Unknown	no
Crit3 satisfied Yes/No/ Unknown	yes
Confidence in assesment crit 3	medium
Comments on UK decline and confidence in assessment	The trend over survey period suggests decline in population. Supported by more localised surveys, for example of Greater London, which have indicated a decline of this species during the last 20 years.
1st source	NBMP Annual Report 2004
2nd source	Noctule London decline

9 Additional information for species listed under the Habitats Directive^{vi}

Attribute	Value
Conclusions - overall assessment	(XX) - Unknown
Conclusions - range	(FV) - Favourable
Conclusions - population	(FV) - Favourable
Conclusions - habitat	(XX) - Unknown
Conclusions - future prospects	(XX) - Unknown
Published sources and/or websites	<p>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.</p> <p>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).</p> <p>BATTERSBY, J (Ed.) & TRACKING MAMMALS PARTNERSHIP. 2005. UK Mammals: Species Status and Population Trends. JNCC/Tracking Mammals Partnership.</p> <p>BOYE, P. & DIETZ, M. 2005. Research Report No 661: Development of good practice guidelines for woodland management for bats. English Nature, Peterborough.</p> <p>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.</p>

	<p>2000. Accounting for nature: assessing habitats in the UK countryside. Countryside Survey 2000. DETR, HMSO, London.</p> <p>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.</p> <p>RICHARDSON, P. 2000. Distribution atlas of bats in Britain and Ireland 1980-1999. Bat Conservation Trust, 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 NBN Gateway</p> <p>Scottish Natural Heritage bat records: update, J. Haddow (pers. comm)</p> <p>Bat Conservation Trust National Bat Monitoring Programme NSP Field Survey (1998-2005)</p> <p>Bat Conservation Trust Distribution atlas of bats in Britain and Ireland 1980-1999 GB data only.</p>
surface area of range in km2	158299
surface area of range in km2 EU	158299
Date of range determination	1980-2006
Quality of data concerning range	Moderate
Range trend	Stable (=)
Range trend magnitude (%)	Not applicable
Range trend period	1980-2006
Range trend reasons 0 - Unknown	False
Range trend reasons 1 - Improved knowledge/more accurate data	False
Range trend reasons 2 - Climate change	False
Range trend reasons 3 - Direct human influence	False

Range trend reasons 4 - Indirect anthropo or zoogenic influence	False
Range trend reasons 5 - Natural processes	False
Range trend reasons 6 - Other (specify)	False
Reasons for reported trend in range specify	Not applicable
Population_min	50000
Population_min EU	50000
Population_max	50000
Population_max EU	50000
Population units	Individuals
Population date	1995
Population method	2 - Extrapolation from surveys of part of the population
Population quality	Poor
Population trend	Stable (=)
Population magnitude (%)	Not applicable
Population period	1998-2005
Pop trend reasons 0 - Unknown	False
Pop trend reasons 1 - Improved knowledge/more accurate data	False
Pop trend reasons 2 - Climate change	False
Pop trend reasons 3 - Direct human influence	True
Pop trend reasons 4 - Indirect anthropo or zoogenic influence	False
Pop trend reasons 5 - Natural processes	False
Pop trend reasons 6 - Other (specify)	False
Surface area of the habitat in km2	Unknown
Date of area estimation	2006
Quality of data on habitat area	Poor
Habitat trend	Unknown (X)
Habitat trend period	1990-1998
Hab trend reasons 0 Unknown	False
Hab trend reasons 1 Improved knowledge	False
Hab trend reasons 2 Climate change	False
Hab trend reasons 3 Direct human influence	False
Hab trend reasons 4 Indirect anthropo or zoogenic influence	False
Hab trend reasons 5 Natural processes	False
Hab trend reasons 6 Other (specify)	False
Reasons for reported trend in Hab specify	Not applicable
Justification of % thresholds for trends	Not Applicable

Future prospects	Unknown
Favourable reference range	158299
Favourable reference range EU	158299
Favourable reference population	50000
Habitat name	<p><I>N. noctula</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>Foraging areas may be in several parts of the landscape, all of which host a high abundance of insect fauna and offer the space in the air needed by the fast flying N. noctula. Large water bodies, valley pastures and open forests are preferred, but the bats also forage in other habitats, and even above harvested fields and urban street lights.</p> <p><I>N. noctula</I> bats can easily make foraging flights more than 10 kilometres away from the roost site, up to a maximum of 20 kilometres. However, the main activity of a maternity colony is within a radius of about 2 kilometres from the colony's roost.</p> <p>Summer roosts are predominantly in woodlands and parks. Deciduous and flood forests with a high percentage of old and dead trees are of highest importance. Roosts are mostly in woodpecker holes in broad-leaved trees. Maternity colonies use several roost sites in a network, which means that the individuals often change from one roost to another. Associations of males, which change their roost site on average every second or third day, need at least eight tree holes suitable for roosting per square kilometre of forest. Besides tree holes the bats also roost in bat boxes (flat constructions are preferred) and small spaces behind wall coverings of buildings or in houses.</p> <p>Winter roosts are mainly in forest and park trees, but large hibernation colonies also roost in buildings or rock crevices. Tree holes must provide a lot of space for a large</p>

	number of bats to be a good hibernaculum for the species.
Other relevant information	See audit trail documents for further information.

10 Species designations^{vii}

Abbreviation	Reporting Category	Designation	Designation description	Year	Source	Comment
HabReg:Sch2	The Conservation of Habitats and Species Regulations 2010	Schedule 2	Schedule 2: European protected species of animals.	1994	The Conservation of Habitats and Species Regulations 2010	
Bern:A2	Bern Convention	Appendix 2	Special protection (‘appropriate and necessary legislative and administrative measures’) for the animal taxa listed, including: all forms of deliberate capture and keeping and deliberate killing; the deliberate damage to or destruction of breeding or resting sites; the deliberate disturbance of wild fauna, particularly during the period of breeding, rearing and hibernation, insofar as disturbance would be significant in relation to the objectives of this Convention; the deliberate destruction or taking of eggs from the wild or keeping these eggs even if empty; the possession of and internal trade in these animals, alive or	1979	Bern Convention	

			dead, including stuffed animals and any readily recognisable part or derivative thereof, where this would contribute to the effectiveness of the provisions of this article.			
CMS_Bonn:A2	Convention on Migratory Species	Bonn Appendix 2	Migratory species having an unfavourable conservation status for which Range States are encouraged to conclude international agreements for their benefit.	1985	Bonn Convention	Geographic constraint=Only European populations.
CMS_EUROBATS:A1	Convention on Migratory Species	EUROBATS Annex I	Protection and enhancement of species populations through legislation, education, conservation measures and international co-operation.	2000	Agreement on the Conservation of Populations of European Bats (EUROBATS)	
HabDir:A4	Habitats Directive	Annex 4	Animal and plant species of Community interest (i.e. endangered, vulnerable, rare or endemic in the European Community) in need of strict protection. They are protected from killing, disturbance or the destruction of them or their habitat. Note that the contents of this annex have been updated in April 2003 following the Treaty of Accession.	1992	Habitats Directive	
England NERC S.41	Biodiversity Lists - England	England NERC S.41	Species “of principal importance for the purpose of conserving	2008	Natural Environment	Geographic constraint=Listing is

			<p>biodiversity” covered under section 41 (England) of the NERC Act (2006) and therefore need to be taken into consideration by a public body when performing any of its functions with a view to conserving biodiversity.</p>		<p>and Rural Communities Act 2006 - Species of Principal Importance in England (section 41) and Wales (section 42)</p>	<p>for England only</p>
<p>Scottish Biodiversity List</p>	<p>Biodiversity Lists - Scotland</p>	<p>Scottish Biodiversity List</p>	<p>The Scottish Biodiversity List is a list of flora, fauna and habitats considered by the Scottish Ministers to be of principal importance for biodiversity conservation. The development of the list has been a collaborative effort involving a great many stakeholders overseen by scientists from the Scottish Biodiversity Forum. Completion of the list is the first time such a stocktake has been done in Scotland.</p> <p>The Scottish Biodiversity List is a tool for public bodies and others doing their Biodiversity Duty. The publication of the Scottish Biodiversity List satisfies the requirements of Section 2(4) of The Nature</p>	<p>2005</p>	<p>Scottish Biodiversity List of species of principal importance for biodiversity conservation</p>	<p>Geographic constraint=Listing is for Scotland only</p>

			Conservation (Scotland) Act 2004.			
Wales NERC S.42	Biodiversity Lists - Wales	Wales NERC S.42	Species “of principal importance for the purpose of conserving biodiversity” covered under Section 42 (Wales) of the NERC Act (2006) and therefore need to be taken into consideration by a public body when performing any of its functions with a view to conserving biodiversity.	2009	Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (section 41) and Wales (section 42)	Geographic constraint=Listing is for Wales only
BAP:2007	Biodiversity Action Plan UK list of priority species	Priority Species	The UK List of Priority Species and Habitats contains 1150 species and 65 habitats that have been listed as priorities for conservation action under the UK Biodiversity Action Plan (UK BAP).	2007	UK list of Priority Habitats and Species	not on former UK BAP list
WACA:Sch5_sect9.4b	Wildlife and Countryside Act 1981	Schedule 5 Section 9.4b	Section 9.4 Animals which are protected from intentional disturbance while occupying a structure or place used for shelter or protection.	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	Geographic constraint=Designation does not apply in Scotland since 15/02/2007.
WACA:Sch5Sect9.4c	Wildlife and Countryside Act 1981	Schedule 5 Section 9.4c	Animals which are protected from their access to any structure or place which they use for shelter or protection being obstructed.	2007	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals	Geographic constraint=Does not apply to Scotland

					and plants)	
WACA:Sch5_sect9.5a	Wildlife and Countryside Act 1981	Schedule 5 Section 9.5a	Section 9.5 Animals which are protected from being sold, offered for sale or being held or transported for sale either live or dead, whole or part.	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	Geographic constraint=Designation does not apply in Scotland since 15/02/2007.
WACA:Sch5_sect9.5b	Wildlife and Countryside Act 1981	Schedule 5 Section 9.5b	Section 9.5 Animals which are protected from being published or advertised as being for sale.	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	Geographic constraint=Designation does not apply in Scotland since 15/02/2007.
ConsRegsNI:Sch2	The Conservation (Nature Habitats, etc.) Regulations (NI) 1995	Schedule 2	Schedule 2: European protected species of animals.	1995	The Conservation (Nature Habitats, etc.) Regulations (Northern Ireland) 1995, amended 2004	

UK BAP 2008 reporting^{viii}

(nb this only applies to species on the original 1997 UK BAP priority species list)

ENDNOTES

ⁱ An explanation of these criteria is included at Annex 3 of [UK Biodiversity Action Plan: Report on the Species and Habitat Review](#). BRIG (ed. Ant Maddock) 2007. This review was organised in two stages. Stage 1 looked at the scientific evidence for selecting the UK List of Priority Species and Habitats while stage 2 considered the conservation action needed for these species and habitats and provided signposts to the means of implementing action.

ⁱⁱ The information on evidence and the species distribution is as presented on the UK BAP website. Users can download a spreadsheet of the [Stage 1 species evidence](#) from the home page of the UK BAP website.

ⁱⁱⁱ Actions were assigned to each and every priority species by expert groups convened at Stage 2 of the Review process. These were subsequently categorised into “signpost categories”. This information is as shown on the UK BAP website See the link for [categorisation \(signposting\) of UK priority species](#).

^{iv} Where a species action is clearly linked to a BAP priority habitat, the name of the relevant habitat or habitats was identified by the stage 2 expert group.

^v This information has been derived from Stage 1 of the priority species review, and is presented in the “marine”, “terrestrial invertebrates” and “other terrestrial species” sheets within the spreadsheet of the [Stage 1 species evidence](#). The information presented here varies according to the taxonomic group. Please note that some of these data have been written for other Expert Group members and may not be of great value to a wider audience.

^{vi} This is only applicable to Species listed under the Annexes 2 4 and 5 of the Habitats Directive. The information presented here was collated by the UK Government in fulfilment of the requirement under Article 17 of the Habitats Directive. For further information see the [2nd UK Report](#) on the implementation of the Habitats Directive.

^{vii} Information on conservation designations has been extracted from JNCC’s collation of information on [species designations](#). The designations shown in version 2 of these pages are as at December 2010.

^{viii} As part of the 2008 UK BAP reporting round lead partners of national plans were asked to answer a number of specific questions. The data will be analysed and used for the UK and country level reports. All of the responses provided through BARS as part of the 2008 reporting exercise are available to [download](#). Note that in the December 2010 version of these pages (version 2) includes corrections to previously truncated text fields.