



## **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).

**Dermochelys coriacea (Vandelli, 1761)**

**Leatherback Turtle**

**1 General information**

Level 1	Marine species
Level 2	turtle
On 1997 UK BAP list	Grouped plan species

**2 UK BAP criteria<sup>i</sup>**

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

**3 Evidence for Criteria<sup>ii</sup>**

Criterion 1	Global/European IUCN category CR
Criterion 2a	
Criterion 2b	
Criterion 3	
Criterion 4	Long-lived, vulnerable and low recovery: More abundant and widespread in the past and not viable now

**4 Distribution by Country**

England	Scotland	Wales	Northern Ireland	International Waters
Y	Y	Y	Y	

**5 Distribution Information**

Distribution data source	NBN Gateway
Distribution data notes	
number of sites (where less than or equal to 10)	
Units used for number of sites	

## 6 Actions identified by experts<sup>iii</sup>

Action number	Action text	Reporting category
1	UK, EU and relevant RFMOs to implement effective fisheries management to reduce marine turtle by-catch.	Wider "landscape" action
2	Undertake research on turtles using UK waters to determine the extent of their distribution in the Atlantic basin throughout their lifecycle and to identify areas of particular importance such as nesting beaches, breeding areas, feeding areas and migratory routes.	Species-specific research
3	Undertake research to determine extent of impact of anthropogenic activities (e.g. egg harvest, fisheries, tourism development, pollution etc.) throughout the distribution identified above and provide management advice.	Species-specific research
4	Promote recording schemes and ensure that all turtle records in UK waters are passed on to the UK 'TURTLE' database, and made available through NBN.	Species-specific awareness raising
5	Contribute to national and international educational, outreach and publicity initiatives to promote conservation of this species throughout its range.	Species-specific awareness raising
6	Provide support to relevant agencies responsible for the conservation of marine turtles in the relevant UK Overseas Territories, and overseas countries where commercial UK interests are in direct conflict with the conservation of this species.	Wider "landscape" action

## 8 Additional information from specialists<sup>iv</sup>

Attribute	Value
NBN current scientific name	<i>Dermochelys coriacea</i>
NBN common name	Leatherback Turtle
classification level 1	Marine species
classification level 2	turtle

## 9 Additional information for species listed under the Habitats Directive<sup>v</sup>

Attribute	Value
Conclusions - overall assessment	(XX) - Unknown
Conclusions - range	(XX) - Unknown
Conclusions - population	(XX) - Unknown
Conclusions - habitat	(XX) - Unknown
Conclusions - future prospects	(XX) - Unknown
Published sources and/or websites	<p>BRONGERSMA, J. D. 1972. European Atlantic turtles. Zoologische Verhandelingen (Leiden), 12, 1-318.</p> <p>DAVENPORT J. 1998. Sustaining endothermy on a diet of cold jelly: energetics of the leatherback turtles &lt;I&gt;Dermochelys coriacea&lt;/I&gt;. British Herpetological Society Bulletin, 62:4-8.</p> <p>FERRAROLI S., GEORGES J.-Y., LE MAHO Y. 2004. Where leatherback turtles meet fisheries. Nature, 429, 521–522.</p> <p>FRAIR W., ACKMAN R.G., MROSOVSKY N. 1972. Body temperature of &lt;I&gt;Dermochelys coriacea&lt;/I&gt;: warm turtle from cold water. Science, 177, 791–793.</p> <p>GODLEY B.J., GAYWOOD M.J., LAW R.J., MCCARTHY C.J., MCKENZIE C., PATTERSON I.A.P., PENROSE R.S., REID R.J., ROSS H.M. 1998. Patterns of marine turtle mortality in British Waters (1992-1996) with reference to tissue contaminant levels. Journal of the Marine Biological Association of the United Kingdom, 78, 973-984.</p> <p>HAYS G. C., HOUGHTON J.D.R., ISAACS C., KING R.S., LLOYD C., LOVELL P. 2004a. First records of oceanic dive profiles for leatherback turtles, &lt;I&gt;D. coriacea&lt;/I&gt;, indicate behavioural plasticity associated with long-distance migration. Animal Behaviour, 67, 733–743.</p> <p>HAYS G. C., HOUGHTON J.D.R., MYERS A.E. 2004B. Pan-Atlantic leatherback turtle</p>

	<p>movements. <i>Nature</i>, 429, 522.</p> <p>HOUGHTON J. D.R., DOYLE T.K., WILSON M.W., DAVENPORT J., HAYS G. C. 2006. Jellyfish aggregations and leatherback turtle foraging patterns in a temperate coastal environment. <i>Ecology</i>, 87, 1967–1972.</p> <p>JAMES M.C., HERMAN T.B. 2001. Feeding of <i>Dermochelys coriacea</i> on medusae in the Northwest Atlantic. <i>Chelonian Conservation Biology</i>, 4, 202–205.</p> <p>JAMES M.C., OTTENSMEYER C.A., MYERS R.A. 2005. Identification of high-use habitat and threats to leatherback sea turtles in northern waters: new directions for conservation. <i>Ecology Letters</i>, 8, 195–201.</p> <p>LUSCHI P., SALE A., MENCACCI R., HUGHES G.R., LUTJEHARMS J.R.E., PAPI F. 2003. Current transport in leatherback sea turtles (<i>Dermochelys coriacea</i>) wandering in the ocean. <i>Proceedings of the Royal Society of London B Supplement</i>, 270, 129–132.</p> <p>MCMAHON C.R., HAYS G.C. 2006. Thermal niche, large-scale movements and implications of climate change for a critically endangered marine vertebrate. <i>Global Change Biology</i>, 12, 1330-1338.</p> <p>PALADINO F.V., O'CONNOR M.P., SPOTILA J.R. 1990. Metabolism of leatherback turtles, gigantothermy, and thermoregulation of dinosaurs. <i>Nature</i>, 344, 858–860.</p> <p>PIERPOINT C., PENROSE R. 2002. 'TURTLE' A database of Marine Turtle Records for the United Kingdom and Eire. (Version 1.3 2002): Introduction, data summary and user notes. (Contractor: Marine Environmental Monitoring, Llechryd.)</p> <p>PIERPOINT, C. 2000. Bycatch of marine turtles in UK waters. JNCC Report No.310</p>
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	<p>SPOTILA J.R., DUNHAM A.E., LESLIE A.J., STEYERMARK A.C., PLOTKIN P.T., PALADINO F.V. 1996. Worldwide population decline of <i>Dermochelys coriacea</i>: are leatherback turtles going extinct? <i>Chelon.Conserv. Biol.</i> 2, 209–222.</p> <p>SPOTILA J.R., REINA R.D., STEYERMARK A.C., PLOTKIN P.T., PALADINO F.V. 2000. Pacific leatherback turtles face extinction. <i>Nature</i>, 405, 529–530.</p> <p>WITT M. J., BRODERICK A. C., JOHNS D.J., MARTIN C., PENROSE R., HOOGMOED M.S., GODLEY B.J. 2006. Prey landscapes help identify potential foraging habitats for leatherback turtles in the northeast Atlantic. <i>Mar. Ecol. Progr. Ser.</i> in press.</p>
surface area of range in km2	Unknown
Date of range determination	05/2007
Quality of data concerning range	Poor
Range trend	Unknown (X)
Range trend magnitude (%)	Not applicable
Range trend period	1994-2006
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	Unknown
Population_max	Unknown
Population date	05/2007
Population method	1 - Based on expert opinion
Population quality	Poor
Population trend	Unknown (X)
Population magnitude (%)	Not applicable

Population period	1994-2006
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	False
Pop trend reasons 4 - Indirect anthropo or zoogenic influence	False
Pop trend reasons 5 - Natural processes	False
Pop trend reasons 6 - Other (specify)	False
Reasons for reported trend in Pop specify	Not applicable
Surface area of the habitat in km2	Unknown
Date of area estimation	05/2007
Quality of data on habitat area	Poor
Habitat trend	Unknown (X)
Habitat trend period	1994-2006
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	Unknown
Habitat name	Leatherback turtles visit UK waters during their foraging migrations. The wide-ranging extent of these migrations is only recently becoming apparent through tagging studies. They feed exclusively on jellyfish and other gelatinous zooplankton throughout their life cycle (Davenport, 1998) and UK waters offer a rich foraging habitat (Hays et al. 2004a). Associations between leatherback turtles and jellyfish concentrations have been reported

	<p>and are the focus of current research interest (Houghton et al 2006, Witt et al 2006).</p> <p>Leatherback turtles exhibit physiological and anatomical adaptations (large body size, insulating thick fat deposits, counter-current heat exchangers) that are unique among reptiles and allows them to conserve heat and maintain a warm core even in cool surrounding waters (Frair et al. 1972, Paladino 1990). Nonetheless, cold temperatures remain an ultimate physiological barrier to their northerly distribution. Some individuals have been recorded in much cooler waters such as in Iceland and Norway, but these are considered to be exceptions (McMahon and Hays 2006). Indeed recent studies have suggested that the waters of the UK represent the northerly limit of routine seasonal leatherback foraging migrations (McMahon and Hays 2006, Witt et al. 2006).</p> <p>Leatherback turtles breed in the tropics where females nest every two to three years.</p>
Other relevent information	See audit trail documents for further information.

## 10 Species designations<sup>vi</sup>

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 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.	1979	Bern Convention	
CMS_Bonn:A1	Convention on Migratory Species	Bonn Appendix 1	Endangered migratory species in danger of extinction throughout all or a significant portion of their range, and for which Range States are obliged to prohibit taking and to take protective	1979	Bonn Convention	Note on status=See also App II.

			measures to conserve. (Note that taking may be permitted in some circumstances as outlined in Article III.5.)			
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.	1979	Bonn Convention	
OSPAR	OSPAR	OSPAR	OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic. OSPAR List of Threatened and/or Declining Species and Habitats.	2008	OSPAR List of Threatened and/or Declining Species and Habitats, 2008.	OSPAR Regions where the species occurs= All. OSPAR Regions where the species is under threat and/or in decline= All where it occurs
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 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.	2008	Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England	Geographic constraint=Listing is for England only

					(section 41) and Wales (section 42)	
NI_Priority	Biodiversity Lists - Northern Ireland	Priority Species (Northern Ireland)	The Northern Ireland Priority List of threatened species requiring conservation action in Northern Ireland. Criteria have been developed to ensure that Priority Species have been chosen using a scientific basis (See <a href="http://www.habitas.org.uk/priority/criteria.html">http://www.habitas.org.uk/priority/criteria.html</a> ). The list is designed to assist those involved in the conservation of biodiversity by guiding decisions on where to target action and invest resources.	2010	Northern Ireland Priority Species List, March 2010	
Scottish Biodiversity List	Biodiversity Lists - Scotland	Scottish Biodiversity List	<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 Conservation (Scotland) Act 2004.</p>	2005	Scottish Biodiversity List of species of principal importance for biodiversity conservation	Geographic constraint=Listing is for Scotland only
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	2009	Natural Environment and Rural	Geographic constraint=Listing is for Wales only

			therefore need to be taken into consideration by a public body when performing any of its functions with a view to conserving biodiversity.		Communities Act 2006 - Species of Principal Importance in England (section 41) and Wales (section 42)	
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	status on former BAP list: Grouped plan species
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.	1988	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 and plants)	Geographic constraint=Does not apply to Scotland

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.	1988	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.	1988	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.	2004	The Conservation (Nature Habitats, etc.) Regulations (Northern Ireland) 1995, amended 2004	

## UK BAP 2008 reporting<sup>vii</sup>

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

### ENDNOTES

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<sup>i</sup> 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.

<sup>ii</sup> 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.

<sup>iii</sup> 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](#).

<sup>iv</sup> 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.

<sup>v</sup> 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 [2<sup>nd</sup> UK Report](#) on the implementation of the Habitats Directive.

<sup>vi</sup> 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.

<sup>vii</sup> 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.