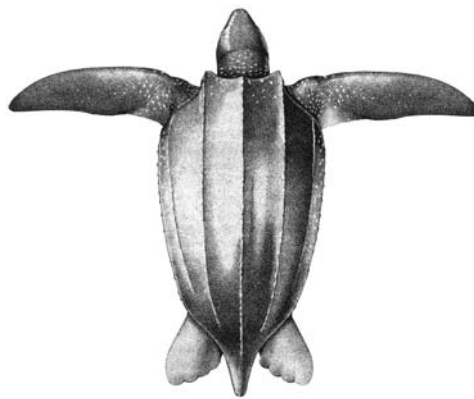


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British Isles & Republic of Ireland Marine Turtle Strandings &
Sightings
Annual Report 2011

R.S.Penrose & L.R.Gander. February 2012



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1. SUMMARY

A total of 67 turtles were reported during the year. One green turtle, four Kemp's Ridley turtles, two leatherback turtles and one loggerhead turtle were found stranded dead. Two leatherbacks were sighted dead at sea. Fifty-one sightings of live leatherback turtles were received.

Live turtles (57)

Fifty-one reports received were of live leatherback turtles seen either from boats or from shore. Six live turtles sighted were unidentified. No live turtles were found stranded.

The geographical distribution of the 57 live sightings are as follows:-

14 Republic of Ireland, 8 Scotland, 17 England, 14 Wales, 0 Northern Ireland, 1 Isle of Man and 3 Offshore.

Dead turtles (10)

One green turtle, four Kemp's Ridley turtles, two leatherback turtles and one loggerhead turtle were found stranded dead. Two leatherbacks were sighted dead at sea.

The geographical distribution of the 10 dead turtles are as follows:-

2 Republic of Ireland, 2 Scotland, 4 England, 2 Wales, 0 Northern Ireland, 0 Isle of Man and 0 Offshore.

Data sharing

2010 TURTLE data has been uploaded to the NBN Gateway <http://www.nbn.org.uk/>

TURTLE record totals

The current total of 2529 is broken down thus:

1273 Republic of Ireland, 374 Scotland, 561 England, 228 Wales, 39 Northern Ireland, 32 Isle of Man, 12 Channel Islands and 10 Offshore.

2. INTRODUCTION

In 1990, the ‘Collaborative UK Marine Mammal Strandings Project’ was initiated and part-funded by the UK Department of the Environment (now Defra). The project involves detailed pathological and other investigations of stranded marine mammal carcasses (mostly cetacean) from UK waters. It forms part of the Department's international obligations towards conservation agreements, including the ‘Agreement on the conservation of Small Cetaceans of the Baltic and North Seas’ (ASCOBANS).

Detailed pathological investigations of stranded marine turtles were included in 2001 and the systematic recording and occasional examination of stranded basking sharks began in 2007. The project is now named the ‘Cetacean Strandings Investigation Programme’ (CSIP, www.ukstrandings.org) (see **Figure 1.**).

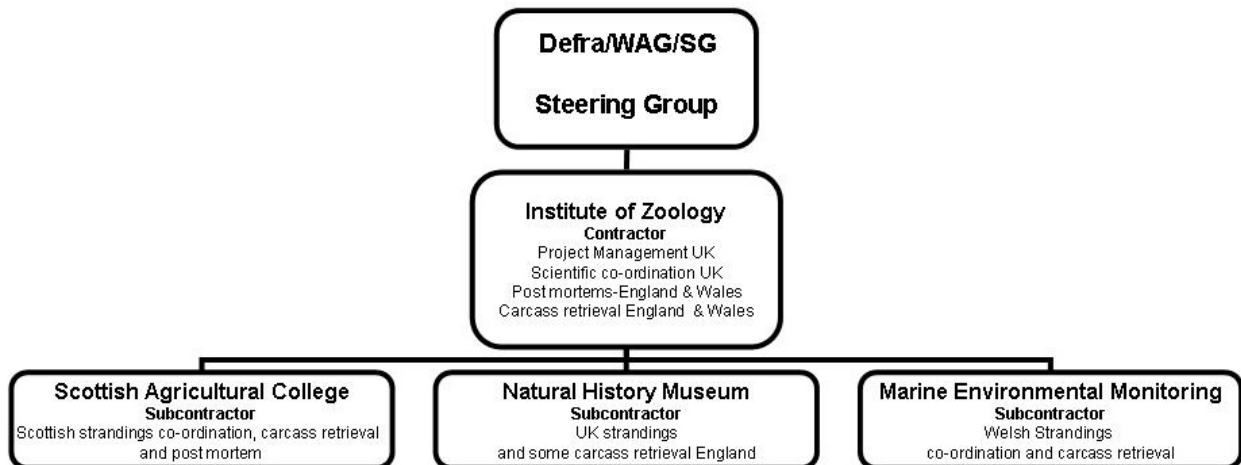


Figure 1. Current Technical Co-ordination of the Cetacean Strandings Investigation Programme (CSIP).

2.1 The UK Turtle Implementation Group.

In 1999, English Nature, now Natural England, published the UK Marine Turtles Grouped Species Action Plan (SAP) on behalf of the UK Biodiversity Group. The SAP is part of the UK Biodiversity Action Plan and aims to enhance marine turtle conservation in UK waters and in the UK Overseas Territories as well as raise awareness and knowledge of their occurrence, legal protection and measures to enhance conservation amongst marine users and the general public. The SAP is being implemented by a group of organisations led by joint lead partners the Marine Conservation Society (MCS) and the Amphibian & Reptile Conservation Trust¹ (ARC). The contact agency is Scottish Natural Heritage (SNH). The Turtle Implementation Group (TIG) consists of the following organisations:-

- **Amphibian & Reptile Conservation Trust¹** is an authority on reptile and amphibian issues and was the Lead Partners or joint Lead Partners for all five of the reptile and amphibian Action Plans within the UK BAP www.arc-trust.org
Contact: *Tony Gent, 01202 391319*
- **Countryside Council for Wales (CCW)** The Countryside Council for Wales is the Government's statutory advisor on sustaining natural beauty, wildlife and the opportunity for outdoor enjoyment in Wales and its inshore waters.
Contact: *Tom Stringell, 01248 385500*
- The **Department of Environment, Food and Agriculture (DEFA)** is the Isle of Man Government's department responsible for species protection and site designation under the Manx Wildlife Act 1990. The Department is also the key Isle of Man contact for strandings and sightings of sea turtles.
Contacts: *Laura Hanley & Dr Fiona Gell, 01624 685835* www.gov.im/defa
- **Joint Nature Conservation Committee (JNCC)** is the public body that advises the UK Government and devolved administrations on UK-wide and international nature conservation.
Contact: *Kelly Macleod, 01224 266584*

¹ Formally Herpetological Conservation Trust (HCT).

- **Marine Conservation Society (MCS)** is the UK charity dedicated to the protection of the marine environment and its wildlife. MCS was the joint Lead Partner of the Marine Turtles Grouped Species Action Plan and coordinates the TIG. www.mcsuk.org
Contacts: *Sue Ranger or Peter Richardson, 01989 566017*
- **Marine Environmental Monitoring (MEM)** is a member of the Defra “UK Cetacean Strandings Investigation Programme”, www.strandings.com www.ukstrandings.org MEM also manages ‘TURTLE’ the British Isles & Republic of Ireland database holding both records of sightings and strandings of marine turtles dating back to 1748.
Contact: *Rod Penrose, (Reporting telephone No. 01239 683033) rodpenrose@strandings.demon.co.uk*
- **MEDASSET**, founded in 1988, is an international environmental NGO registered as a charity and private company in the UK and as a Non Profit Organisation in Greece, working for the conservation of sea turtles and their habitats throughout the Mediterranean, through scientific research, environmental education, political lobbying and awareness-raising.
Contact: *Lily Venizelos, + 30 210 3613572 E-mail: medasset@medasset.org*
- **National Parks and Wildlife Service (NPWS)**, part of the Department of Arts, Heritage and the Gaeltacht, provides the legislative and policy framework for the conservation of nature and biodiversity in the Republic of Ireland. It also oversees its implementation, based on good science, with particular emphasis on the protection of habitats and species, through the designation and conservation of sites under EU Directives and national legislation.
Contact: *Dr Ferdia Marnell, +3531 8883290.*
- **Natural England (NE)** is the Government agency that champions the conservation of wildlife and natural features throughout England.
Contact: *Paul Edgar, 0300 060 1324.*
- **Northern Ireland Environment Agency (NIEA)**, is the agency responsible for the implementation of government environmental policy in Northern Ireland. Its aim is “to protect and conserve the natural and man-made environment and to promote its appreciation for the benefit of present and future generations”.
Contact: *Gary Burrows, 028 9056 9571 or 028 7082 3600.*
- **Queen’s University Belfast:** Dr Jonathan Houghton works on the foraging ecology and migratory behaviour of marine turtles with a particular focus on the predator prey interactions of leatherback turtles and gelatinous zooplankton (jellyfish).
Contact: *Dr Jonathan Houghton, 028 90972297 j.houghton@qub.ac.uk*
- **Scottish Natural Heritage (SNH)** is a government body responsible to the Scottish Government and Scottish Parliament. SNH promotes the care, improvement, responsible enjoyment, understanding, appreciation and sustainable use of Scotland’s natural heritage. SNH is the contact government point for the Marine Turtles Grouped Species Action Plan.
Contact: *Laura Clark, 01463 725237.*
- **The Wildlife Trusts** is a partnership of 47 Wildlife Trusts, across the UK, caring for more than 2,400 nature reserves. It campaigns for the protection of wildlife and invests in the future by helping people of all ages to gain a greater appreciation and understanding of nature. The Wildlife Trusts Basking Shark Project contributes at sea survey data, from the west coast of Britain on an annual basis.
Contact: *Dr Nick Tregenza, 01736 711783.*
- **University College Cork** *Professor John Davenport* is Emeritus Professor of Zoology. He has worked on most species of sea turtles, but especially leatherbacks, since the early 1980s, conducting fundamental studies on their physiology and biomechanics. He is currently linked to turtle conservation in Bermuda, and conducts turtle research with colleagues in Nova Scotia, France and Hawaii.
Contact: *Professor John Davenport, +353 21 490 4051 or Dr Tom Doyle +353 (0) 21 4703119.*
- **University of Exeter, Cornwall Campus** hosts the Marine Turtle Research Group that carries out fundamental and applied research on marine turtles in British waters, the Mediterranean, West Africa and throughout the UK Overseas Territories.
Contacts: *Dr Brendan Godley & Dr Annette Broderick, 01326 371 861.*

3. MATERIALS AND METHODS

Contact details vary for different parts of the British Isles & Republic of Ireland and the Turtle Code should be consulted for the relevant contacts.

In **England & Wales** a 24 hour answer phone **01239 683033**, is interrogated at regular intervals. A message requests callers to leave details of the stranding or sighting and location, along with their name and contact phone number, so they may be reached if confirmation of details are required. A dedicated email address to receive digital photographs has been created info@strandings.demon.co.uk (If the stranding is a live-stranding a message on the answer-phone informs the caller to contact the RSPCA immediately. see 3.1).

For **Scotland** all records should be reported to Scottish Natural Heritage on **01463 725237** with dead strandings being reported to the Scottish Agricultural College **01463 243030**. Live strandings and entanglements should be reported to the SSPCA on **03000 999 999**.

For **Northern Ireland** all records of live or dead turtles should be reported to the Portrush Coastal Zone Centre on **028 7082 3600**.

In the **Republic of Ireland** all records should be reported to Dr Tom Doyle on **353-(0)21-4703119** (work) and **353-(0)87 1354938** (mobile). Sightings & strandings can also be reported online in the Republic of Ireland at www.turtle.ie

UK turtle sightings and strandings can also be reported using the UK Turtle Code online at www.euroturtle.org/turtlecode

On the **Isle of Man** all marine animal strandings should be reported to **DEFA** on **01624 685835** or directly to either Dr Fiona Gell **07624 473753** or Laura Hanley **07624 483942**. If a live seal becomes stranded call the MSPCA on **01624 851672**.

The following criteria are applied: -

3.1 Live Animals

(Condition code 1)²

In 1994 the Marine Animal Rescue Coalition (MARC) was formed. This consists of all the major animal welfare and conservation bodies involved with marine mammals/turtles in the UK. It has been agreed that in the case of a live-stranding the first point of call would be the RSPCA (England & Wales), SSPCA (Scotland) as they support a manned 24-hour emergency phone. The RSPCA/SSPCA would then contact the relevant organisations, Marine Environmental Monitoring etc.

Contacts and advice can be found in the UK Turtle Code at www.strandings.com/Turtlepage.html

3.2 Dead Animals

(Condition code 2a extremely fresh as if just died)²

(Condition code 2b slight decomposition)²

(Condition code 3 moderate decomposition)²

Health and safety precautions are followed with the animal being handled only with gloved hands. Preferably it is then taken immediately for *post-mortem* examination, but due to funding cuts in 2006 freezing is now an option until transport becomes available.

(Condition code 4 advanced decomposition)²

(Condition code 5 mummified carcass)²

Species identified, basic measurements taken together with skin for DNA. Health and safety precautions being observed. Local Authorities then contacted for safe disposal of remains.

All live and dead marine turtles are allocated a “T0000/001” number. “T” designates the animal as a marine turtle, 0000 is the year and /001 is an individual number for each record of the same year. Records of all strandings & sightings in the British Isles & Republic of Ireland are kept by the Strandings Co-ordinator. Copies of *post-mortem* examination reports are sent from the Strandings Co-ordinator to the finder and others associated with the relevant stranding.

² Body conditions based on Kuiken, T. and Garcia Hartmann, M (1991) Proceedings of the European Cetacean Society workshop on cetacean pathology: dissection techniques and tissue sampling. ECS newsletter 17, Special issue: 39pp

4. RESULTS

The following three tables include marine turtle 'sightings' and 'strandings' reported through 2011.

Table 1.

2011 Total number of reported marine turtles for the British Isles & RoL (live & dead).													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Green turtle (<i>Chelonia mydas</i>)	0	0	0	0	0	0	0	0	0	0	0	1	1
Hawksbill turtle (<i>Eretmochelys imbricata</i>)	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's ridley turtle (<i>Lepidochelys kempii</i>)	0	0	0	0	0	0	0	0	0	0	0	4	4
Leatherback turtle (<i>Dermochelys coriacea</i>)	0	0	0	0	0	3	11	29	9	1	0	2	55
Loggerhead turtle (<i>Caretta caretta</i>)	0	0	0	0	0	0	0	0	0	0	0	1	1
Unidentified	0	0	0	0	0	0	2	3	1	0	0	0	6
Total animals	0	0	0	0	0	3	13	32	10	1	0	8	67

Table 2.

2011 Number of live marine turtles.													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Green turtle (<i>Chelonia mydas</i>)	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawksbill turtle (<i>Eretmochelys imbricata</i>)	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's ridley turtle (<i>Lepidochelys kempii</i>)	0	0	0	0	0	0	0	0	0	0	0	0	0
Leatherback turtle (<i>Dermochelys coriacea</i>)	0	0	0	0	0	3	10	28	8	1	0	1	51
Loggerhead turtle (<i>Caretta caretta</i>)	0	0	0	0	0	0	0	0	0	0	0	0	0
Unidentified	0	0	0	0	0	0	2	3	1	0	0	0	6
Total animals	0	0	0	0	0	3	12	31	9	1	0	1	57

Table 3.

2011 Number of dead marine turtles.													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Green turtle (<i>Chelonia mydas</i>)	0	0	0	0	0	0	0	0	0	0	0	1	1
Hawksbill turtle (<i>Eretmochelys imbricata</i>)	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's ridley turtle (<i>Lepidochelys kempii</i>)	0	0	0	0	0	0	0	0	0	0	0	4	4
Leatherback turtle (<i>Dermochelys coriacea</i>)	0	0	0	0	0	0	1	1	1	0	0	1	4
Loggerhead turtle (<i>Caretta caretta</i>)	0	0	0	0	0	0	0	0	0	0	0	1	1
Unidentified	0	0	0	0	0	0	0	0	0	0	0	0	0
Total animals	0	0	0	0	0	0	1	1	1	0	0	7	10

The general geographical distribution of each species, strandings and sightings, are plotted on the following maps. Although the maps are generated directly from the data stored, they should be regarded as showing distribution of animals rather than giving absolute counts. While the co-ordinate system and the mapping software can theoretically differentiate between points as close as 1 metre apart, even with separations of 100 metres at the scale at which these maps are presented, some symbols may appear to overlap completely.

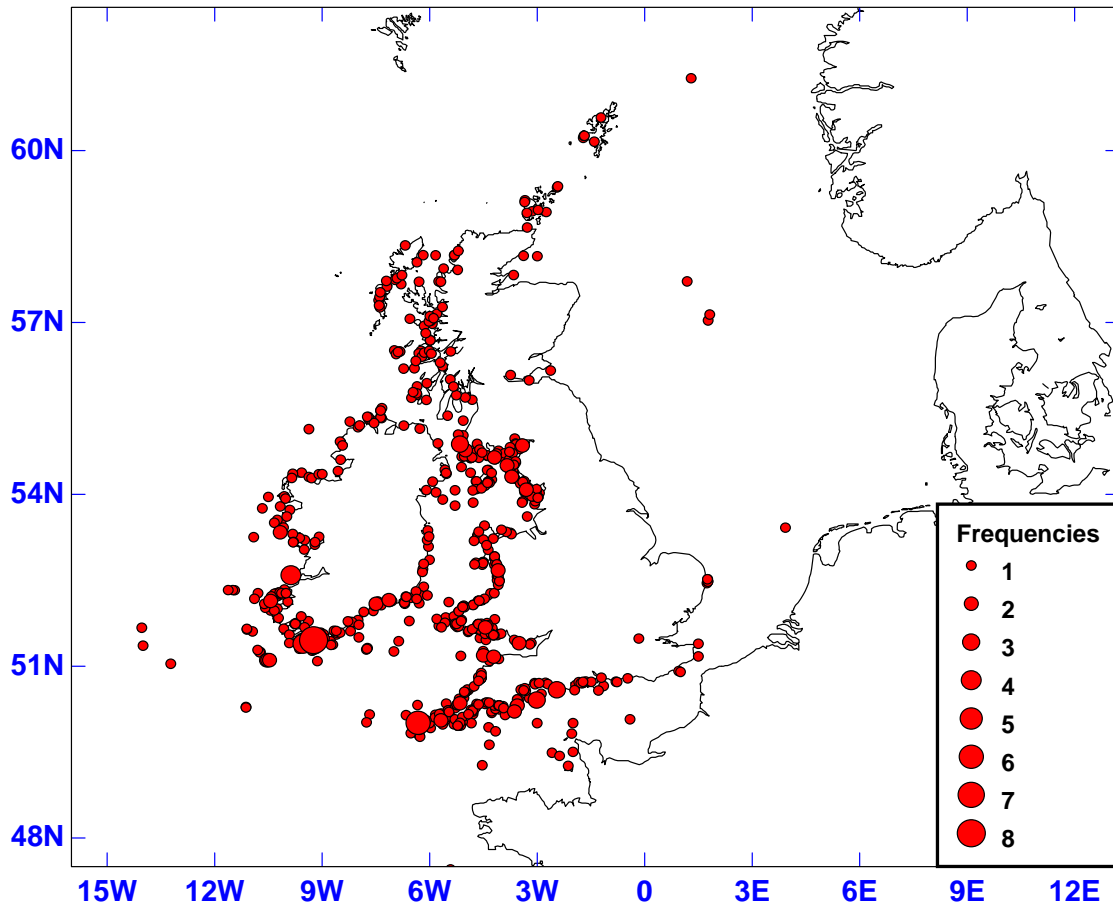


Figure 2. *All species sightings & strandings 2001-2011.*

All species, sightings & strandings over the eleven year period 2001-2011 have been plotted in **Figure 2.**

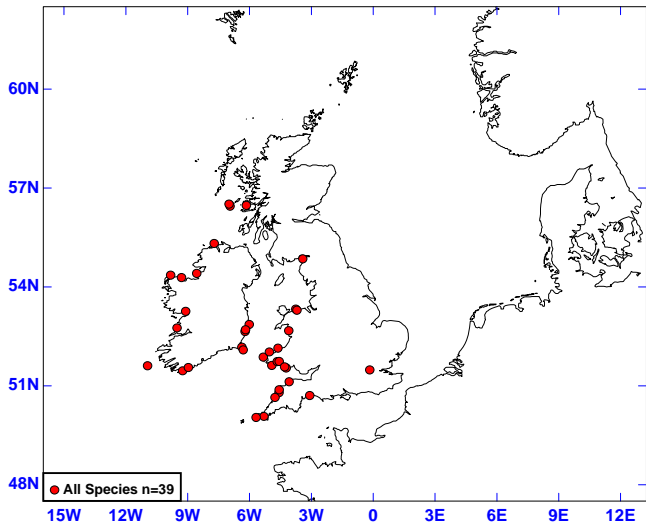


Figure 3. All species sightings & strandings 2009.

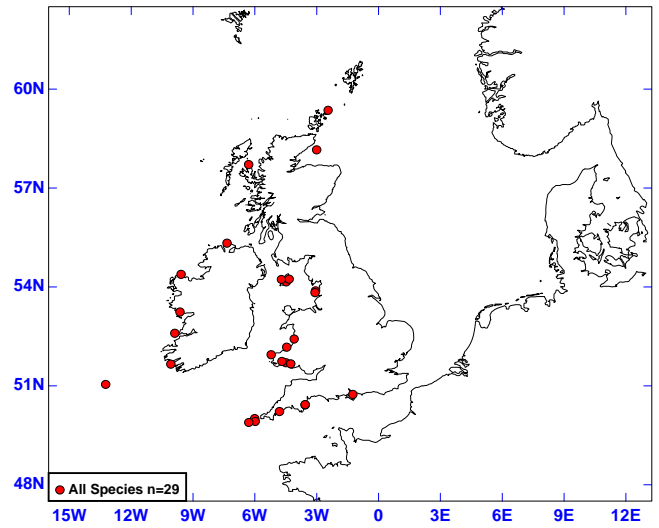


Figure 4. All species sightings & strandings 2010.

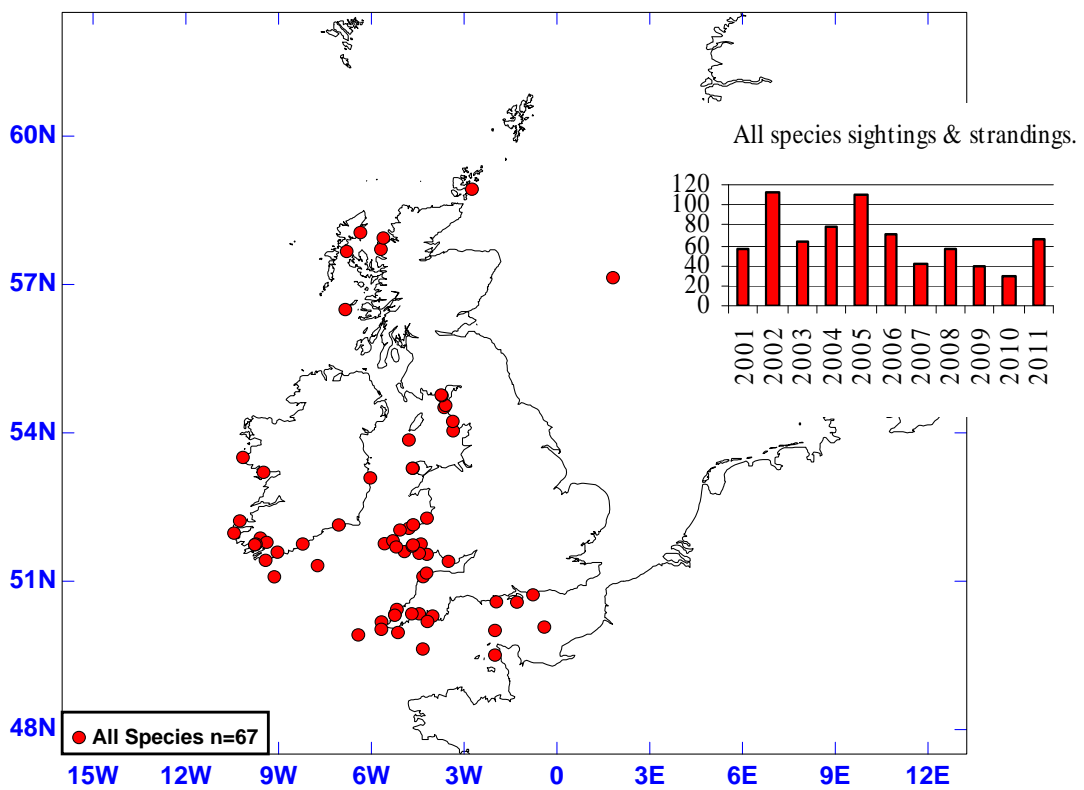


Figure 5. All species sightings & strandings 2011.

4.1 Sightings.

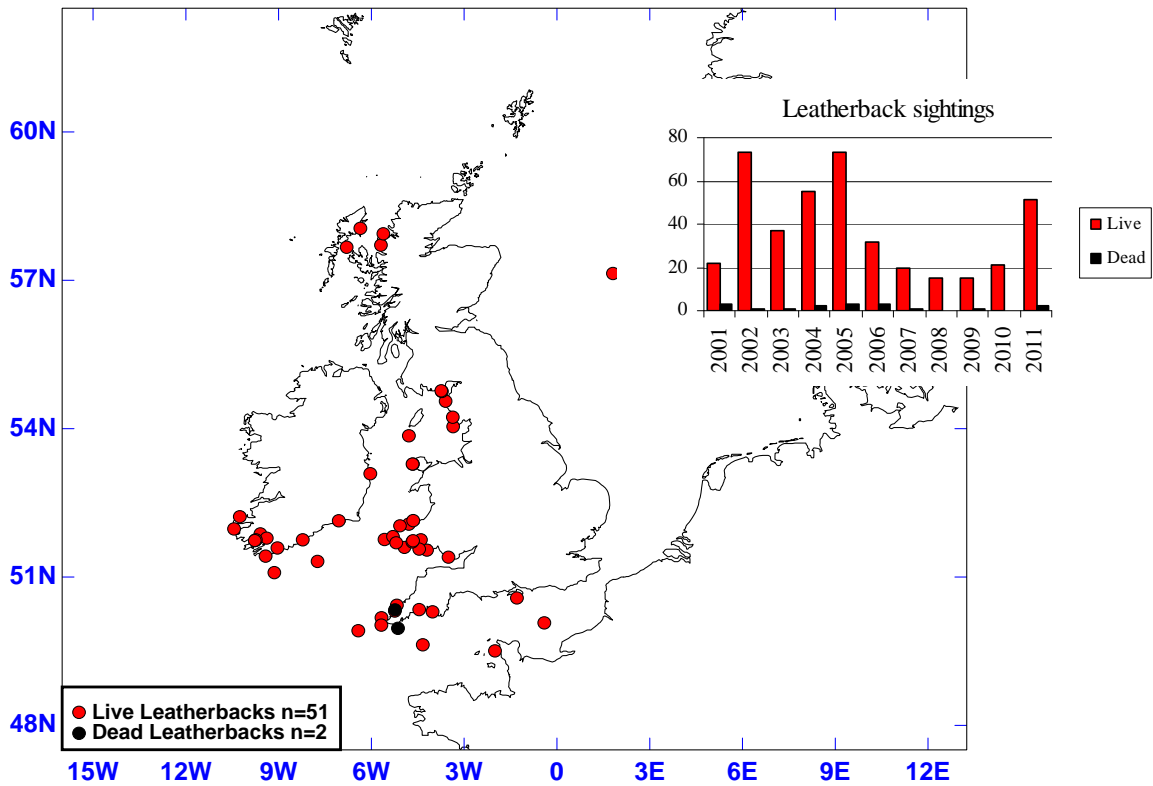


Figure 6. *Leatherback sightings 2011.*

No live or dead **loggerhead turtle** sightings were reported during 2011. However, ‘sightings’ of live loggerhead turtles have been recorded in recent years as shown in **Figure 7**.

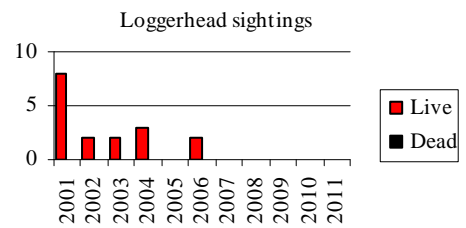


Figure 7. *Loggerhead sightings 2011.*

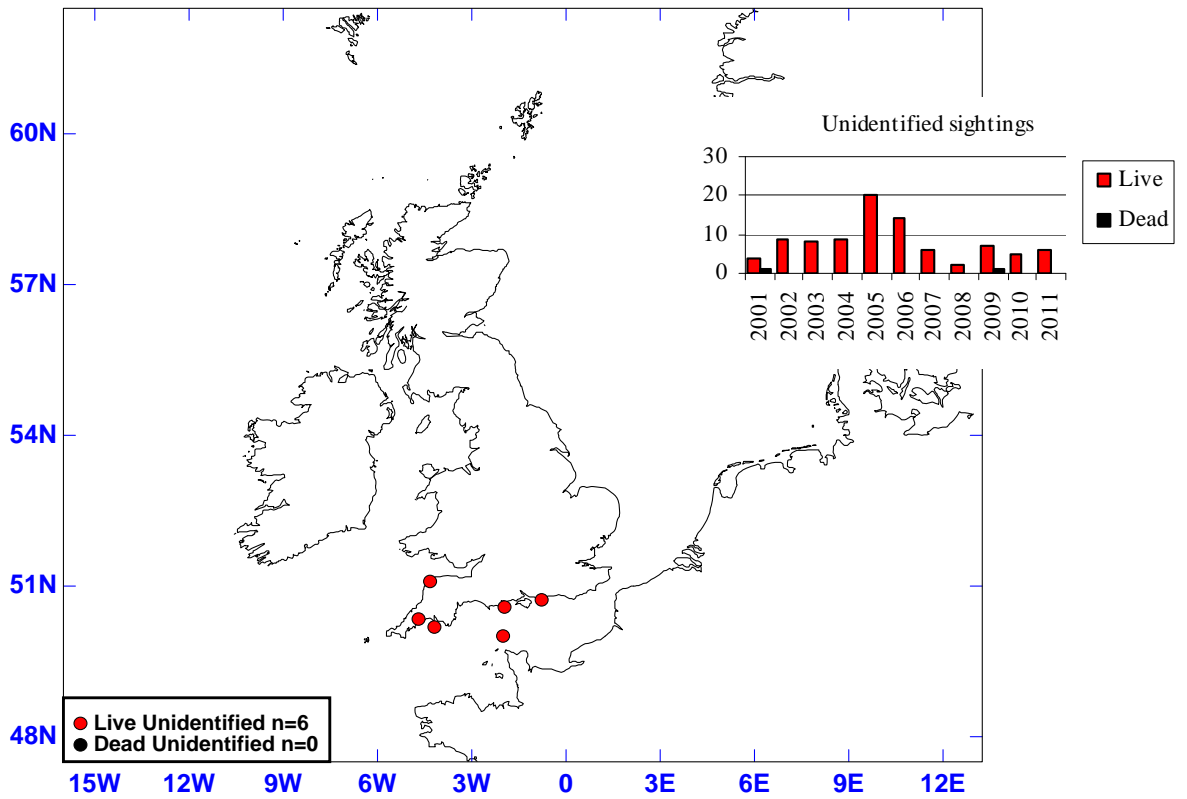


Figure 8. *Unidentified sightings 2011.*

4.2 Strandings.

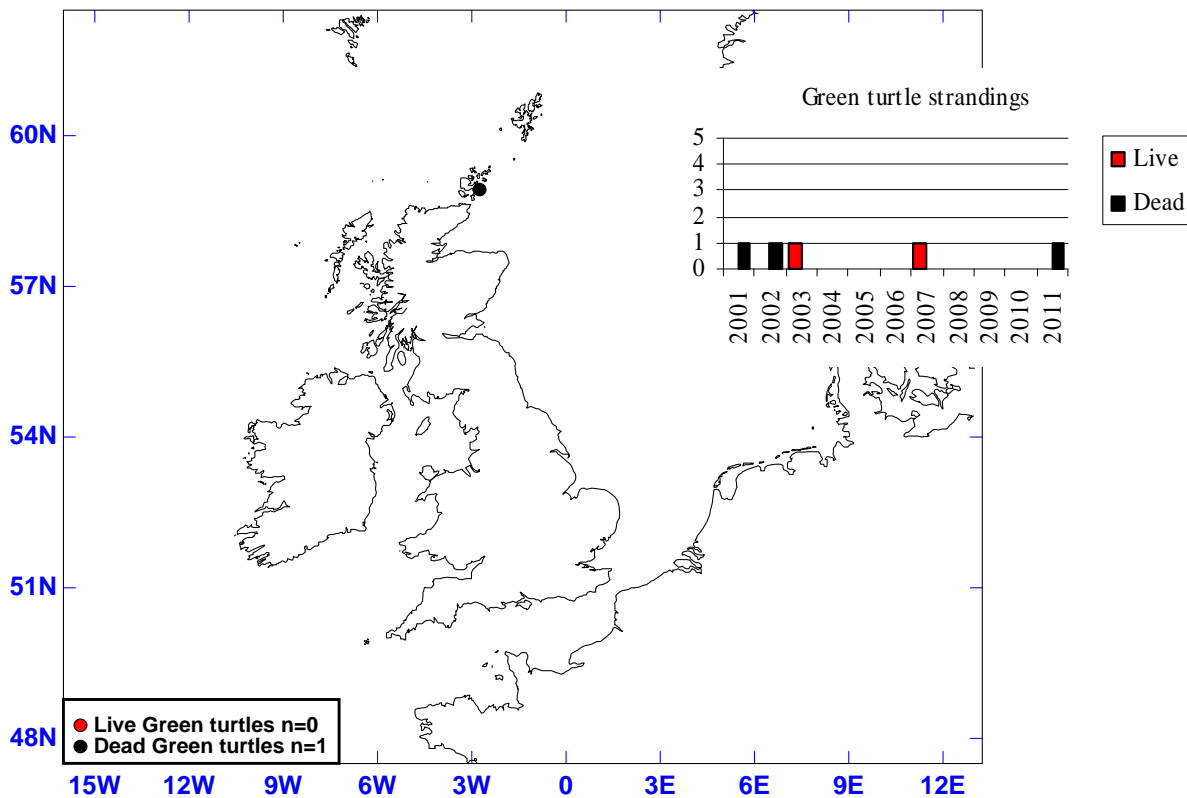


Figure 9. *Green turtle strandings 2011.*

No live or dead **hawksbill turtle** strandings were reported during 2011. There have been no records of Hawksbill turtle “strandings” in the database. One “sighting” record exists off Cork Harbour in February 1983 when one was caught in a herring net and brought ashore alive.

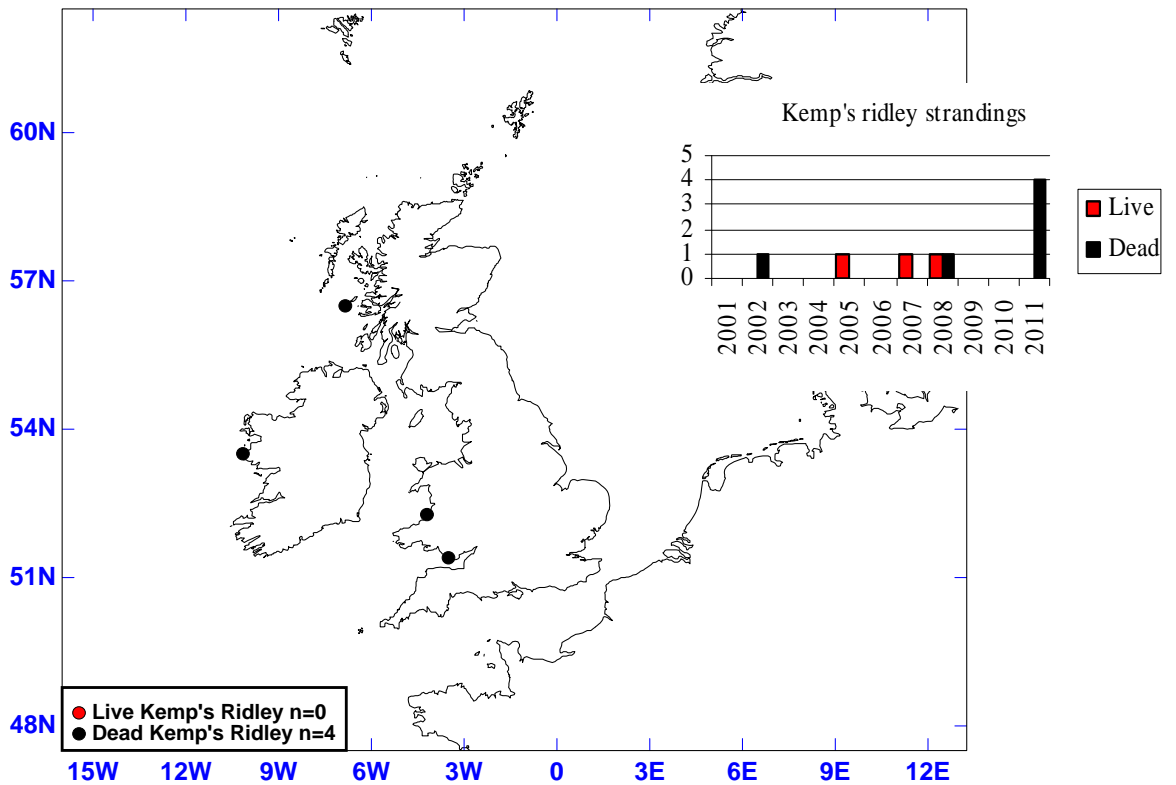


Figure 10. *Kemp's ridley strandings 2011.*

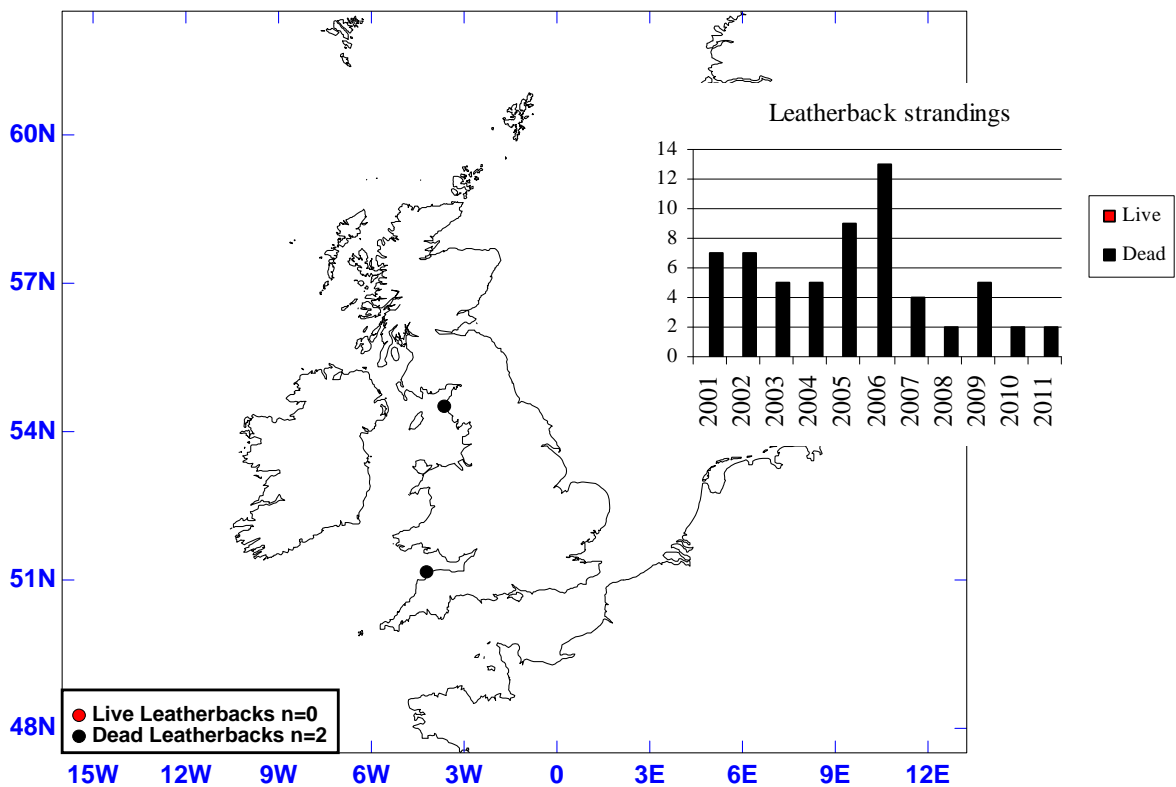


Figure 11. *Leatherback strandings 2011.*

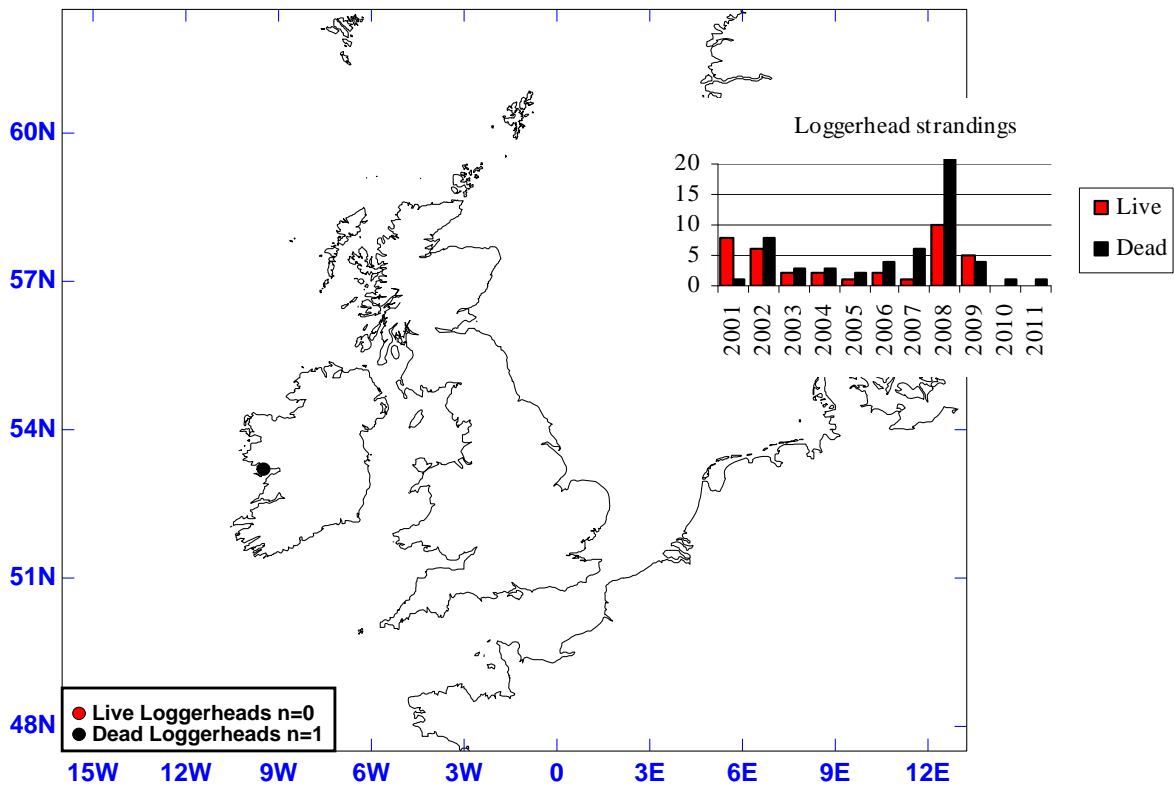


Figure 12. *Loggerhead strandings 2011.*

No live or dead **unidentified turtles** were reported stranded during 2011. However, ‘strandings’ of both live and dead unidentified turtles have been recorded in recent years as shown in **Figure 13**.

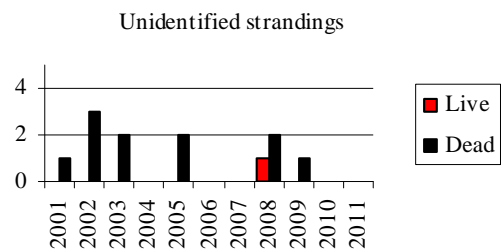


Figure 13. *Unidentified strandings 2011.*

All leatherback strandings and sightings, both dead and alive have been plotted by month for the period 2001 - 2011 (n=499) shown in **Figure 14**. The average figure was taken over 2001-2011 and plotted in **Figure 15**. The graph clearly shows the increase in numbers through the summer months and gives a good indication on when to expect leatherbacks around the British Isles & Republic of Ireland coast. The records for the hard-shell species are more sporadic. Of the hard-shell species the most numerous recorded turtle over the 2001 - 2011 period is the loggerhead (n=110). The data for this species are plotted in **Figure 16** and **Figure 17**.

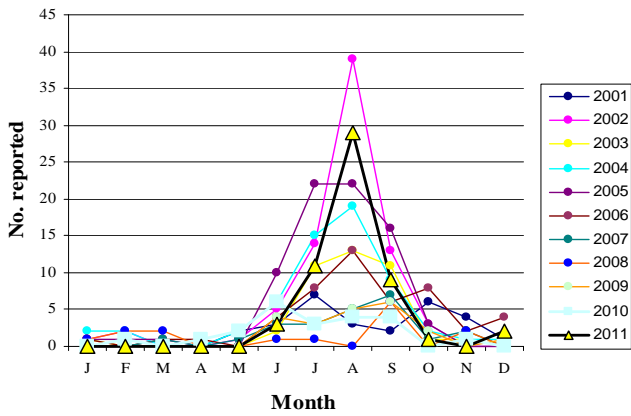


Figure 14. All leatherbacks by month.

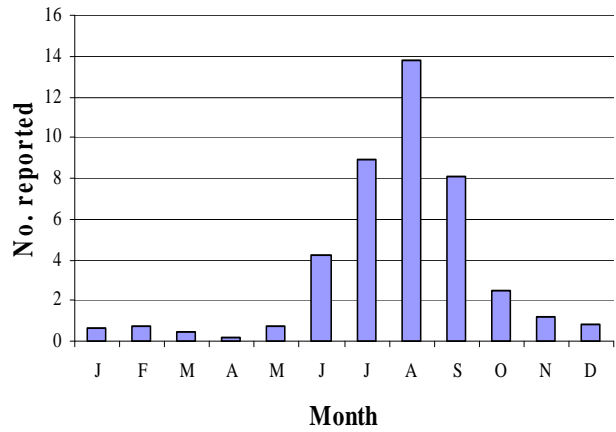


Figure 15. All leatherbacks average over 2001-2011

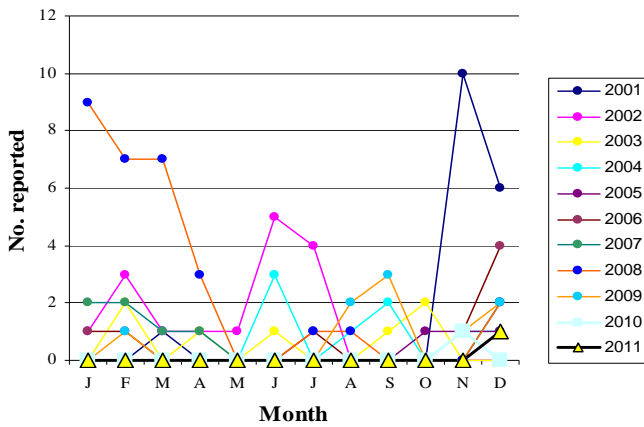


Figure 16. All loggerheads by month.

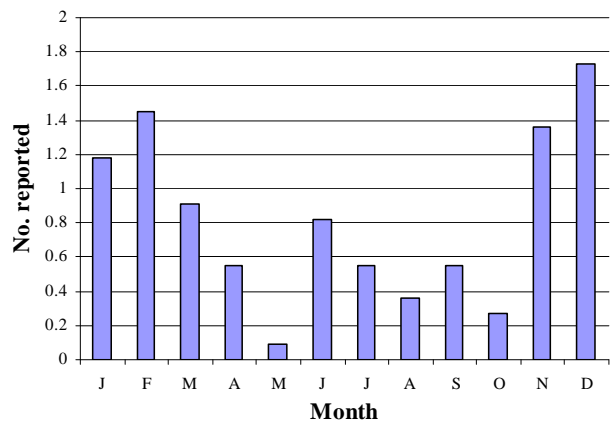


Figure 17. All loggerheads average over 2001-2011.

Table 4.

Cumulative number of records.		
Country	All Species	
	2011	1748 - 2011
Rep. of Ireland	16	1273
England	21	561
Scotland	10	374
Wales	16	228
N. Ireland	0	39
Isle of Man	1	32
Channel Islands	0	12
Offshore	3	10
Total	67	2529

An additional row has been added to **Table 4.** (Offshore), this includes records of turtles where its difficult to attribute a county ie, animal far from shore or nearer to Europe than UK.

Countries are listed in **Table 4.** by descending order of total number of records shown in the year **1748 – 2011** column.

Table 5.

Species Comparison.																		
Country	<i>1991 - 2001</i>																	
	2001 - 2011																	
	GT	HB	KR	LBT	LOG	UNI												
England	2	1	0	0	4	3	103	153	12	30	15	58						
Scotland	1	2	0	0	0	2	88	81	13	34	14	11						
Rep. of Ireland	0	1	0	0	2	1	413	162	13	30	29	15						
Wales	0	0	0	0	2	3	64	74	1	15	10	11						
Channel Islands	0	1	0	0	0	0	0	0	1	1	0	2						
N. Ireland	0	0	0	0	0	0	16	8	0	0	3	2						
Isle of Man	0	0	0	0	0	0	4	16	0	0	2	4						
Offshore	0	0	0	0	0	0	3	5	0	0	0	1						
Total	3	5	0	0	8	9	691	499	40	110	73	104						

GT = Green turtle, **HB** = Hawksbill turtle, **KR** = Kemp's ridley turtle, **LBT** = Leatherback turtle, **LOG** = Loggerhead turtle, **UNI** = Unidentified turtle.

Table 6.

TURTLE Database Species Totals (1748 - 2011).	
Species	TOTAL
Green turtle (<i>Chelonia mydas</i>)	10
Hawksbill turtle (<i>Eretmochelys imbricata</i>)	1
Kemp's ridley turtle (<i>Lepidochelys kempii</i>)	40
Leatherback turtle (<i>Dermochelys coriacea</i>)	1898
Loggerhead turtle (<i>Caretta caretta</i>)	216
Unidentified	364
Total animals	2529

The total records held in TURTLE are 2542 (end of 2011). However, some records with inadequate year data have been excluded in this report and show as a discrepancy compared to previous years in some totals presented in Table 6.

A breakdown of records for each country is shown in **Table 4.** However, the eleven year comparison, 1991-2001 / 2001-2011 shown in **Table 5,** shows a marked decline in leatherback turtles recorded for the Republic of Ireland compared with increases for nearly all other countries, the high numbers in 1991-2001 are a result of the concerted efforts of Gabriel King in investigating and collecting historical records around the Irish coast.

5. MATTERS ARISING.

5.1 Retrospective Reports.

The following retrospective records were added to the TURTLE database during 2011.

- T1982/28 Loggerhead turtle, stranded dead, July 1982 at Thallabawn Strand, Co Mayo, Eire.
- T1982/29 Kemp's Ridley, stranded dead, December 1982 at Cross Strand Co Mayo, Eire.

6. LIVE STRANDING EVENTS 2011.

There were no live-strandings of marine turtles reported in 2011.

6.1 Rehabilitation

There were no marine turtles reported undergoing rehabilitation in 2011.

6.2 Repatriation.

There were no marine turtles repatriated in 2011.

7. BYCATCH.

Four marine turtles were reported as by-caught during 2011, all were leatherbacks, the details are listed below.

T2011/006 was a leatherback turtle found dead entangled in pot ropes near Bawden Rocks St Agnes, Cornwall on the 26th July 2011. The carcass was recovered to shore where basic morphometrics were taken. Due to the state of decomposition the carcass was not examined further and the remains were collected by the local authority for disposal.

T2011/007 was a leatherback turtle found alive entangled in pot ropes 1 mile west of the harbour at St Agnes, Cornwall on the 27th July 2011. The turtle was released alive.

T2011/044 was a leatherback turtle found alive entangled in pot ropes 5nm south west of Stoke Point Plymouth, Devon on the 9th September 2011. The turtle was released alive.

T2011/055 was a leatherback turtle found alive entangled in pot ropes at Lambay Island, Dublin, Republic of Ireland on the 26th August 2011. The turtle was released alive.

8. SAMPLES & POST-MORTEM EXAMINATIONS.

The normal procedure for the taking of samples is from fresh animals that have been taken for *post-mortem* examination within the CSIP or the Irish Strandings project.

One green turtle was examined within the CSIP during 2011.

The green turtle, **T2011/050**, was found at Newark Bay, South Ronaldsay in the Orkneys on the 13th December 2011. This turtle represents the tenth green turtle recorded in the TURTLE database and the fourth for Scotland. The carcass was in a very fresh condition and was sent for examination at the SAC Inverness where preliminary findings suggested the cause of death to be cold stunning.



Two Kemp's Ridley turtles found stranded in 2011 are currently in cold-storage awaiting examination at ZSL.

Plate 1.

Green turtle T2011/050.

Photo by: SAC/CSIP

9. DATA SHARING.

The TURTLE database was uploaded to the National Biodiversity Network (NBN) <http://www.nbn.org.uk/> to include the 2010 data.

10. UNUSUAL OCCURENCES.

Following a small number of dead Kemp's Ridley turtles stranding on the British Isles in December 2011 / January 2012 (5 to date) a request was sent to NOAA asking if turtles recovered and released from the BP Deep Water Horizon oil spill in the Gulf of Mexico were tagged.

Details of tags and tagging location were supplied and as a result the Kemp's Ridelys currently awaiting post-mortem examination at the ZSL will be X-rayed and scanned for PIT tags.

11. PUBLICITY.

The Strandings Web-site has been maintained to provide details of the CSIP. Although this is intended primarily for Wales, key contact details are given for England, Scotland and Ireland. The pages can be viewed at www.strandings.com/

Annual reports and other turtle related publications are available at www.strandings.com/Turtlepage.html Posters and leaflets produced to increase awareness of the project have continued to be distributed.

Records are posted on the National Biodiversity Network (NBN) Gateway and these can be accessed at <http://www.searchnbn.net/> The NBN is now the preferred outlet for the database and the database on the strandings.com web-site will no longer be maintained but will be linked to the NBN in future.

Publicity encouraging the public to be alert and report sightings and strandings of marine turtles was conducted by MCS through 2011. This included items on Ch4 TV News, BBCR4 Today, BBC R2 News, BBC Radio Scotland, BBC Radio Wales and articles in the national Daily Mail, Daily Telegraph, The Times, The Sun, The Mirror, The Guardian and The Observer, as well as over 150 articles in regional and local press and radio. The Channel 4 news item can be viewed at <http://www.channel4.com/news/turtles-lured-to-the-uk-by-jellyfish-feast>

An updated UK Turtle Code was produced by MCS in 2011 funded by Natural England and the Scottish Natural Heritage <http://www.mcsuk.org/downloads/wildlife/turtlecode.pdf> a copy is also attached as Appendix 2.

12. TAGGING.

No marine turtles underwent rehabilitation or repatriation during 2011 so therefore no tagging was carried out.

13. ACKNOWLEDGEMENTS.

Marine Environmental Monitoring wishes to acknowledge the following;

Cornwall Wildlife Trust, Marine Conservation Society, Medasset, Tom Doyle (Coastal and Marine Research Centre (CMRC)), Laura Hanley I.o.M and the Hebridean Wildlife Trust (HWDT) for supplying data to the database.

Scottish Natural Heritage, Natural England, National Parks & Wildlife Service and the Countryside Council for Wales for financial support towards the British Isles & Republic of Ireland TURTLE database.

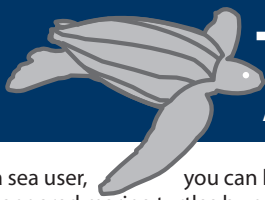
I would like to offer my very special thanks to Robin Pratt and Jemma and Ray Lerwill without whose support the marine mammal strandings project in Wales, as is, would probably not be in existence. In the early nineties, when very little funding was available in Wales for investigating causes of death in marine mammals and turtles, (cetaceans, seals and turtles) a facility was provided at Fishguard, Pembrokeshire, enabling under-cover mechanical handling, freezer storage (supported by CCW), washing down facilities and office space which housed the Welsh national reporting telephone line for nearly 20 years. Under the cover of the publicity of the new UK national strandings reporting line 0800 6520333, I have taken the opportunity to move the Wales reporting line from Fishguard to my home base. I and the CSIP team are extremely grateful to Robin, Jemma and Ray for this support, commitment and foresight towards monitoring the marine megafauna on the Welsh coast.

14. APPENDICES.

- Appendix 1. 2011 TURTLE data.
- Appendix 2. Updated UK Turtle Code.

Appendix 1.

RecordKey	Species	LifeStage	Live/Dead	EndDate	Country	County	Location	Notes
T2011/001	LBT	SEA	ALIVE	05/06/2011	SCOTLAND	WESTERN ISLES	The Minch, between Skye and	Seen from HWDT research vessel Silurian. 1.5m seen from 50m for 10 mins before diving.
T2011/002	LBT	SEA	ALIVE	02/06/2011	WALES	PEMBROKESHIRE	5 miles NW of Grassholm	Seen 200 metres away. Slight sea strong tide. Large back shape, too large for seal, no fin - probable turtle.
T2011/003	UNI	SEA	ALIVE	11/07/2011	ENGLAND	CORNWALL	Between Porthkerris and Par	Seen from boat 2ft 6ins x 3 ft. Pale greenish.
T2011/004	LBT	SEA	ALIVE	13/07/2011	ENGLAND	CORNWALL	South from St Austell	No details
T2011/005	LBT	SEA	ALIVE	09/07/2011	WALES	PEMBROKESHIRE	5 mile off north side Skomer	Seen 6 metres from yacht - surfaced 3 times then dived
T2011/006	LBT	SEA	DEAD	26/07/2011	ENGLAND	CORNWALL	Bawden Rocks St Agnes	Found dead in commercial pot ropes. Approx 7 ft long. Taken ashore.
T2011/007	LBT	SEA	ALIVE	27/07/2011	ENGLAND	CORNWALL	1 mile west of harbour At Agnes	Released from rope tangled around head and flipper. White scar line down carapace.
T2011/008	UNI	SEA	ALIVE	26/07/2011	ENGLAND	DORSET	One mile offshore of Durlston	Body approx 15ins. Short neck. Seen from 25ft for half minute before dived. Green colour swimming east to west.
T2011/010	LBT	SEA	ALIVE	29/07/2011	WALES	SWANSEA	Port Eynon	Seen by Gower Coast Adventure boat
T2011/011	LBT	SEA	ALIVE	23/07/2011	WALES	CARMARTHENSHIRE	1km off Taf and Towy estuaries	10 m from observer. Several pics taken.
T2011/012	LBT	SEA	ALIVE	29/07/2011	EIRE	CORK	near Santo wreck, outside Cork	seen from dive boat
T2011/013	LBT	SEA	ALIVE	07/08/2011	ENGLAND	HAMPSHIRE	Reeth Bay, Niton, Isle of Wight	seen from boat 2m away. Huge turtle, 3 ft across. Swimming 500m from bay.
T2011/009	LBT	SEA	ALIVE	27/07/2011	ENGLAND	CORNWALL	Tubby's Head	Light scar line down carapace and part of front flipper missing. 2m inshore off rocks, viewed from cliffs.
T2011/014	UNI	SEA	ALIVE	05/08/2011	ENGLAND	SUSSEX	2 km offshore east of Selsey Bill	seen 20m from boat moving eastwards - no further details
T2011/015	LBT	SEA	ALIVE	06/08/2011	WALES	CARMARTHENSHIRE	20m from Laughan Sands	seen while sampling jellyfish.1.5-1.7m length,deep scar left side dorsal ride. Shallow water
T2011/016	LBT	SEA	ALIVE	02/08/2011	WALES	ANGLESEY	1 km from coast. Near Prth	Seen 2 m from boat by Kayaking instructor. Heading southerly direction out to sea.
T2011/017	LBT	SEA	ALIVE	04/08/2011	WALES	PEMBROKESHIRE	Witches cauldron, Ceibwr Bay	Seen 15m from headland. Seen 60 m from observer.
T2011/018	LBT	SEA	ALIVE	08/08/2011	SCOTLAND	HIGHLAND	Gairloch	Floating near surface in Gairloch harbour then dived. Seen 5m from observer
T2011/019	LBT	SEA	ALIVE	08/08/2011	WALES	ANGLESEY	off coast near Holyhead	Seen from boat. Swimming. 2m long.
T2011/020	LBT	SEA	ALIVE	19/08/2011	WALES	PEMBROKESHIRE	off St Govan's Head	Seen from land while fishing - One metre across making good headway near rocks against tide in SW direction.
T2011/021	LBT	SEA	ALIVE	26/08/2011	EIRE	CORK	1 mile south of Galley Head	seen from MV Holly Jo, whale watching vessel
T2011/022	LBT	SEA	ALIVE	19/08/2011	WALES	PEMBROKESHIRE	400yds off Coppit Hall, between	Heard then saw huge turtle surface 5 ft from kyack whilst fishing - dived and not seen again -
T2011/023	LBT	SEA	DEAD	26/08/2011	ENGLAND	CORNWALL	2 miles from headland, nr Church	Badly decomposed, head and limbs missing. Seen one metre from fishing boat?
T2011/024	LBT	SEA	ALIVE	24/08/2011	SCOTLAND	offshore	Elgin Franklin oil rig	Seen from boat approx. 40 metres. White mark on left top of carapace - looked injured or exhausted, treading water.
T2011/025	LBT	SEA	ALIVE	29/08/2011	ENGLAND	CORNWALL	1500 m offshore near Looe Island	Swimming strongly towards Fowey
T2011/026	LBT	SEA	ALIVE	17/08/2011	ENGLAND	ISLES OF SCILLY	25nm off Scilly isles, near Celtic	Swimming west. Seen 20 metres from Fastnet sailing boat.
T2011/027	LBT	SEA	ALIVE	23/08/2011	SCOTLAND	Western Isles	1000m off headland entrance to	Seen approx 5 m from observer. Surfaced in front of and facing boat (boat headed n/w) . 1.5 - 2 m in length. Thought two turtles in wake.
T2011/028	UNI	SEA	ALIVE	17/08/2011	ENGLAND	DEVON	Plymouth	Seen from sailing boat. 14 ins long.
T2011/029	UNI	SEA	ALIVE	28/08/2011	ENGLAND	DEVON	3-4 miles offshore between	Stationary then swimming westerly 15m from observer. Colour of wet cardboard box and approx 3 ft long.
T2011/031	LBT	SEA	ALIVE	30/08/2011	ENGLAND	CUMBRIA	offshore near Walney offshore	Swimming fast westerly one metre from observer - also seen on 31st
T2011/032	LBT	SEA	ALIVE	28/08/2011	WALES	PEMBROKESHIRE	near shore Martin's haven	photos of animal 12 ft long small head, long neck, stiff body
T2011/033	LBT	SEA	ALIVE	23/08/2011	ENGLAND	CORNWALL	100m off the Runnel stone,	Seen from boat swimming in southerly direction, 50m from observer
T2011/034	LBT	SEA	ALIVE	31/08/2011	SCOTLAND	Western Isles	next to the isle of Pabbay, west	Seen 30m from observer seen from boat on surface then dived
T2011/035	LBT	SEA	ALIVE	01/09/2011	ENGLAND	Cumbria	800m off Silecroft beach, south	Seen from fishing boat swimming around 30 ft from observer
T2011/036	LBT	SEA	ALIVE	30/08/2011	WALES	PEMBROKESHIRE	300m off bay near Amroth	Seen while 4 boats kayaking 3m away - turtle appeared to follow and interact.
T2011/038	LBT	SEA	ALIVE	18/09/2011	ENGLAND	CORNWALL	500m off headland Pendeen	Seen from land approx 600m. Just inside the Three Stone Oar rocks.
T2011/037	LBT	SEA	ALIVE	01/09/2011	SCOTLAND	Highland	1 mile off headland from Mellon	Moving out to sea towards Priest Island - short dives air intakes within 20 ft of boat.
T2011/030	LBT	SEA	ALIVE	30/08/2011	OFFSHORE	off France	2000m offshore of Channel Isles	Swimming slowly head up for air every 4-5 mins.
T2011/039	LBT	SEA	ALIVE	18/09/2011	SCOTLAND	Galloway	near Robin Rigg Windfarm,	seen 5m from boat travelling SW.
T2011/040	UNI	SEA	ALIVE	03/09/2011	OFFSHORE	offshore	English Channel	seen alongside St Malo to Portsmouth ferry
T2011/041	LBT	SEA	ALIVE	17/09/2011	WALES	PEMBROKESHIRE	off Strumble Head	Seen facing northerly direction with bins while bird/sea watching. Inside tide race 2-300m offshore, size of a Ford Fiesta!
T2011/042	LBT	ST	DEAD	27/09/2011	ENGLAND	CUMBRIA	St Bees Head	Found dead decomposing right of Lifeboat stn.
T2011/043	LBT	SEA	ALIVE	01/10/2011	SCOTLAND	Galloway	near Robin Rigg Windfarm,	seen by dive crew of MV Maid Good and 50-100m by observer onboard carrying out marine mammal monitoring for E-ON. Seen 10mins not feeding.
T2011/044	LBT	SEA	ALIVE	09/09/2011	ENGLAND	DEVON	5nm south west of Stoke Point	Found entangled in pot rope - released alive and swam away
T2011/045	LBT	SEA	ALIVE	31/08/2011	WALES	CEREDIGION	Mwnt	Seen by holiday maker kyaking in bay in evening
T2011/046	LBT	SEA	ALIVE	12/10/2011	ENGLAND	CUMBRIA	1.2nm west of Whitehaven piers.	Seen from boat. Pics taken.
T2011/048	LBT	ST	DEAD	06/12/2011	ENGLAND	DEVON	Woolacombe Beach	Decomposed = awaiting details
T2011/047	LBT	SEA	ALIVE	29/09/2011	ISLE OF MAN	ISLE OF MAN	South off Chickens 6 - 12 nm	Large, 1.5 - 2m, with ridges on its back. Seen for 5 mins from commercial fishing boat King Challenger.
T2011/049	KR	ST	DEAD	08/12/2011	SCOTLAND	Western Isles	Baugh, Isle of Tiree	36.5cm nose to shell tip, carapace 27cm
T2011/050	GT	ST	DEAD	13/12/2011	SCOTLAND	ORKNEY	Newark Bay, Sth Ronaldsay	Carapace290mm x 280 mm. Male
T2011/051	KR	ST	DEAD	12/12/2011	WALES	CEREDIGION	Llanon	Photograph sent with report but nothing found next day. Recovered by John Gorman and collected by Rod Penrose 31/12/2011. Held by MEM
T2011/052	KR	ST	DEAD	13/12/2011	EIRE	MAYO	Turbot Island	26ins
T2011/053	KR	ST	DEAD	28/12/2011	WALES	Vale of Glamorgan	Llantwit Major beach	dead on beach. Hidden and retrieved next day.
T2011/054	LBT	SEA	ALIVE	28/09/2011	OFFSHORE	offshore	offshore coast of France	Seen from Portsmouth ferry heading to France
T2011/055	LBT	SEA	ALIVE	26/08/2011	EIRE	DUBLIN	Lambay Island, Dublin	Tanagled in pot rope, released alive by Alpha Dive Group
T2011/056	LBT	SEA	ALIVE	17/07/2011	EIRE	WEXFORD	Coningmor Rock, near Saltee	Swimming
T2011/057	LBT	SEA	ALIVE	22/08/2011	EIRE	CORK	offshore Toe Head (1 of 3	seen from boat (1 of 3 sightings possibly same animal)
T2011/058	LBT	SEA	ALIVE	22/08/2011	EIRE	CORK	offshore Toe Head (1 of 3	seen from boat (1 of 3 sightings possibly same animal)
T2011/059	LBT	SEA	ALIVE	22/08/2011	EIRE	CORK	offshore Toe Head (1 of 3	seen from boat (1 of 3 sightings possibly same animal)
T2011/060	LBT	SEA	ALIVE	17/08/2011	EIRE	CORK	off Old Head Kinsale gs fields	seen from angling charter
T2011/061	LBT	SEA	ALIVE	21/08/2011	EIRE	CORK	Dursey Island	no details
T2011/062	LBT	SEA	ALIVE	23/07/2011	EIRE	CORK	1 mile east of High Island,	seen from whale watching vessel. Size medium.
T2011/063	LBT	SEA	ALIVE	17/08/2011	EIRE	KERRY	600m from Beara Rocks, Lambs	seen from 27ft yacht. Big enough to stand on!
T2011/064	LBT	SEA	ALIVE	19/08/2011	EIRE	CORK	close to Cape Clear	waiting for details angling charter boat
T2011/065	LBT	SEA	ALIVE	20/08/2011	EIRE	CORK	close to Sherkin Island	waiting for details
T2011/066	LBT	SEA	ALIVE	21/08/2011	EIRE	CORK	south of Cape Clear	waiting for details
T2011/067	LOG	ST	DEAD	01/12/2011	EIRE	CLARE	Fanore Beach	carapace 54 x 58 cms with one flipper and bones found on beach - pic sent to Tom Doyle for ID



The United Kingdom Turtle Code

Advice for sea users on how to deal with marine turtle encounters

As a sea user, you can help in the effort to protect endangered marine turtles by providing information about your encounters with these spectacular creatures in UK waters.

MARINE TURTLES ARE LEGALLY PROTECTED

There is no offence if turtles are caught accidentally in fishing gear. Nor is it an offence to help turtles if entangled or stranded, or temporarily to hold dead turtles for later examination by experts.

However, marine turtles are protected in Britain.

This means that:

- turtles may not be deliberately killed or caught
- live turtles may not be landed unless for the purpose of tending them or enabling their subsequent release
- dead turtles or shells obtained from turtles in UK waters may not be possessed unless the animal was lawfully acquired
- turtles and their derivatives may not be sold or offered for sale without UK government permission, unless they are antiques acquired before 1st June 1947 (with documented proof)
- turtles and their derivatives may not be imported or exported without UK government permission.

The following legislation pertains to marine turtles:

- Wildlife and Countryside Act 1981 (as amended), in England and Wales.
- Conservation of Habitats and Species Regulations 2010, in England and Wales.
- Conservation (Natural Habitats, &c.) Regulations 1994 as amended, in Scotland.
- Conservation (Natural Habitats etc.) (Amendment) Regulations (Northern Ireland) 2007.
- Control of Trade in Endangered Species (Enforcement) Regulations (1997) as amended, in the UK.
- Customs and Excise Management Act 1979.
- Isle of Man Wildlife Act 1990.

PLEASE REPORT ALL TURTLE ENCOUNTERS

ENGLAND/WALES

ALL RECORDS
Rod Penrose, Marine Environmental Monitoring
01239 683033 (24hrs)
www.strandings.com

LIVE STRANDINGS/ ENTANGLEMENTS

RSPCA 0300 1234999
BDMLR 01825 765546

ISLE OF MAN

Dr Fiona Gell/Laura Hanley
DEFA - Isle of Man Government
01624 685835 (main)
Marine Operations Centre
01624 686628 (24hrs)

SCOTLAND

ALL RECORDS
Laura Clark, Marine Monitoring Officer,
Scottish Natural Heritage
01463 725237

DEAD STRANDINGS

Bob Reid, Scottish Agricultural College
01463 243030/
07979245893

LIVE STRANDINGS/ ENTANGLEMENTS
SSPCA 03000 999999

NORTHERN IRELAND

ALL RECORDS
The Coastal Zone Centre at Portrush (DOENI)
028 7082 3600

REPUBLIC OF IRELAND

ALL RECORDS
Dr Thomas Doyle
Coastal & Marine Research Centre, University College Cork
00353 (0) 21 4703119 (Direct)
00353 (0) 87 1354938 (24hrs)

Report online at: www.euroturtle.org/turtlecode & www.mcsuk.org

RECORD THE FOLLOWING DETAILS

All information is valuable, but the following details are particularly useful:

- A description** of the turtle (alive or dead), identification of species (at least to leatherback/hard-shelled level) and overall straight length. Note any damage (e.g. cuts, scars) and **take photographs** when possible.
 - Location** (longitude & latitude/ OS grid reference), **date** and **time** of sighting.
 - Other observations**, such as turtle's behaviour, whether caught in fishing gear (including exact nature of entanglement, gear involved) etc.
 - Presence of tags**. Many conservation projects place plastic or metal tags on turtles' flippers, which display identification numbers and a return address. Record any tag details if this can be done without causing disturbance to the turtle.
- Please report all dead turtles, even if they have to be discarded at sea. Records from diaries or logbooks, however old, are also of interest.**

WHAT TO DO IF YOU FIND A SICK OR ENTANGLED TURTLE

Immediately report the turtle to the relevant contact. Marine turtles will drown if trapped underwater, but prompt action can save them. A turtle that is entangled or trapped is likely to be stressed. Large turtles deliver a serious bite and a blow from a flipper can be painful, so be careful. Due to possible health risks involved in handling turtles, always wear rubber gloves.

TURTLES ENTANGLED AT SEA

Approach calmly and cautiously and ensure first of all that the turtle's head is above water so that it can breathe if it is alive.

ALIVE: AVOID TOWING TURTLES TO SHORE. They should be disentangled and released at sea whenever possible.

If alert & active

- Do not use a gaff to pull the turtle alongside and do not haul leatherbacks aboard.
- Avoid pulling hard on the turtle's flippers as they may dislocate or break.
- Carefully disentangle the turtle, making sure that as much net and line as possible has been removed before the animal is released.
- Make sure that the vessel is stopped and out of gear before carefully sliding the turtle back into the water.
- Ensure that the turtle is clear of the vessel before moving away.

ONLY if disentanglement at sea is impossible should the turtle be brought ashore.

Tow leatherbacks very slowly and make sure the animal's head is above water so that it can breathe. Release leatherbacks in shallow water, not on land. Other species should be retained and reported.

If traumatised/inactive (no or slight movement, limbs flexible and limp, no decomposition)

Severely traumatised hard-shelled turtles can be saved if they are small enough to fit on your boat.

- Wrap the turtle in a towel soaked in seawater. Do not cover the nostrils.
- Place the animal in a sheltered and secure place on its belly. To drain the lungs, raise the back end of the shell so the turtle is resting at approximately 30°. Keep it in this position until you return to shore.
- Leatherbacks should **not** be hauled aboard. If inactive, they can be towed to shore very slowly, ensuring they are able to breathe at all times.

DEAD: There may be serious health risks involved in handling dead turtles. Inexperienced individuals are advised not to touch them. Where possible, record the details listed above and, only if the specimen is fresh, bring it back to shore and place in cold storage. Always wear rubber gloves when handling turtles.

TURTLES STRANDED ON LAND

Leatherback turtles

Leatherbacks found stranded on beaches are usually very weak, dead or dying, but might still be saved.

If apparently uninjured:

- Carefully drag the turtle back to the sea and release it (enlist the help of several people and pull the shell rather than the flippers).
- Do not drag the animal over rocks, as this will cause severe damage.
- If stranded on rocks, it may be better to wait for the incoming tide to provide some buoyancy before dragging the turtle back to sea.

Other species (hard-shelled)

Loggerhead, Kemp's ridley, green and hawksbill turtles encountered on UK shores are usually cold stunned juveniles and should not be placed back in the sea.

- Wrap the turtle in a towel soaked in seawater, do not cover the nostrils
- Place the animal in a sheltered and secure place on its belly. If inactive, raise the back end of the shell so the turtle is resting at approximately 30° to drain the lungs. Report the turtle as soon as possible.

Dead turtles of all species are valuable for research and should be reported as soon as possible. Fresh specimens should be preserved in a cold store where possible. These animals will undergo a full post-mortem examination within the DEFRA-funded UK Cetacean Strandings Investigation Project (CSIP).

Marine Turtles in the UK



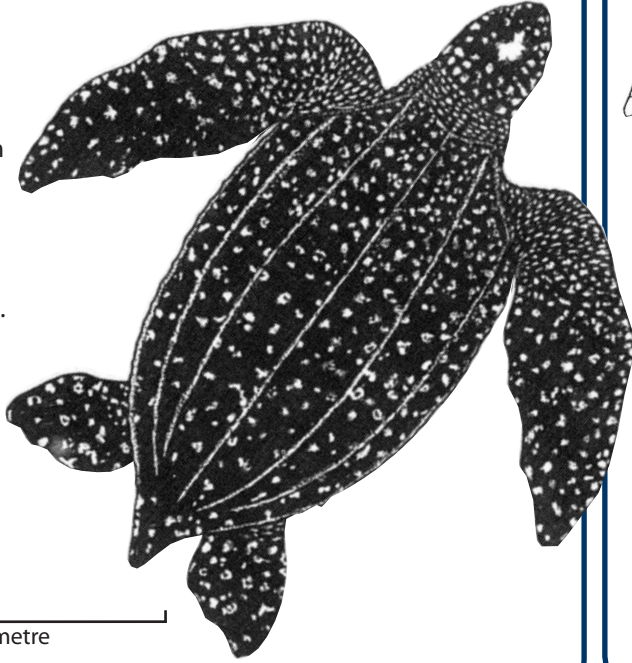
Endorsed by:



Of the world's seven marine turtle species, five have been recorded in UK waters. They are the leatherback, loggerhead, Kemp's ridley, green and hawksbill turtles. The leatherback, the largest marine turtle, is the species most frequently recorded in UK waters. Leatherbacks have a flexible, leathery shell and are unique among reptiles in that they are able to metabolically raise their body temperature above that of their immediate environment, allowing them to survive in colder waters. Each summer leatherbacks migrate to UK waters where they feed on jellyfish. The other four species have hard shells and are less frequently encountered in UK waters, where they usually occur as stray juveniles carried by currents from warmer seas.

LEATHERBACK TURTLE

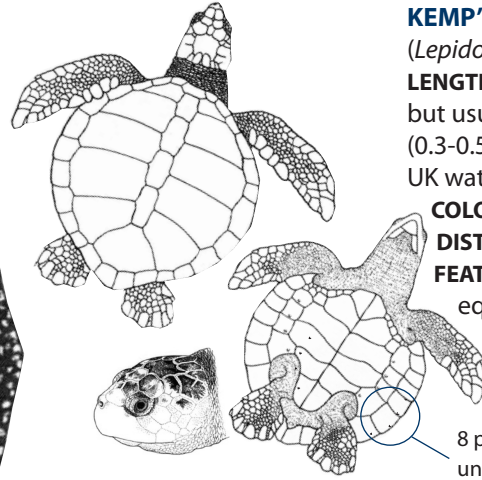
(Dermochelys coriacea)
Most frequently recorded species in UK waters.
LENGTH: up to 2.91 metres.
COLOUR: black, spotted with white.
DISTINCTIVE FEATURES: large, up to 916 kg, pronounced longitudinal ridges on shell, which tapers to a blunt spike.



SCALE 1 metre

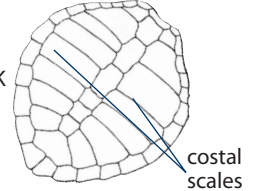
KEMP'S RIDLEY TURTLE

(Lepidochelys kempii)
LENGTH: up to 1 metre, but usually juveniles (0.3-0.5 metres) occur in UK waters.
COLOUR: grey/olive.
DISTINCTIVE FEATURES: shell width equal to or greater than shell length.



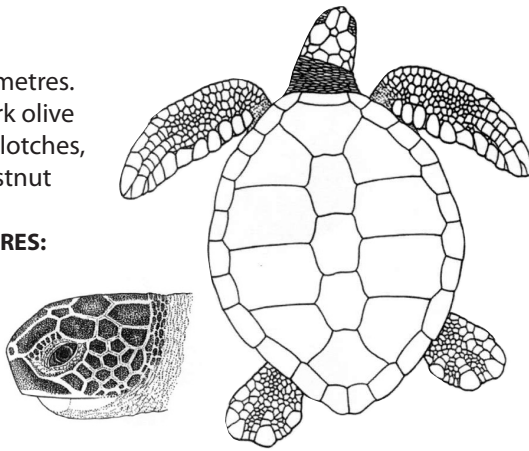
8 pores visible on underside (4 either side)

NB: The olive ridley turtle (*Lepidochelys olivacea*) occurs in the Atlantic, but has not been recorded in UK waters to date. Similar to Kemp's ridley with 8 pores on underside, but has 5-9 pairs of costal scales on shell.



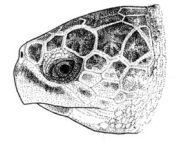
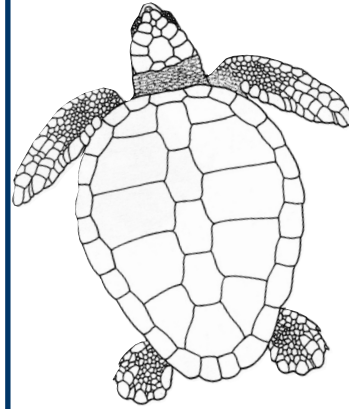
GREEN TURTLE

(Chelonia mydas)
LENGTH: up to 1.5 metres.
COLOUR: adults dark olive or grey with dark blotches, juveniles have chestnut coloured shell.
DISTINCTIVE FEATURES: smooth shell, rounded facial profile (not angular).



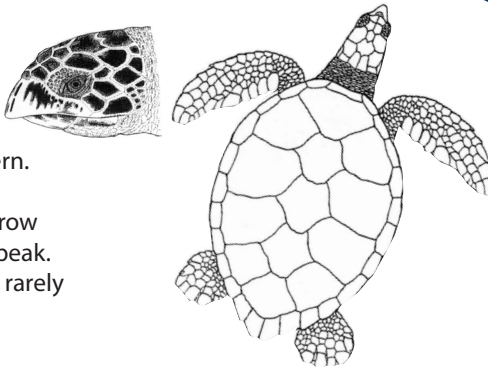
LOGGERHEAD TURTLE

(Caretta caretta)
LENGTH: adults up to 1.5 metres, but usually juveniles (0.3-0.5 metres) occur in UK waters.
COLOUR: reddish brown.
DISTINCTIVE FEATURES: large head, juveniles have small spikes along spine of shell.



HAWKBILL TURTLE

(Eretmochelys imbricata)
LENGTH: up to 1.2 metres.
COLOUR: brown, amber and black tortoiseshell pattern.
DISTINCTIVE FEATURES: shell scales overlapping, narrow tapered head with bird-like beak. Largely tropical distribution, rarely encountered in UK waters.



MARINE TURTLES ARE THREATENED

In UK waters threats include:

- **Accidental entanglement in fishing gear.** Although turtles can dive to great depths, they become stressed and drown when trapped underwater by fishing gear. Fishing gear discarded at sea may also entangle and kill turtles.
 - **Marine litter,** especially plastic, which turtles mistake for jellyfish. Once ingested, plastic can block a turtle's gut leading to starvation.
 - **Boat collisions.** Turtles often bask and must surface regularly to breathe, leaving them vulnerable to boat strike.
- PLEASE BE VIGILANT, AND DO NOT DISCARD FISHING GEAR OR LITTER AT SEA.**



Illustrations are taken, with permission, from: Eckert, K.L., K.A. Bjorndal, F.A. Abreu-Grobois, and M. Donnelly (Editors). 1999. *Research and Management Techniques for the Conservation of Sea Turtles*. IUCN/SSC Marine Turtle Specialist Group Publication No. 4. THIS DOCUMENT WAS PRODUCED BY THE MARINE CONSERVATION SOCIETY (MCS) IN 2011 WITH SUPPORT FROM NATURAL ENGLAND AND SCOTTISH NATURAL HERITAGE AND IN COLLABORATION WITH THE TURTLE IMPLEMENTATION GROUP OF THE UK MARINE TURTLES GROUPED SPECIES ACTION PLAN.