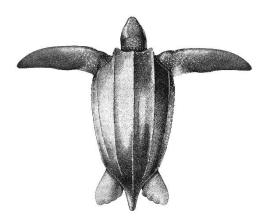


www.strandings.com

British Isles & Republic of Ireland Marine Turtle Strandings & Sightings Annual Report 2015

R.S.Penrose & L.R.Gander. May 2016





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1. SUMMARY

A total of 46 marine turtles were reported to TURTLE during 2015: 9 Kemp's ridley turtles, 15 loggerhead turtles, 18 leatherback turtles, 1 green turtle and 3 unidentified to species.

Live Stranded (10)

7 loggerhead turtles and 3 Kemp's ridley turtles live stranded. 6 loggerhead turtles and 2 Kemp's ridley turtles were recovered for rehabilitation. 2 loggerhead turtles survived and should be released in 2016.

Live sightings (19)

15 leatherback turtles and 2 loggerhead turtles.2 were unconfirmed to species and recorded as unidentified.

Dead stranded (16)

2 leatherback turtles stranded dead: 1 in Eire; 1 in Wales.

6 Kemp's ridley turtles stranded dead: 4 in England; 1 in Wales; 1 in Scotland.

6 loggerhead turtles stranded dead: 3 in Eire; 2 in England; 1 in Wales.

1 green turtle stranded dead in Wales.

1 unidentified to species stranded dead in Eire.

Post Mortem and Samples

3 loggerhead turtles have been examined post mortem so far at CSIP/ZSL, CSIP/Exeter Uni and CSIP/SMASS Inverness.

Data Sharing

2014 TURTLE database has been uploaded to the NBN Gateway http://www.nbn.org.uk

TURTLE records totals

The current total of 2719 is broken down thus: 1322 Eire; 643 England; 395 Scotland; 259 Wales; 40 Northern Ireland; 32 Isle of Man; 15 Channel Islands; 13 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.).

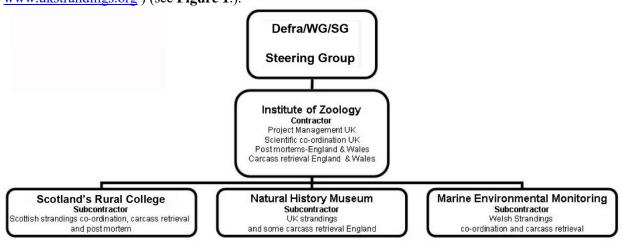


Figure 1. Current Technical Co-ordination of the Cetacean Strandings Investigation Programme (CSIP).

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 was 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
- 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. Contact: Dr Fiona Gell, 01624 685835 www.gov.im/defa
- **DOE** (NI) Marine Division is responsible for protecting the marine environment while maximising the sustainable use of its resources, now and for future generations. Contact: *Gary Burrows*, 028 7082 3600.
- 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. <u>www.mcsuk.org</u> Contact: *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
- Marine Turtle Research Group is based at the University of Exeter, Cornwall Campus and carries out fundamental and applied research on marine turtles in British waters, the Mediterranean, West Africa and throughout the UK Overseas Territories. Contacts: *Prof Brendan Godley & Dr Annette Broderick 01326 371 861*.
- **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 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 Paul.Edgar@naturalengland.org.uk or Katharine Woods, 0300 060 0638
- <u>katharine.woods@naturalengland.org.uk</u>
 Natural Resources Wales (NRW) Formerly 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, 03000 654912 Tom.Stringell@cyfoethnaturiolcymru.gov.uk or Ceri Morris, 03000 654913 Ceri.Morris@cyfoethnaturiolcymru.gov.uk
- 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, +44 (0)1392 926233 or Dr Tom Doyle +353 (0) 21 4703119.

<u>3. MATERIALS AND METHODS</u>

Contact details vary for different parts of the British Isles & Republic of Ireland and the Turtle Code (Appendix 2.) 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 <u>info@strandings.demon.co.uk</u>

For **Scotland** all records should be reported to Scottish Natural Heritage on **01463 725237** with dead strandings being reported to the Scotland's Rural College (SRUC) **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 <u>www.turtle.ie</u>

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

On the Isle of Man all marine animal strandings should be reported to DEFA on 01624 685835 or directly to Dr Fiona Gell 07624 473753.

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 <u>manned</u> 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 <u>www.strandings.com/Turtlepage.html</u>

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

<u>4. RESULTS</u>

The following three tables include marine turtle 'sightings' and 'strandings' reported through 2015.

Table 1.

2015 Total number of reported marine t	urtle	s fo	r the	Bri	tish	Isles	& 1	RoI.	(live	& c	lead)	•	
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Green turtle (Chelonia mydas)	0	0	0	0	0	0	0	0	0	0	0	1	1
Hawksbill turtle (Eretmochelys imbricata)	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's ridley turtle (Lepidochelys kempii)	2	0	0	0	0	0	0	0	0	0	0	7	9
Leatherback turtle (Dermochelys coriacea)	1	0	1	0	0	0	1	7	4	3	1	0	18
Loggerhead turtle (Caretta caretta)	1	1	0	0	0	0	0	0	0	2	0	11	15
Unidentified	0	0	0	0	0	1	0	1	0	0	0	1	3
Total animals	4	1	1	0	0	1	1	8	4	5	1	20	46

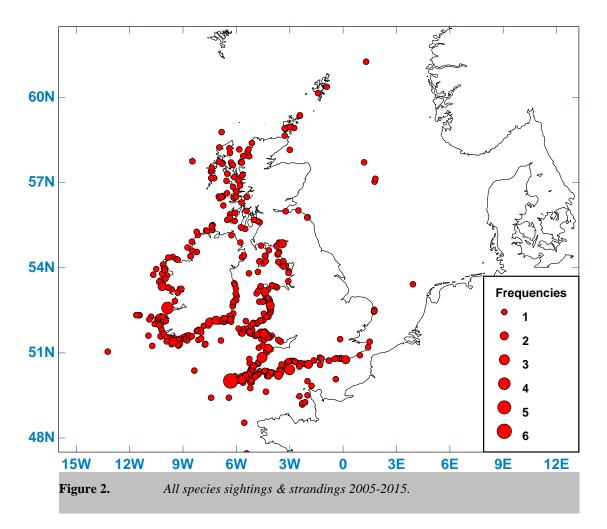
Table 2.

2015 Number of live marine turtles.													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Green turtle (Chelonia mydas)	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawksbill turtle (Eretmochelys imbricata)	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's ridley turtle (Lepidochelys kempii)	1	0	0	0	0	0	0	0	0	0	0	2	3
Leatherback turtle (<i>Dermochelys coriacea</i>)	0	0	1	0	0	0	1	7	4	2	0	0	15
Loggerhead turtle (Caretta caretta)	1	0	0	0	0	0	0	0	0	2	0	6	9
Unidentified	0	0	0	0	0	1	0	1	0	0	0	0	2
Total animals	2	0	1	0	0	1	1	8	4	4	0	8	29

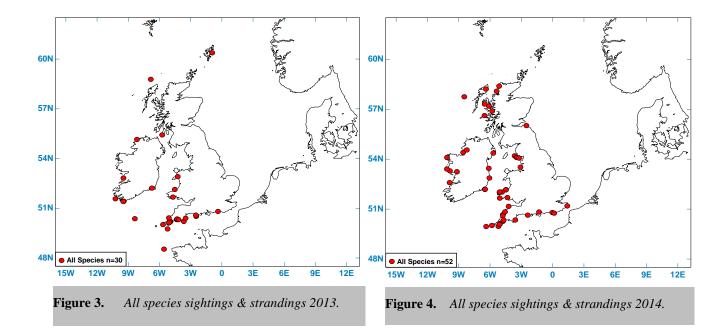
Table 3.

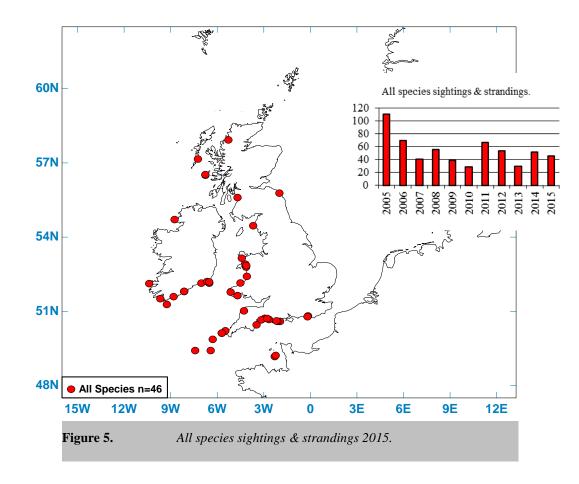
2015 Number of dead marine turtles.													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Green turtle (Chelonia mydas)	0	0	0	0	0	0	0	0	0	0	0	1	1
Hawksbill turtle (Eretmochelys imbricata)	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's ridley turtle (Lepidochelys kempii)	1	0	0	0	0	0	0	0	0	0	0	5	6
Leatherback turtle (<i>Dermochelys coriacea</i>)	1	0	0	0	0	0	0	0	0	1	1	0	3
Loggerhead turtle (Caretta caretta)	0	1	0	0	0	0	0	0	0	0	0	5	6
Unidentified	0	0	0	0	0	0	0	0	0	0	0	1	1
Total animals	2	1	0	0	0	0	0	0	0	1	1	12	17

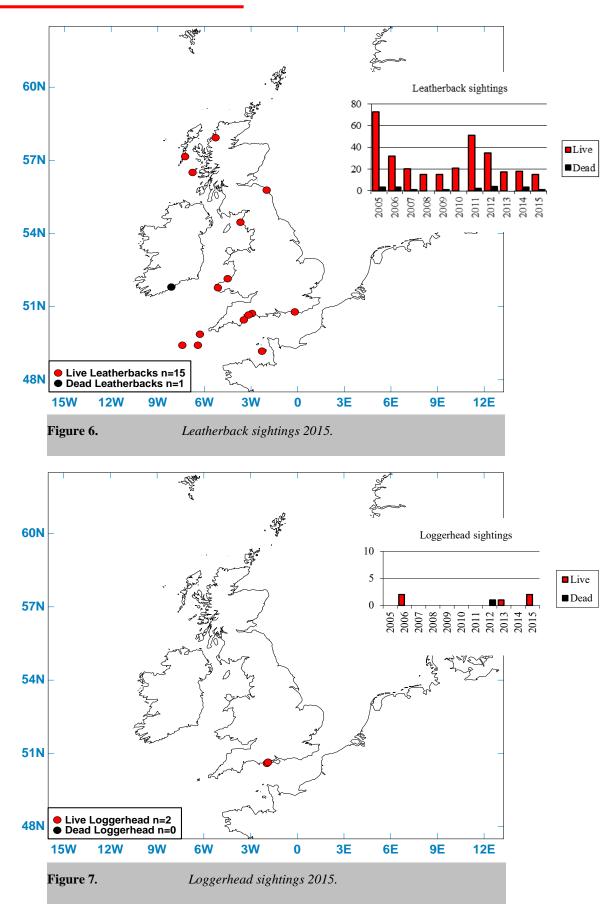
The general geographical distribution of each species, strandings and sightings, are plotted on the following maps. Although the maps are generated directly from the data stored, they should be regarded as showing distribution of animals rather than giving absolute counts. While the co-ordinate system 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.

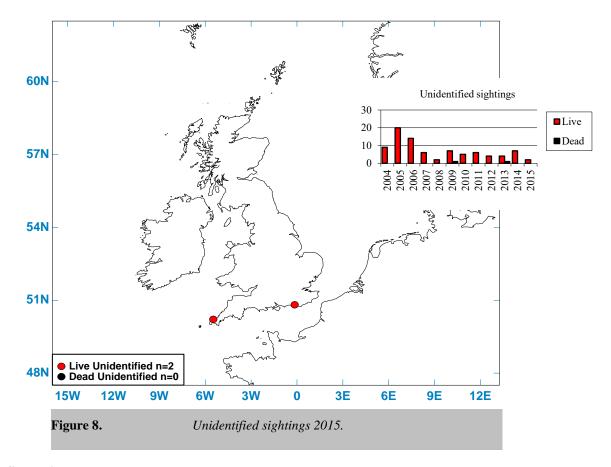


All species, sightings & strandings over the eleven year period 2005-2015 have been plotted in Figure 2.

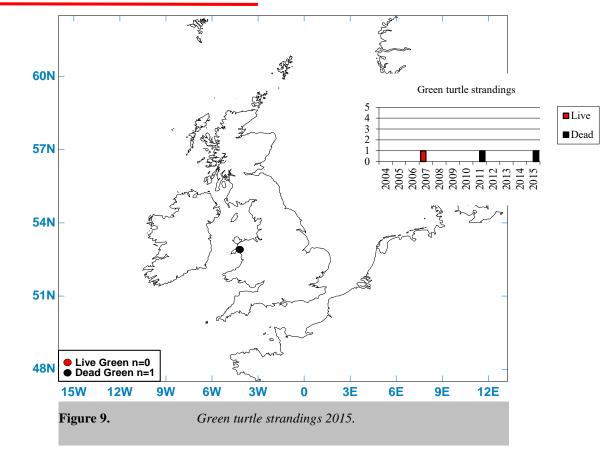




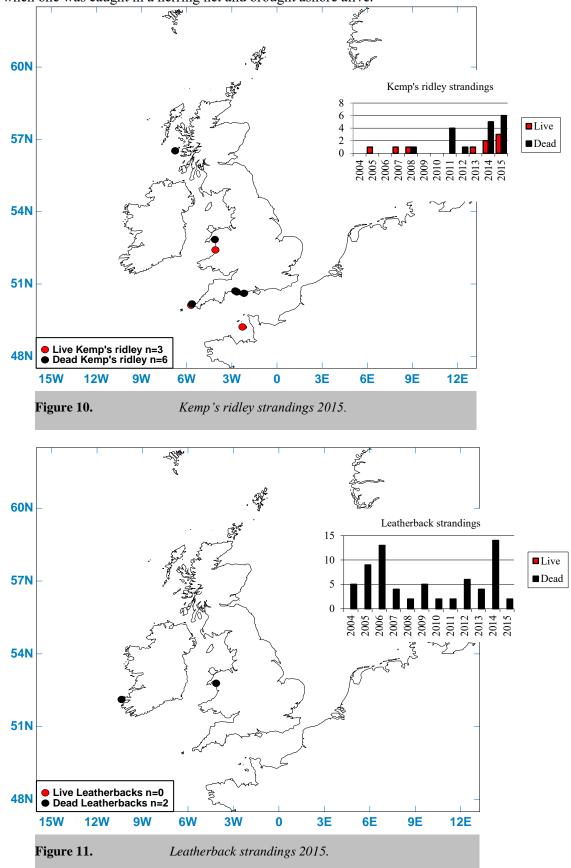


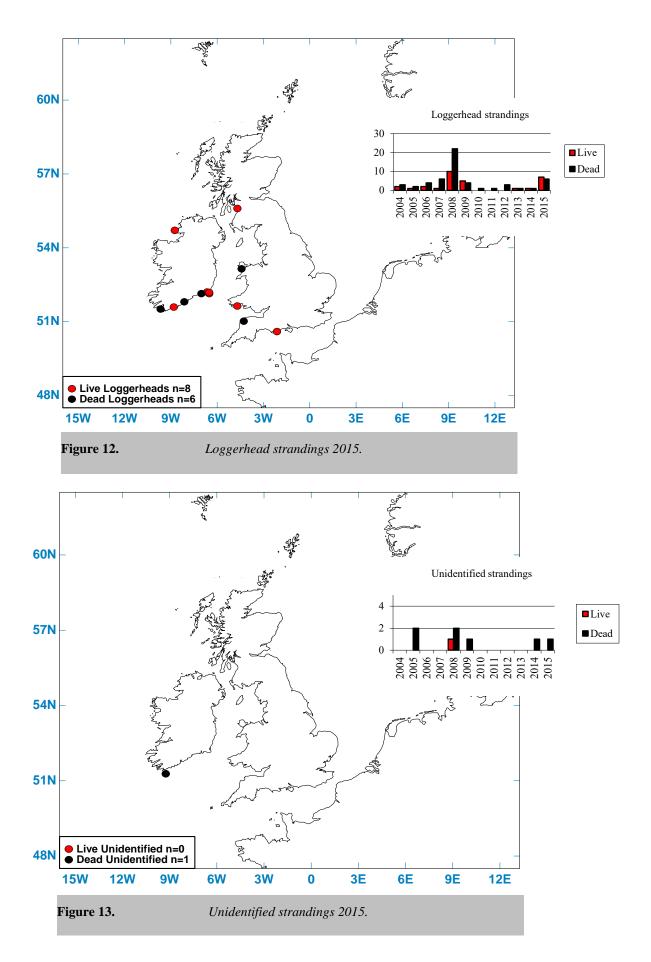


4.2 Strandings.



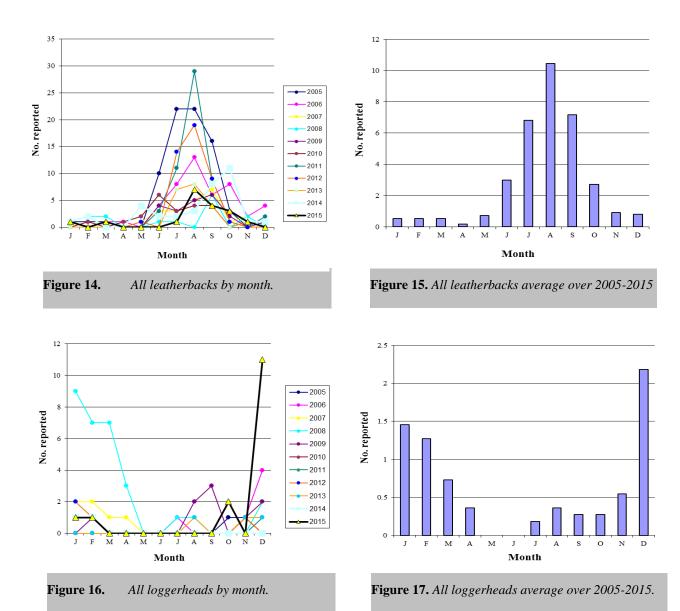
No live or dead **hawksbill turtle** strandings were reported during 2014. There have been no records of hawksbill turtle strandings in the database. One sighting record exists off Cork Harbour in February 1983 when one was caught in a herring net and brought ashore alive.





All leatherback strandings and sightings, both dead and alive have been plotted by month for the period 2005 - 2015 (n=401) shown in **Figure 14.** The average figure was taken over 2005-2015 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 2005 - 2015 period is the loggerhead (n=84). The data for this species are plotted in **Figure 16** and **Figure 17**.



Country	All Species							
	2015	1748 - 2015						
Rep. of Ireland	10	1322						
England	21	643						
Scotland	5	395						
Wales	8	259						
N. Ireland	0	40						
Isle of Man	0	32						
Channel Islands	2	15						
Offshore	0	13						
Fotal	46	2719						

Table 4.

The 'Offshore' row in **Table 4**. includes records of turtles where it is 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 - 2015 column.

Table 5.

Species Comparison.															
	1995 - 2005														
Country	2005 - 2015														
	G	Т	H	B	K	R	LB	Г	LC)G	UNI				
England	2	0	0	0	6	11	184	119	17	25	42	48			
Scotland	2	1	0	0	2	5	108	48	23	15	12	9			
Rep. of Ireland	0	1	0	0	0	2	246	137	19	26	21	16			
Wales	0	1	0	0	2	8	80	78	2	17	11	10			
Channel Islands	1	0	0	0	0	1	0	2	2	0	2	1			
N. Ireland	0	0	0	0	0	0	15	4	0	0	2	1			
Isle of Man	0	0	0	0	0	0	13	7	0	0	5	1			
Offshore	0	0	0	0	0	0	5	6	0	1	0	1			
Total	5	3	0	0	10	27	<u>651</u>	401	63	84	95	87			

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 - 2015).								
Species	TOTAL							
Green turtle (Chelonia mydas)	11							
Hawksbill turtle (Eretmochelys imbricata)	1							
Kemp's ridley turtle (Lepidochelys kempii)	61							
Leatherback turtle (Dermochelys coriacea)	2024							
Loggerhead turtle (Caretta caretta)	238							
Unidentified	384							
Total animals	2719							

The total records held in TURTLE are 2734 (end of 2015). 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, 1995-2005 / 2005-2015 shown in **Table 5**, shows a marked decline in leatherback turtles recorded for the Republic of Ireland, the high numbers in 1995-2005 are a result of the concerted efforts of Gabriel King in investigating and collecting historical records around the Irish coast.

5. MATTERS ARISING.

T2014/040 was a Kemp's ridley turtle found stranded alive at Walney Island, Cumbria on 20th December 2014. The animal was recovered by a member of the public and taken to a local zoo where he was unfortunately turned away. Luckily, the Cumbria Coordinator for BDMLR remained on the case and arranged rehabilitation at Maryport Aquarium. The turtle improved and was doing well until unfortunately it unexpectedly died on the 23rd January 2015. The turtle was examined postmortem by the attending veterinarian and it is thought the animal died as a result of septicemia. Samples were taken and sent to ZSL for analysis where Shewanella putrefaciens was cultured in pure isolate from lung,



Photo by: Vicki Temple.

liver and kidney swabs. This isolate might have been of pathological significance, but it is usually considered to be a post-mortem invader.

5.1 Retrospective Reports.

There were no retrospective reports received during 2015.

6. LIVE STRANDING EVENTS 2015.

There were 10 live-strandings of marine turtles reported in 2015.

T2015/002 Kemp's ridley turtle found stranded alive at La Pulente, St Ouens Bay, Jersey, Channel Islands on 11th January 2015. T2015/003 Loggerhead turtle found stranded alive at Glencolumcille beach, Donegal, Ireland on 24th January 2015. T2015/027 Loggerhead turtle found stranded alive at Irvine, north Avrshire, Scotland on 5th December 2015. **T2015/029** Kemp's ridley turtle found stranded alive at Cape Cornwall, Cornwall, England on 1st December 2015. T2015/031 Kemp's ridley turtle found stranded alive at Aberystwyth, Ceredigion, Wales on 12th December 2015. T2015/033 Loggerhead turtle found stranded alive at Caldey Island, Pembrokeshire, Wales on 18th December 2015. T2015/034 Loggerhead turtle found stranded alive at Tacumshin Lake, Wexford, Ireland on 20th December 2015. T2015/035 Loggerhead turtle found stranded alive at Kimmeridge, Dorset, England on 22nd December 2015. T2015/045 Loggerhead turtle found stranded alive at near Clonakilty, Cork, Ireland on 22nd December 2015. T2015/046 Loggerhead turtle found stranded alive at Ballyteigue Burrows, Wexford, Ireland on 22nd December 2015.

6.1 Rehabilitation

Of the ten live strandings listed above all but **T2015/029** and **T2015/033** were recovered for rehabilitation.

T2015/029 was a retrospective report and the turtle was not recovered by the finder. **T2015/033** stranded and died on Caldey Island, Pembrokeshire, and was unable to be recovered, see page 20.

T2015/002 Kemp's ridley turtle found stranded alive at La Pulente, St Ouens Bay, Jersey, Channel Islands on 11th January 2015, was recovered to New Era Veterinary Practice by the JSPCA but soon died.

T2015/003 Loggerhead turtle found stranded alive at Glencolumcille beach, Donegal, Ireland on 24th January 2015, was recovered to Exploris Aquarium, Portaferry, County Down but unfortunately died the next day.

T2015/027 Loggerhead turtle found stranded alive at Irvine, north Ayrshire, Scotland on 5th December 2015, was recovered to the Oban Sea Life Centre where it unfortunately died. The turtle had acquired a huge mass of goose barnacles on the right side of its carapace indicating it must have been experiencing buoyancy difficulties for some time. The carcass was examined at SRUC/CSIP Inverness where the front right flipper was found to be malformed and much smaller than the left front flipper. The cause of death was given as 'cold-stunned'.

T2015/031 Kemp's ridley turtle found stranded alive at Aberystwyth, Ceredigion, Wales on 12th December 2015 was collected by the Strandings Co-ordinator and a transport relay established with the help of Ellie West and Keith Hogben RSPCA. The animal was successfully delivered to Bristol Aquarium where it started its rehabilitation. After surviving for a week and giving all the indications



Plate 2. Loggerhead turtle T2015/027
Photo by: Avril Keith.

it was doing well the turtle unexpectedly died. A post-mortem examination revealed bacterial pneumonia.

T2015/033 Loggerhead turtle found stranded alive at Caldey Island, Pembrokeshire, Wales on 18th December 2015, had the majority of both front flippers missing. It was thought the best course of action would be euthanasia but due to high winds and seas no access to the island to instigate this act was possible. The turtle died a few days later and was buried on the island so no post-mortem examination was able to be conducted. From images received both front flippers appeared clean cut and healed.

T2015/034 Loggerhead turtle found stranded alive at Tacumshin Lake, Wexford, Ireland on 20th December 2015 was moribund but alive, it was taken to Dingle Aquarium but died the following day.

T2015/035 Loggerhead turtle found stranded alive at Kimmeridge, Dorset, England on 22nd December 2015 was recovered by Steve Trewhella and taken to Weymouth Sea Life Centre where a veterinarian decision was taken to euthanize the animal due to the loss of both front flippers. The carcass was stored frozen at Weymouth for later collection and post-mortem examination within the CSIP.

This turtle showed similar injuries to T2015/033 that had stranded four days earlier in Pembrokeshire.



Plate 3. Loggerhead turtle T2015/033 on Caldey Island.



Plate 4.

Loggerhead turtle T2015/035.

Photo by: Steve Trewhella.

T2015/045 Loggerhead turtle found stranded alive at near Clonakilty, Cork, Ireland on 22nd December 2015 was taken to Dingle Aquarium where it is still alive and doing well. It is hoped the turtle will be released in the Canaries during 2016.

T2015/046 Loggerhead turtle found stranded alive at Ballyteigue Burrows, Wexford, Ireland on 22nd December 2015 was taken to Galway Aquarium where it is still alive and doing well. It is hoped the turtle will be released in the Canaries during 2016.

6.2 Repatriation.

No repatriation events took place in 2015 but as stated above it is hoped that T2015/045 and T2015/046 will be released in the Canaries during 2016.

The loggerhead turtle **T2013/024** (Leona), that stranded in Co Clare, R.o.I. 19th November 2013 and was released with a satellite tag from the Canaries on the 4th December 2014, continued to do well until it stopped transmitting on the 1st September 2015 presumably due to failure of the battery. Over this period she had covered nearly 10,000Km.

7. BYCATCH.

No turtles were reported as being by-caught during 2015.

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.



Figure 18. Leonas' final satellite transmission 1st Sept. 2015.

T2015/005 was a 30cm SOL (straight overall length) loggerhead turtle found dead at Abbotsham, Devon on the 6th February 2015. The carcass was recovered to the CSIP at ZSL London where it was examined by Rob Deaville. The cause of death was given as cold-stunned.

T2015/027 was a 72cm SOL (straight overall length) loggerhead turtle found alive and burdened with a large mass of goose barnacles on its right side at Irvine, North Ayrshire, Scotland on the 5th December 2015. It was recovered to Oban Sea Life Centre where it unfortunately died that night. The carcass was examined at SRUC/CSIP Inverness where the front right flipper was found to be malformed and much smaller than the left front flipper. The cause of death was given as cold-stunned.

T2015/040 was a 28.5cm SOL (straight overall length) loggerhead turtle found dead at Kennack Sands on the Lizard, Cornwall on the 27th December 2015. The carcass was recovered to the CSIP at Exeter University where it was examined by James Barnett. The cause of death was given as cold-stunned.

9. DATA SHARING.

The TURTLE database was uploaded to the National Biodiversity Network (NBN) <u>http://www.nbn.org.uk/</u> to include the 2014 data.

10. UNUSUAL OCCURENCES.

A cold stunning event took place along the eastern seaboard of the USA affecting large numbers of Kemp's ridley turtles through November-December 2014. <u>http://www.nbcnews.com/nightly-news/mysterious-illness-sickening-sea-turtles-n272851</u> It is possible the Kemp's ridleys stranding in the UK/RoI during the beginning of the year were Kemp's ridleys that never fully recovered and were swept across the Atlantic in strong currents.

<u>11. PUBLICITY.</u>

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 <u>www.strandings.com/</u>

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

Marine turtle records are posted on the National Biodiversity Network (NBN) Gateway and these can be accessed at <u>http://www.searchnbn.net/</u> The NBN is now the preferred outlet for the TURTLE database and the database on the strandings.com web-site is no longer maintained.

12. ACKNOWLEDGEMENTS.

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Natural England, National Parks & Wildlife Service and the Welsh Government for financial support towards the British Isles & Republic of Ireland TURTLE database.

13. APPENDICES.

- Appendix 1. 2015 TURTLE data.
- Appendix 2. UK Turtle Code.
- Appendix 3. Morphometrics.

RecordKeypeciesCo	oightStra	arAliveDea	EndDate	Country	County	Location	Notes
T2015/002 KR	ST	ALIVE	11/01/2015	ISLANDS	JERSEY	La Pulente, St Ouens Bay.	Died.
T2015/003 LOG	ST	ALIVE	24/01/2015	EIRE	DONEGAL	Glencolmcille beach	Taken to Exploris Aquarium but died on 25th Jan
T2015/004 LBT	ST	DEAD	6/01/2015	EIRE	KERRY	Ventry	no notes
T2015/005 LOG	ST	DEAD	6/02/2015	ENGLAND	DEVON	Abbotsham	Taken fresh from beach and frozen by member of public. Collected by CSIP for post mortem.
T2015/006 LBT	SEA		21/03/2015			Berwick on Tweed	Seen from 4 metres by snorkeller near sandbar in mouth of Tweed. C. 1.5 x 2m size.
T2015/007 UNI			16/06/2015			Carbis Bay	Approx. 70 metres from observer
T2015/008 LBT	SEA	ALIVE	16/07/2015	SCOTLAND	ARGYLL & BUTE	near Tiree, Scaranish. 300m off coast.	Seen from boat collecting plankton samples. Jellies noted.
T2015/009 LBT			02/08/2015		DORSET	Lyme Regis	Seen by mackeral fisherman eating barrel jellyfish. Photos taken. Reported in Mirror on line. And Dorset Post.
T2015/010 UNI	SEA		28/08/2015			Brighton Harbour	Seen swimming in harbour, retrieved by a fisherman and released into deeper waters further out on advice of Brighton Aquarium. Hardshell 2ft long, ridged carapace 18ins. Thought to be loggerhead. No pics.
T2015/011 LBT			29/08/2015			4 miles SE of Sidmouth	Seen at 25 metres from a boat. 6000m offshore. Travelling westerly.
T2015/012 LBT			29/08/2015			1000m off Gold Trop Bay, north of Little Haven	Seen at 3 metres from boat
T2015/013 LBT			31/08/2015		DEVON	1500m off headland Hopes Nose, Torquay	Seen at 15 metres from boat. Swimming SE out to sea. Large appx 2 x 1 metre.
T2015/014 LBT			08/09/2015			3km west of Priest Island, Ullapool	Seen at 100-150 metres from boat. Swimming west. Sank below surface as ferry approached.
T2015/015 LBT	SEA		11/08/2015			off St Bees Head	Surfaced and dived twice. See during EIA process for proposed Moorside development.
T2015/016 LBT			13/09/2015			off Penbryn beach	Seen from beach 8-12m from shoreline. 2.5m long. A swimmer was in the water! Eventually moved north up coast.
T2015/017 LBT	SEA		01/09/2015			Out of Loch Boisdale	Seen close by Uist Sea Tours boat. Length 2m.
T2015/018 LBT	SEA		25/08/2015			South of the Jones Bank	Seen by Celtic Voyager boat crew during UWTV survey. 1.8 m One of Two
T2015/019 LBT	SEA		25/08/2015			South of the Jones Bank	Seen by Celtic Voyager boat crew during UWTV survey. 2.3m One of two seen
T2015/020 LBT			20/09/2015			Southwest of Scilly Isles. 3300m offshore .	Seen from 3 metres from boat.
T2015/021 LBT	SEA		20/10/2015			4 miles south of Hove	Seen from fishing boat at 4 metres. 4.500 metres off shore heading west eating jellies.
T2015/022 LOG	SEA		18/10/2015			50-100m off Durlston Head	Seen by walkers with hig viz bins. Two loggerheads approx 3ft. See 023
T2015/023 LOG			18/10/2015			50-100m off Durlston Head	Seen by walkers with hig viz bins. Two loggerheads approx 3ft. See 022
T2015/024 LBT	SEA	DEAD	10/10/2015	EIRE	CORK	Harbour	Washed up. Very decomposed.
T2015/025 LBT			08/10/2015		JERSEY	10 miles off Corbierre	Videoed by a fisherman. Appeared on itv News online. Approx 6 ft.
T2015/026 LBT	ST	DEAD	19/11/2015	WALES	Gwynedd	Dyffryn Ardudwy beach	Collected by Council then buried as decomposing. 5 x 3 ft
	ST		05/12/2015			Irvine	Collected and taken to Oban Sealife Centre. Many goose barnacles on its shellDied in rehab.
T2015/028 GT	ST		06/12/2015			Black Rock Sands	Collected by Harbour Master. Passed to RSPCA Colwyn Bay and frozen awaiting collectiom by MEM/CSIP and PM.
T2015/029 KR	ST	ALIVE	01/12/2015	ENGLAND	CORNWALL	Cape Cornwall	Left on beach.
T2015/030 KR	ST		06/12/2015			Cape Cornwall	Collected and taken to Nick Tregenza awaiting collection by CSIP.
T2015/031 KR	ST		12/12/2015		CEREDIGION	Aberystwyth	Taken home and collected by MEM. Passed to RSPCA and relayed to Bristol Aquarium. Died in rehab.
T2015/032 KR	ST		18/12/2015		Gwynedd	Harlech	Collected and stored frozen by NRW Warden Rhodri Dafydd.
T2015/033 LOG	ST		18/12/2015		PEMBROKESHIRE		Live stranded, both front flippers missing (healed injuries) collected by finder but unable to transport to mainland due to stormy weather. Died 20th Dec and buried on island.
	ST		20/12/2015		WEXFORD	Tacumshin Lake. Kilmore Quay	Moribund but alivetaken to Dingle Aquarium by Tom Doyle and Tony Murray. This turtle died the next day
	ST		22/12/2015		DORSET	Kimmeridge	Collected by Steve Trewhella . Damaged alive. Taken to Weymouth Sealife Centre and euthanased.
	ST		27/12/2015			Penrhos Beach Newborough	Dead with damage to eyes and neck. Last seen at 12.00pmwent missing could not collect.
T2015/037 KR	ST		29/12/2015			Near West Bexington. Chesil Beach, Weymouth	Left on beach, Very rough weather collection not attempted. Nothing found next day by Steve Trewhella.
T2015/038 KR	ST		31/12/2015			Pond field cove	Held frozen by Steve Trewella. Awaiting collection by CSIP
T2015/039 KR	ST		29/12/2015			West Bay	Poor condition and left on the beach.
	ST		27/12/2015			Kennack Sands	Stored in fridge. PM'd by James Barnett.
	ST		23/12/2015			Portally Cove, near Dunmore east	
	ST		18/12/2015		CORK	Ballyrisode beach, near Crookhaven, west Cork	stored frozen for PM - awaiting collection by NUIG
	ST		20/12/2015			beach 5 miles west of Ballycotton, Yougal	stored at Dingle Oceanworld Aquarium - awaiting collection by NUIG
T2015/044 UNI	ST		15/12/2015		CORK	washed up on Long Strand	need to check wildlife Artist
	ST		22/12/2015		CORK	near Clonakilty	alive at Dingle Oceanworld Aquarium - still alive and doing well 15th Feb 2016
T2015/046 LOG	ST	ALIVE	22/12/2015	EIRE	WEXFORD	Ballyteigue Burrows, Kilmore Quay	alive at Aquarium Galway - Still alive and doing well as 15th Feb 2016

The United Kingdom Turtle Code

Appendix 2

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.

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.

If traumatised/inactive

limp, no decomposition)

Do not cover the nostrils.

vou return to shore.

times.

(no or slight movement, limbs flexible and

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.

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

Leatherbacks should not be hauled aboard. If

slowly, ensuring they are able to breathe at all

DEAD: There may be serious health risks

Inexperienced individuals are advised not

to touch them. Where possible, record the

specimen is fresh, bring it back to shore and

place in cold storage. Always wear rubber

involved in handling dead turtles.

details listed above and, only if the

gloves when handling turtles.

inactive, they can be towed to shore very

Place the animal in a sheltered and secure

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.

PLEASE REPORT ALL TURTLE ENCOUNTERS SCOTLAND NORTHERN IRELAND

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 DEFA - Isle of Man Government 01624 685835 (main) Marine Operations Centre 01624 686628 (24hrs)

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

DEAD STRANDINGS Nick Davison

Scotland's Rural College (SRUC). 01463 243030/ 07979245893

LIVE STRANDINGS/ **ENTANGLEMENTS** SSPCA 03000 999999

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.

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).

For copies of this code and information about turtles in UK waters, contact MCS on 01989 566017 or info@mcsuk.org



Marine Turtles in the UK

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.

