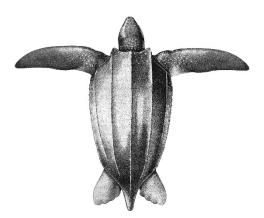


www.strandings.com

# British & Irish Marine Turtle Strandings & Sightings Annual Report 2019

R.S. Penrose & L.R. Gander. February 2020





Marine Environmental Monitoring Penwalk Llechryd Cardigan Ceredigion West Wales SA43 2PS e-mail: <u>rodpenrose@strandings.com</u>

## CONTENTS.

1	SUMMARY	Page 4
2	<b>INTRODUCTION</b> 2.1 The UK Turtle Implementation Group.	5 5
3	MATERIALS AND METHODS 3.1 Live Animals. 3.2 Dead Animals.	7 7 8
4	RESULTS 4.1 Sightings. 4.2 Strandings.	9 12 13
5	MATTERS ARISING 5.1 Retrospective Reports.	18 18
6	LIVE STRANDING EVENTS 2019 6.1 Rehabilitation. 6.2 Repatriation.	18 18 19
7	ВУСАТСН	19
8	SAMPLES & POST-MORTEM EXAMINATIONS	19
9	DATA SHARING	20
10	UNUSUAL OCCURENCES	20
11	PUBLICITY	20
12	ACKNOWLEDGEMENTS	20
13	APPENDICES	20

# List of Figures.

Figure 1.	Current Technical Co-ordination of the Cetacean Strandings Investigation Programme (CSIP).	5
Figure 2.	All species sightings & strandings 2009-2019.	10
Figure 3.	All species sightings & strandings 2017.	11
Figure 4.	All species sightings & strandings 2018.	11
Figure 5.	All species sightings & strandings 2019.	11
Figure 6.	Leatherback sightings 2019.	12
Figure 7.	Loggerhead sightings 2019.	12
Figure 8.	Unidentified sightings 2019.	12
Figure 9.	Green turtle strandings 2019.	13
Figure 10.	Kemp's ridley strandings 2019.	14
Figure 11.	Leatherback strandings 2019.	14
Figure 12.	Loggerhead strandings 2019.	15
Figure 13.	Olive ridley strandings 2019.	15
Figure 14.	Unidentified strandings 2019.	15
Figure 15.	All leatherbacks by month.	16
Figure 16.	All leatherbacks average over 2009-2019.	16
Figure 17.	All loggerheads by month.	16
Figure 18.	All loggerheads average over 2009-2019.	16
List of Plates.		
Plate 1.	Loggerhead turtle T2019/13 receiving VIP treatment at Cork Airport.	19
List of Tables.		
Table 1.	2019 Total number of reported marine turtles for British Isles & RoI (live & dead).	9
Table 2.	2019 Number of live marine turtles.	9
Table 3.	2019 Number of dead marine turtles.	9
Table 4.	Cumulative number of records.	17
Table 5.	Species Comparison.	17
Table 6.	'TURTLE' Database Species Totals (1748 - 2019).	18

### **<u>1. SUMMARY</u>**

A total of 21 live and dead marine turtles were reported to TURTLE during 2019. One Kemp's ridley turtle; 15 leatherback turtles; 4 loggerhead turtles and 1 green turtle.

### Live stranded

There were 3 live stranded turtles reported in 2019. All 3 were loggerheads; one in Northern Ireland, one in Republic of Ireland and one in Scotland.

### Live sightings

Eleven leatherback turtles were sighted alive at sea. Five in England; 2 in Scotland; 2 in the Republic of Ireland and 2 in Wales.

<u>Dead sightings</u> There were no dead sightings.

### Dead strandings

A total of 7 dead turtles were reported stranded.

Four leatherback turtles stranded dead. Two in England; one in Wales; and one in Scotland. One Kemp's ridley turtle stranded dead in Wales; one loggerhead in England; one Green turtle in Scotland.

Post mortem examination

One leatherback turtle received a post-mortem examination within the CSIP. One Kemp's ridley turtle is currently held frozen awaiting examination.

<u>Data sharing</u> The TURTLE database has been adapted and uploaded to the NBN Atlas.

**Repatriation** 

Loggerhead turtle T2019/13 was flown to the Canaries and successfully released on 4<sup>th</sup> November 2019.

TURTLE record totals

The current total of 2835 is broken down thus: 1347 Republic of Ireland; 688 England; 410 Scotland; 282 Wales; 42 Northern Ireland; 36 Isle of Man; 17 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.).

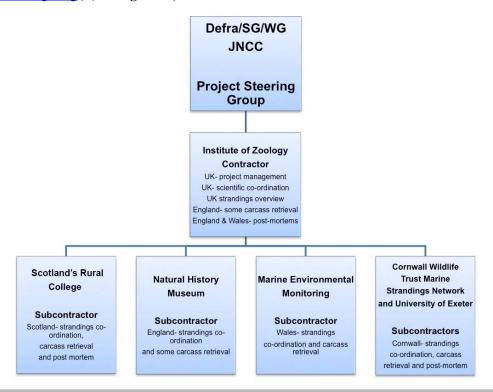


Figure 1. Current technical co-ordination of the Cetacean Strandings Investigation Programme (CSIP).

### 2.1 The UK Turtle Implementation Group.

Historically, 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 was part of the UK Biodiversity Action Plan and aimed 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 Trust<sup>1</sup> (ARC). The contact agency was Scottish Natural Heritage (SNH). The Turtle Implementation Group (TIG) now only communicate electronically and contribute to the project as a steering panel. TIG consists of the following organisations:-

<sup>&</sup>lt;sup>1</sup> Formally Herpetological Conservation Trust (HCT).

- Amphibian & Reptile Conservation Trust is an authority on reptile and amphibian conservation issues and is an active
  participant in Governmental and third sector nature conservation programmes across the UK <u>www.arc-trust.org</u>
  Contact: Karen Haysom, 01202 391319 <u>karen.haysom@arc-trust.org</u>
- 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 Peter Duncan, 01624 685884 peter.duncan@gov.im The Manx Wildlife Trust also record strandings on behalf of DEFA.
   Contact: Dr Lara Howe on 01624 844432. lara@manxwt.org.uk
- The Department of Agriculture, Environment, and Rural Affairs (DAERA) Marine & Fisheries 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. gary.burrows@daera-ni.gov.uk
- 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
- 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: Dr Peter Richardson, 01989 566017
- Marine Environmental Monitoring (MEM) is a member of the Defra "UK Cetacean Strandings Investigation Programme", <u>www.strandings.com</u> <u>www.ukstrandings.org</u> MEM also manages 'TURTLE' the British Isles & Irish 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.com
- 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 & Prof Annette Broderick 01326 371 861.*
- MEDASSET, founded in 1988, is an international environmental NGO registered as a Non Profit Organisation 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 Culture, 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 ferdia.marnell@chg.gov.ie
- Natural England (NE) is the Government agency that champions the conservation of wildlife and natural features throughout England.

Contact: Paul Edgar, 02080 267708 paul.edgar@naturalengland.org.uk

• Natural Resources Wales (NRW) Natural Resources Wales is the largest Welsh Government Sponsored Body. Formed in April 2013, it took over the functions of the Countryside Council for Wales, Forestry Commission Wales and the Environment Agency in Wales, as well as certain Welsh Government functions. Its purpose is to pursue sustainable management of natural resources in all of its work. This means looking after air, land, water, wildlife, plants and soil to improve Wales' well-being, and provide a better future for everyone.

Contact: Dr 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 thoughton@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: *Marine Monitoring Team*, MPA@nature.scot 01463 725 018
- 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 Dr Tom Doyle, School of Biological, Earth & Environmental Sciences. Sightings & strandings can also be reported online in the Republic of Ireland via the National Biodiversity Data Centre's turtle sightings page: <a href="https://records.biodiversityireland.ie/record/sea-turtles">https://records.biodiversityireland.ie/record/sea-turtles</a> Contact: Dr Tom Doyle, 353-(0) 87 1354938 (mobile).

### **3. MATERIALS AND METHODS**

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.com</u>

For **Scotland** all records should be reported to Scottish Natural Heritage on **01463** 725018 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 DAERA Marine and Fisheries Division at the Portrush Coastal Zone centre on 028 7082 3600.

UK turtle sightings and strandings can also be reported using the UK Turtle Code online at <a href="http://www.euroturtle.org/turtlecode/default.htm">http://www.euroturtle.org/turtlecode/default.htm</a>

In the **Republic of Ireland** all records should be reported to Dr Tom Doyle, School of Biological, Earth & Environmental Sciences, **353-(0) 87 1354938** (mobile). Sightings & strandings can also be reported online in the Republic of Ireland via the National Biodiversity Data Centre's turtle sightings page: <u>https://records.biodiversityireland.ie/record/sea-turtles</u>

On the Isle of Man all marine animal strandings should be reported to DEFA on 01624 685835/685884 or directly to Dr Peter Duncan 07624 300525, or Dr Lara Howe 07624 450879

The following criteria are applied: -

### 3.1 Live Animals

### (Condition code 1)<sup>2</sup>

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>http://www.strandings.com/Graphics%20active/turtlecode.pdf</u>

#### **3.2 Dead Animals**

(Condition code 2a extremely fresh as if just died)<sup>2</sup>

(Condition code 2b slight decomposition)<sup>2</sup>

(Condition code 3 moderate decomposition)<sup>2</sup>

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)<sup>2</sup>

(Condition code 5 mummified carcass)<sup>2</sup>

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.

<sup>&</sup>lt;sup>2</sup> 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 2019.

Table 1.

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)	0	0	0	0	0	0	0	0	0	0	0	1	1
Leatherback turtle (Dermochelys coriacea)	0	0	1	0	0	1	1	8	1	1	0	2	15
Loggerhead turtle (Caretta caretta)	2	0	1	0	0	0	0	0	1	0	0	0	4
Olive ridley turtle (Lepidochelys olivacea)	0	0	0	0	0	0	0	0	0	0	0	0	0
Unidentified	0	0	0	0	0	0	0	0	0	0	0	0	0

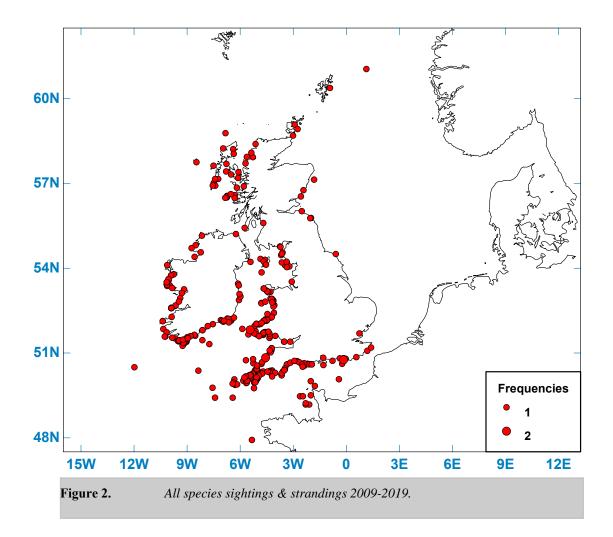
### Table 2.

2019 Number of live marine turtles.													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ΤΟΤΑΙ
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)	0	0	0	0	0	0	0	0	0	0	0	0	0
Leatherback turtle (Dermochelys coriacea)	0	0	0	0	0	1	1	8	0	1	0	0	11
Loggerhead turtle (Caretta caretta)	1	0	1	0	0	0	0	0	1	0	0	0	3
Olive ridley turtle (Lepidochelys olivacea)	0	0	0	0	0	0	0	0	0	0	0	0	0
Unidentified	0	0	0	0	0	0	0	0	0	0	0	0	0
Total animals	1	0	1	0	0	1	1	8	1	1	0	0	14

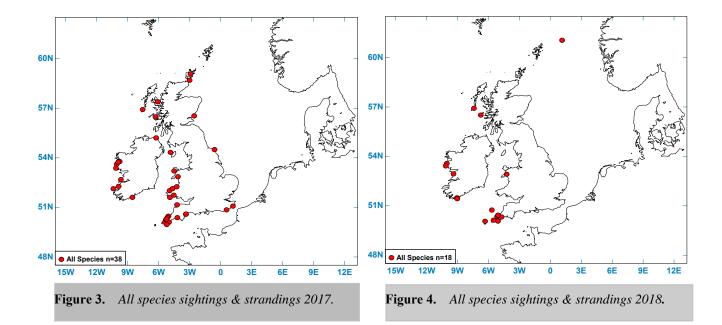
### Table 3.

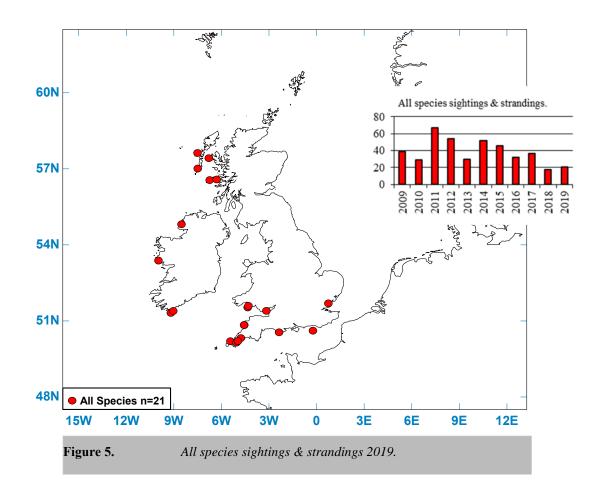
2019 Number of dead marine turtles.													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Green turtle (Chelonia mydas)	0	0	0	0	0	0	0	0	0	0	0	1	1
Hawksbill turtle (Eretmochelys imbricata)	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's ridley turtle (Lepidochelys kempii)	0	0	0	0	0	0	0	0	0	0	0	1	1
Leatherback turtle (Dermochelys coriacea)	0	0	1	0	0	0	0	0	1	0	0	2	4
Loggerhead turtle (Caretta caretta)	1	0	0	0	0	0	0	0	0	0	0	0	1
Olive ridley turtle (Lepidochelys olivacea)	0	0	0	0	0	0	0	0	0	0	0	0	0
Unidentified	0	0	0	0	0	0	0	0	0	0	0	0	0
Total animals	1	0	1	0	0	0	0	0	1	0	0	4	7

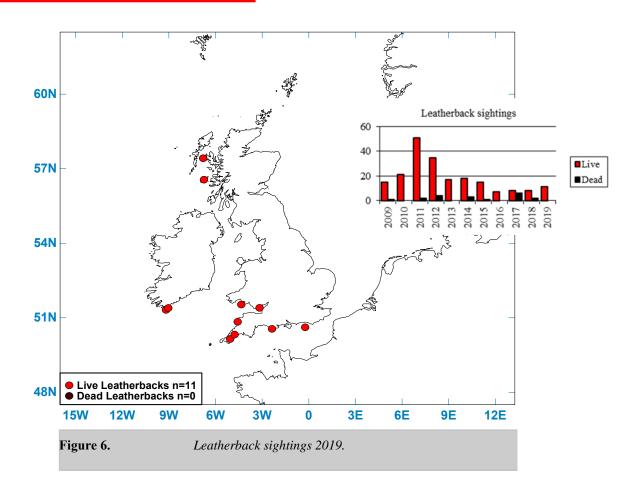
The general geographical distribution of each species, strandings and sightings, are plotted on the following maps. Although the maps are generated directly from the data stored, they should be regarded as showing distribution of animals rather than giving absolute counts. While the co-ordinate system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



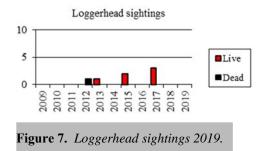
All species, sightings & strandings over the eleven year period 2009-2019 have been plotted in Figure 2.







No live or dead loggerhead sightings were reported during 2019. However, sightings of both live and dead loggerhead turtles have been recorded in recent years as shown in **Figure 7**.



No live or dead unidentified sightings were reported during 2019. However, sightings of both live and dead unidentified turtles have been recorded in recent years as shown in **Figure 8**.

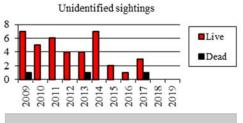
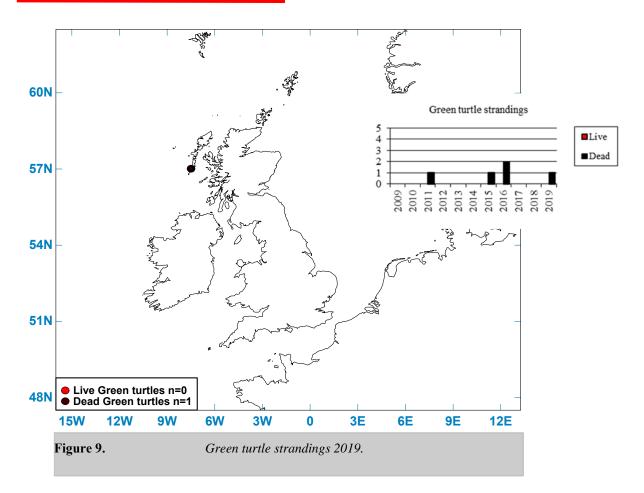
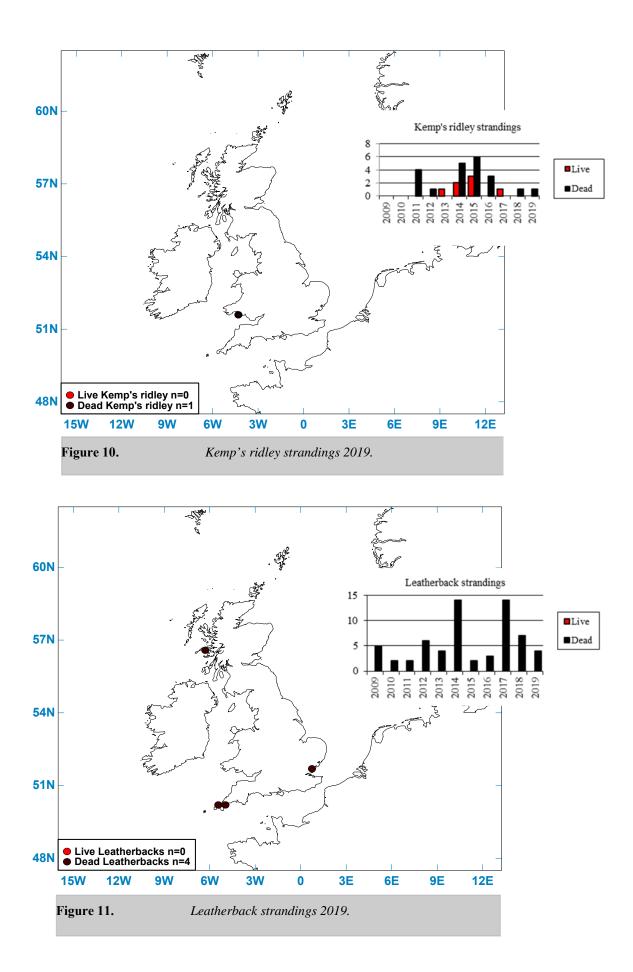


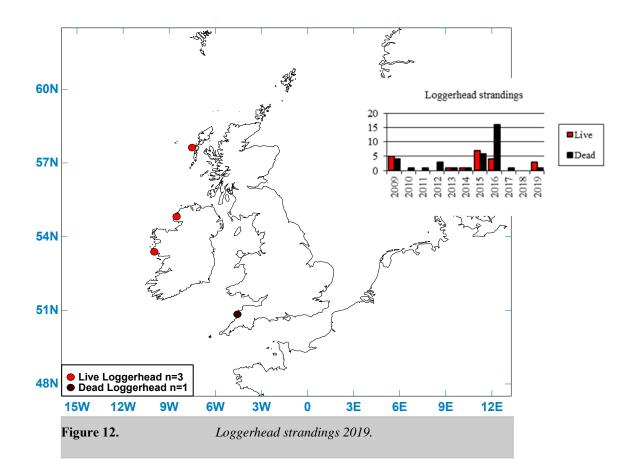
Figure 8. Unidentified sightings 2019.

## 4.2 Strandings.



No live or dead hawksbill turtle strandings were reported during 2019. 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.





No live or dead olive ridley turtle strandings were reported during 2019. However, a live stranding of an olive ridley turtle was recorded in recent years as shown in **Figure 13**.

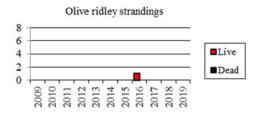


Figure 13. Olive ridley strandings 2019.

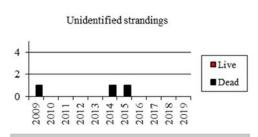
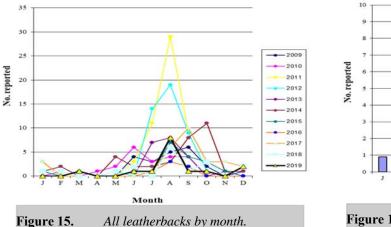


Figure 14. Unidentified strandings 2019.

No live or dead unidentified turtle strandings were reported during 2019. However, strandings of both live and dead unidentified turtles have been recorded in recent years as shown in Figure 14. All leatherback strandings and sightings, both dead and alive have been plotted by month for the period 2009 - 2019 (n=296) shown in **Figure 15.** The average figure was taken over 2009-2019 and plotted in **Figure 16.** 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 & Irish coast. The records for the hard-shell species are more sporadic. Of the hard-shell species the most numerous recorded turtle over the 2009 - 2019 period is the loggerhead (n=60). The data for this species are plotted in **Figure 17** and **Figure 18**.



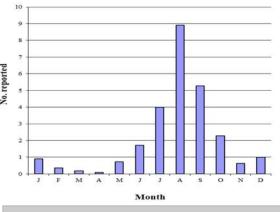


Figure 16. All leatherbacks average over 2009-2019

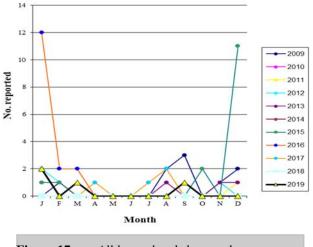
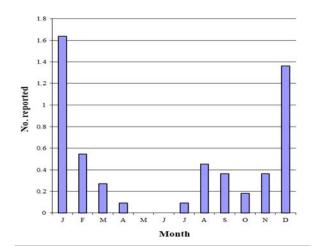
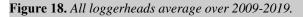


Figure 17.All loggerheads by month.





### Table 4.

Cumulative number of records.									
Country	All Species								
	2019	1748 - 2019							
Rep. of Ireland	3	1347							
England	9	688							
Scotland	5	410							
Wales	3	282							
N. Ireland	1	42							
Isle of Man	0	36							
Channel Islands	0	17							
Offshore	0	13							
Total	21	2835							

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 - 2019 column.

Table :
---------

Species Comparison.														
	1999 - 2009													
Country	2009 - 2019													
	G	Т	HB		K	R	LBT		LOG		OR		UNI	
England	1	0	0	0	6	11	168	105	31	22	0	0	54	28
Scotland	2	2	0	0	3	3	<i>93</i>	39	33	3	0	0	13	4
Rep. of Ireland	1	0	0	0	0	3	190	80	32	19	0	0	20	5
Wales	0	3	0	0	3	11	<u>69</u>	61	16	9	0	1	14	4
Channel Islands	1	0	0	0	0	1	0	2	1	2	0	0	2	0
N. Ireland	0	0	0	0	0	0	13	1	0	1	0	0	2	1
Isle of Man	0	0	0	0	0	0	13	4	0	3	0	0	3	1
Offshore	0	0	0	0	0	0	5	4	0	1	0	0	0	1
Total	5	5	0	0	12	29	<u>551</u>	296	<i>113</i>	60	0	1	108	44

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

### Table 6.

TURTLE Database Species Totals (1748	- 2019).
Species	TOTAL
Green turtle (Chelonia mydas)	14
Hawksbill turtle (Eretmochelys imbricata)	1
Kemp's ridley turtle (Lepidochelys kempii)	68
Leatherback turtle (Dermochelys coriacea)	2098
Loggerhead turtle (Caretta caretta)	263
Olive ridley turtle (Lepidochelys olivacea)	1
Unidentified	390
Total animals	2835

The total records held in TURTLE are 2835 (end of 2019). However, some historical records with inadequate year data have been excluded in this report and from being uploaded to the NBN Atlas.

A breakdown of records for each country is shown in **Table 4.** However, the eleven-year comparison, 1999-2009 / 2009-2019 shown in **Table 5**, shows a marked decline in leatherback turtles recorded for most countries, this decline in sightings of LBTs is likely to be a reflection of reduced effort.

### **5. MATTERS ARISING.**

### 5.1 Retrospective Reports.

No retrospective reports were received during 2019.

### 6. LIVE STRANDING EVENTS 2019.

Three loggerheads were reported as live-stranding in 2019, these are listed below;

**T2019/01** was reported live-stranded at Rosbeg, County Donegal, Northern Ireland on the 13<sup>th</sup> January 2019. The turtle was collected from finders by Exploris Aquarium.

**T2019/02** was reported live-stranded at Hosta beach North Uist, Western Isles, Scotland on the  $18^{\text{th}}$  March 2019. The turtle was placed back in the sea by the finder. A loggerhead turtle was later found dead on the  $26^{\text{th}}$  March 2019 and was presumed to be the same animal.

**T2019/13** was reported live-stranded at Dolans beach, Galway, Republic of Ireland on the 13<sup>th</sup> September 2019. The turtle was taken to Dingle Oceanworld Aquarium.

### 6.1 Rehabilitation

**Loggerhead turtle T2019/01** was collected from finders by Exploris Aquarium where it is currently doing well.

**Loggerhead turtle T2019/13** was taken to Dingle Oceanworld where it underwent rehabilitation and was soon found to be in a stable and suitable position to be repatriated.

### 6.2 Repatriation.

**Loggerhead turtle T2019/01** is hoping to be repatriated soon with Exploris Aquarium looking into routes for release in the Canary Islands.



Plate 1. Loggerhead turtle T2019/13 receiving VIP treatment at Cork Airport.

Loggerhead turtle T2019/13 was flown to the Canaries and successfully released on 4th Nov 2019. The small loggerhead was PIT tagged at Dingle Oceanworld with a UK series tag but was not flipper tagged on advice from veterinarian Pascual Calabuig who raised concerns about increased risk of entanglement from these tags. Our thanks go to Dingle Oceanworld, especially aquarist Louise Overy and her team for their involvement with the rehabilitation and the organising of the repatriation, Ryanair for flying the turtle for free and as ever, the veterinarian team at Las Palma.

# 7. BYCATCH.

No turtles were reported to Marine Environmental Monitoring during 2019 as by-caught.

### 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.

Two turtles were recovered to the project in 2019 in a suitable condition to undergo a full post-mortem examination. These were a leatherback turtle **T2019/16** and a Kemp's ridley turtle **T2019/18**. These are covered in more detail below.

**T2019/16** was a leatherback turtle found stranded at Maylandsea, Essex on the 11<sup>th</sup> December 2019. The carcass was recovered by staff from the Natural History Museum, London for examination within the CSIP. Cause of death was given as: 'possible meningoencephalitis (pending histopathology)'

**T2019/18** was a Kemp's ridley turtle found stranded at Llangennith on the Gower Peninsular on the 18<sup>th</sup> December 2019. The carcass is stored frozen awaiting examination at a later date.

### 9. DATA SHARING.

The National Biodiversity Network (NBN) Gateway permanently closed on 31st March 2017 superseded by the NBN Atlas which went live on 1st April 2017. The TURTLE database has now been transferred to this platform having been updated to the new validation process required for the NBN Atlas.

### **10. UNUSUAL OCCURRENCES.**

There were no unusual occurrences in 2019.

### **<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/Wales.html</u> Posters and leaflets produced to increase awareness of the project have continued to be distributed.

The NBN Atlas is now be the preferred outlet for the TURTLE database.

# **<u>12. ACKNOWLEDGEMENTS.</u>**

Marine Environmental Monitoring wishes to acknowledge the following;

Cornwall Wildlife Trust, Marine Conservation Society, Dr Tom Doyle, Irish Whale and Dolphin Group (IWDG), University of Exeter's Cornwall campus, Gabriel King, Exploris Aquarium, Dingle Oceanworld, Ryanair and Pascual Calabuig and his team in Las Palmas.

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. 2019 TURTLE data.
- Appendix 2. UK Turtle Code.
- Appendix 3. Morphometrics.

RecordKey	peciesCo	bightStrar	AliveDead	EndDate	Country	County	Location	Notes
T2019/01	LOG	ST	ALIVE	13/01/2019	NORTHERN IRELAND	DONEGAL	Rosbeg	Collected from finders by Exploris Aquarium
T2019/02	LOG	ST	ALIVE	18/03/2019	SCOTLAND	WESTERN ISLES	Hosta beach North Uist	Placed back in sea by finder, not sure if dead or alive. Found dead 26/03/2019, hopefully to be recovered for examination by SMASS.
T2019/03	LOG	ST	DEAD	23/01/2019	ENGLAND	CORNWALL	Crooklett's Beach, Bude	Disposed of by finder.
T2019/04	LBT	ST	DEAD	02/03/2019	ENGLAND	CORNWALL	Black Cliff, Hayle	No further info. Record transcribed from CWT database.
T2019/05	LBT	SEA	ALIVE	09/06/2019	WALES	VALE OF GLAMORG	Off Lavernack Point between St Mary's Well Bay and Flatholm.	Possible sighting
T2019/06	LBT	SEA	ALIVE	13/08/2019	ENGLAND	CORNWALL	Off Pendennis head	Photographed from kayak by James Adger
T2019/07	LBT	SEA	ALIVE	08/08/2019	SCOTLAND	HIGHLAND	Off Neist Point, Isle of Skye.	Observed from clifftop, photo's to follow. Reported to MCS 9th Aug received MEM 15th Aug.
T2019/08	LBT	SEA	ALIVE	20/08/2019	ENGLAND	CORNWALL	Porthpean	Observed swimming around owners boat on mooring off the beach.
T2019/09	LBT	SEA	ALIVE	26/08/2019	WALES	SWANSEA	Off Gower.	Observed feeding on barrel jellyfish from Gower Coast Adventures RIB "Sea Serpent".
T2019/10	LBT	SEA	ALIVE	25/08/2019	ENGLAND	DORSET	approximately 2.5 miles east of Grove Point, Portland	It was around 2 metres in length and he also spotted a barrel jellyfish just in front of the turtle, so it's possible the turtle was feeding, although this behaviour wasn't witnessed.
T2019/11	LBT	SEA	ALIVE	02/08/2019	SCOTLAND	INNER HEBRIDES	Observed at sea in Gunna Sound.	Observed at sea in Gunna Sound.
T2019/12	LBT	SEA	ALIVE	23/08/2019	ENGLAND	CORNWALL	Off Bude	Observed by kayaker in conversation with American tourist Whitney Ball.
T2019/13	LOG	ST	ALIVE	13/09/2019	EIRE	GALWAY	Dolans beach	On beach known as Dolans beach near Roundstone, thought dead until lifted up. Taken to Dingle Oceanworld Aquarium. Flown to Canaries and released 4th Nov 2019.
T2019/14	LBT	ST	DEAD	24/09/2019	ENGLAND	CORNWALL	Between Portscatho and Pendower Beach, The Roseland.	Seen from coast path.
T2019/15	LBT	SEA	ALIVE	27/10/2019	ENGLAND	SUSSEX	Off Brighton	Observed from a trip boat visting the Rampion Offshore Windfarm.
T2019/16	LBT	ST	DEAD	11/12/2019	ENGLAND	ESSEX	Maylandsea	Recovered by NHM for examination within the CSIP.
T2019/17	GT	ST	DEAD	06/12/2019	SCOTLAND	WESTERN ISLES	Cleat beach, Isle of Barra.	not recovered, carcass disappeared.
T2019/18	KR	ST	DEAD	18/12/2019	WALES	SWANSEA	Llangennith	Recovered by MEM for examination within the CSIP.
T2019/19	LBT	ST	DEAD	26/12/2019	SCOTLAND	ARGYLL & BUTE	Calgary, Mull.	Carapace only.
T2019/20	LBT	SEA	ALIVE	14/07/2019	EIRE	CORK	Off Rosscarbery Bay.	Observed from Cork Whale Watch.
T2019/21	LBT	SEA	ALIVE	28/08/2019	EIRE	CORK	Off Galley Head.	Observed from Cork Whale Watch.

# The United Kingdom & Rol Turtle Code Advice for sea users on how to deal with marine turtle encounters

# Appendix 2.

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.

# 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 vou 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.

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

Marine Monitoring Team, Scottish Natural Heritage, 01463 725009

### **DEAD STRANDINGS**

College (SRUC) 01463 243030 07979 245893 strandings@sruc.ac.uk

LIVE STRANDINGS/ **ENTANGLEMENTS** 

NORTHERN IRELAND ALL RECORDS The Portrush Coastal Zone

(DAERA) 028 7082 3600

### REPUBLIC OF IRELAND

ALL RECORDS Dr Tom Dovle School of Biological, Earth & Environmental Sciences, University College Cork.

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

# SCOTLAND ALL RECORDS

Nick Davison, Scottish Rural

SSPCA 03000 999999



# **Marine Turtles in the UK & Rol**

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.

