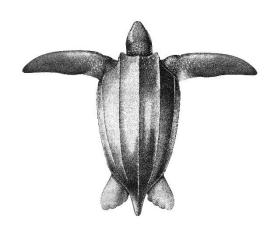


www.ukturtles.online www.strandings.com

British & Irish Marine Turtle Strandings & Sightings Annual Report 2023

R.S. Penrose and M.J.B. Westfield. April 2024.





Marine Environmental Monitoring Penwalk Llechryd Cardigan Ceredigion West Wales SA43 2PS

e-mail: rodpenrose@strandings.com









Ariennir yn Rhannol gan **Lywodraeth Cymru** Part Funded by **Welsh Government**

CONTENTS.

1	SUMMARY	Page 4
2	INTRODUCTION 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 14
5	MATTERS ARISING 5.1 Retrospective Reports.	19 19
6	LIVE STRANDING EVENTS 2023 6.1 Rehabilitation. 6.2 Repatriation.	19 21 22
7	ВУСАТСН	23
8	SAMPLES & POST-MORTEM EXAMINATIONS	23
9	DATA SHARING	23
10	UNUSUAL OCCURENCES	24
11	PUBLICITY	24
12	ACKNOWLEDGEMENTS	24
13	APPENDICES	25

List of Figures.		page
Figure 1.	Current Technical Co-ordination of the Cetacean Strandings Investigation Programme (CSIP).	5
Figure 2.	All species sightings & strandings 2013-2023 live and dead.	10
Figure 3.	All species sightings & strandings 2021.	11
Figure 4.	All species sightings & strandings 2022.	11
Figure 5.	All species sightings & strandings 2023.	11
Figure 6.	Kemp's ridley sightings 2023.	12
Figure 7.	Leatherback sightings 2023.	12
Figure 8.	Loggerhead sightings 2023.	13
Figure 9.	Unidentified sightings 2023.	13
Figure 10.	Green strandings 2023.	14
Figure 11.	Kemp's ridley strandings 2023.	14
Figure 12.	Leatherback strandings 2023.	15
Figure 13.	Loggerhead strandings 2023.	15
Figure 14.	Olive ridley strandings 2023.	16
Figure 15.	Unidentified strandings 2023	16
Figure 16.	All leatherbacks by month.	17
Figure 17.	All leatherbacks average over 2013-2023.	17
Figure 18.	All loggerheads by month.	17
Figure 19.	All loggerheads average over 2013-2023.	17
Plate 1.	All 5 loggerheads at HARC overnight.	22
Plate 2.	Juvenile loggerhead turtle T2023/31 from Guernsey with mass of goose barnacles attached.	24
Plate 3.	Juvenile loggerhead T2023/32 from Cornwall with mass of goose barnacles attached.	24
List of Tables.		
Table 1.	2023 Total number of reported marine turtles for British Isles & Ireland (live & dead).	9
Table 2.	2023 Number of live marine turtles.	9
Table 3.	2023 Number of dead marine turtles.	9
Table 4.	Cumulative number of records in the TURTLE database.	18
Table 5.	Species Comparison from all TURTLE database records.	18
Table 6.	'TURTLE' Database Species Totals (1748 - 2023).	19

1. SUMMARY

A total of 47 live and dead marine turtles were reported to TURTLE during 2023. Six Kemp's ridley turtles; 13 leatherback turtles and 28 loggerhead turtles.

Live sightings

Twelve turtles were sighted alive at sea. Nine leatherbacks and 2 loggerheads sighted in England with one leatherback sighted offshore.

Dead sightings

No dead sightings were reported in 2023.

Live stranded

There were 15 live stranded turtles reported in 2023. These were 14 loggerhead turtles; one in Guernsey, 7 in England, 3 in Wales, 3 in Ireland and 1 Kemp's ridley turtle in Wales.

Dead strandings

A total of 20 turtles were reported stranded dead.

Three leatherback turtles stranded dead. One in England and 2 in Ireland.

Five Kemp's ridley turtles stranded dead. One in Scotland, 2 in England and 2 in Wales.

Twelve loggerhead turtles stranded dead. Four in Ireland, one in Scotland, 4 in England, one in Jersey and 2 in Wales.

Post-mortem examination

Two loggerhead turtles received a post-mortem examination within the CSIP and Irish network plus 4 loggerheads pending.

Rehabilitation

Of the 15 live-strandings in 2023, 11 turtles survived in rehabilitation.

Repatriation

Due to complications caused by Brexit none of the 10 UK turtles were able to be repatriated during 2023.

Kemp's ridley turtle **T2021/13** held at Anglesey Sea Zoo. Was eventually flown back to America in August 2023.

Loggerhead turtle **T2022**//03 held at Sea Life Scarborough wase flown out for release in the Azores via Lisbon, Portugal November 2023.

TURTLE record totals

The current total of 2952 since 1748 is broken down thus:

1372 Ireland; 729 England; 435 Scotland; 305 Wales; 41 Northern Ireland; 37 Isle of Man; 19 Channel Islands; 14 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**.).

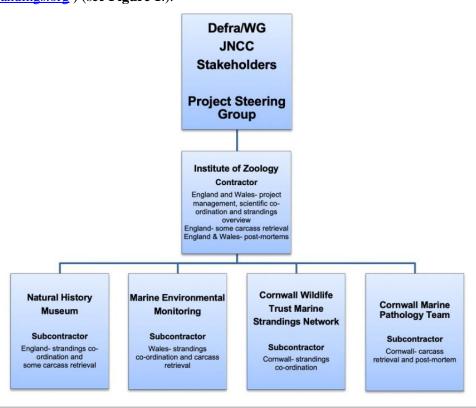


Figure 1. Current technical co-ordination of the Cetacean Strandings Investigation Programme (CSIP).

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 Trust¹ (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:-

-

¹ 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 www.arc-trust.org
 Contact: Dr Karen Haysom, 01202 391319 karen.haysom@arc-trust.org
- 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 or 07624 300525 (mob), peter.duncan@gov.im

The Manx Wildlife Trust also record strandings on behalf of DEFA.

Contact: Dr Lara Howe on 01624 844432. lara@mwt.im

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: Dr Liz Pothanikat, 028 905 69421. Liz.Pothanikat@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: Nikki Taylor, 01733 866902
- 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
 Contact: Greg Wannell, 01989 566017
- Marine Environmental Monitoring (MEM) is a member of the Defra "UK Cetacean Strandings Investigation Programme", www.ukstrandings.com www.ukstrandings.org 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, rodpenrose@strandings.com or Mat Westfield mat.westfield@strandings.com (Reporting telephone No. 01239 683033.)

- 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 B.J.Godley@exeter.ac.uk
- 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 Housing, Local Government and Heritage, 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@housing.gov.ie
- Natural England (NE) is the Government agency that champions the conservation of wildlife and natural features throughout England

Contact: Tim Bernhard, 07775 026622 tim.bernhard@naturalengland.org.uk

- Natural Resources Wales (NRW) 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. 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 653000 tom.stringell@cyfoethnaturiolcymru.gov.uk
- NatureScot is Scotland's nature agency providing advice to Scottish Government. NatureScot promotes the care, improvement, responsible enjoyment, understanding, appreciation and sustainable use of Scotland's natural heritage.
 Contact: Marine Monitoring Team, MPA@nature.scot 01463 725 018
- 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
- 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:
https://records.biodiversityireland.ie/record/sea-turtles

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 info@strandings.com Live strandings and entanglements should be reported to the RSPCA on **0300 1234 999** and/or British Divers Marine Life Rescue (BDMLR) **01825 765546**.

For **Scotland** all records should be reported to the Scottish Marine Animal Strandings Scheme (SMASS) **07979 245893** reports@strandings.org Live strandings and entanglements should be reported to the SSPCA on **03000 999 999** and/or British Divers Marine Life Rescue (BDMLR) **01825 765546.**

For **Northern Ireland** all records of live or dead turtles should be reported to DAERA Marine and Fisheries Division on **028 905 69421** or https://www.daera-ni.gov.uk/contacts/marine-wildlife-team

UK and Irish turtle sightings and strandings can also be reported using the UK & RoI Turtle Code online at http://www.euroturtle.org/turtlecode/default.htm or www.ukturtles.online

In **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 Ireland via the National Biodiversity Data Centre's turtle sightings page: https://records.biodiversityireland.ie/record/sea-turtles

On the **Isle of Man** all marine animal strandings should be reported to DEFA (Fisheries) 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) 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 or British Divers Marine Life Rescue (BDMLR) would then contact the relevant organisations, Marine Environmental Monitoring etc.

Contacts and advice can be found in the UK Turtle Code (Appendix 2.).

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 2023.

Table 1.

Species	Jan	Feb	Mar	Apr	Mav	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 (<i>Lepidochelys kempii</i>)	2	0	0	0	0	0	0	0	0	0	1	3	6
Leatherback turtle (Dermochelys coriacea)	0	0	0	0	1	0	0	2	5	3	2	0	13
Loggerhead turtle (Caretta caretta)	9	8	0	2	1	0	0	1	0	0	5	2	28
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

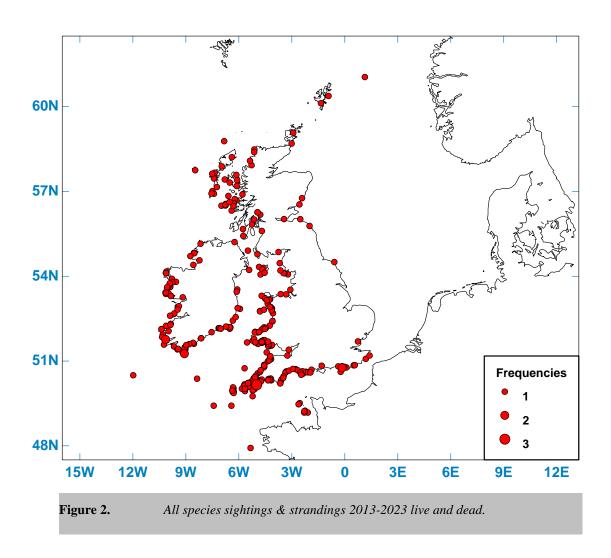
Table 2.

2023 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)	0	0	0	0	0	0	0	0	0	0	0	1	1
Leatherback turtle (Dermochelys coriacea)	0	0	0	0	1	0	0	2	5	2	0	0	10
Loggerhead turtle (Caretta caretta)	3	6	0	1	0	0	0	1	0	0	4	1	16
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	3	6	0	1	1	0	0	3	5	2	4	2	27

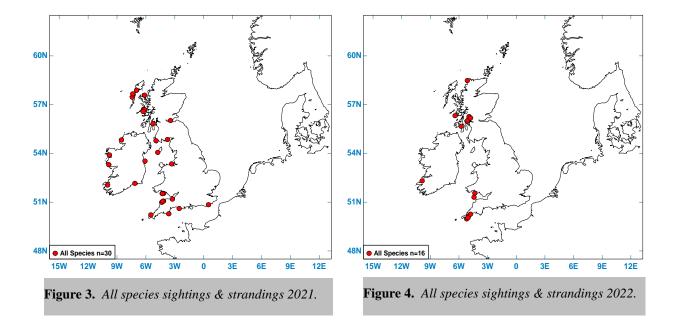
Table 3.

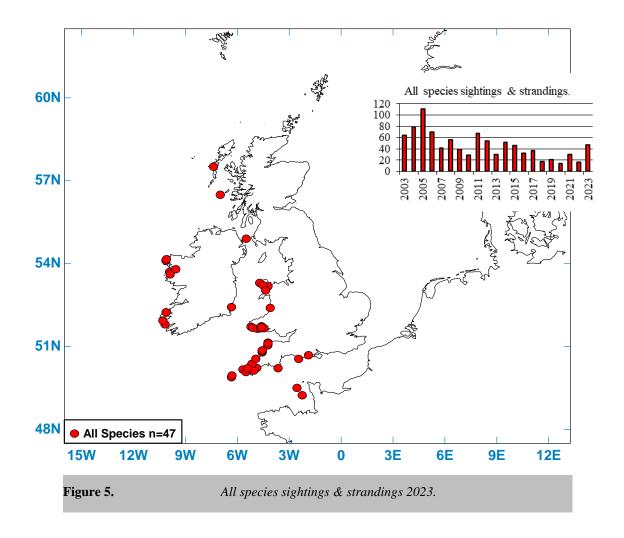
2023 Number of dead marine turtles.													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAI
Green turtle (Chelonia mydas)	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawksbill turtle (Eretmochelys imbricata)	0	0	0	0	0	0	0	0	0	0	0	0	0
Kemp's ridley turtle (Lepidochelys kempii)	2	0	0	0	0	0	0	0	0	0	1	2	5
Leatherback turtle (Dermochelys coriacea)	0	0	0	0	0	0	0	0	0	1	2	0	3
Loggerhead turtle (Caretta caretta)	6	2	0	1	1	0	0	0	0	0	1	1	12
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	8	2	0	1	1	0	0	0	0	1	4	3	20

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, live and dead over the eleven year period 2013-2023 have been plotted in **Figure 2.**





No live or dead Kemp's ridley sightings were reported during 2023. However, sightings of a live Kemp's ridley turtle has been recorded in recent years as shown in **Figure 6.**

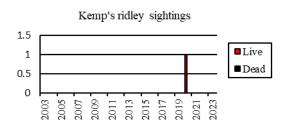
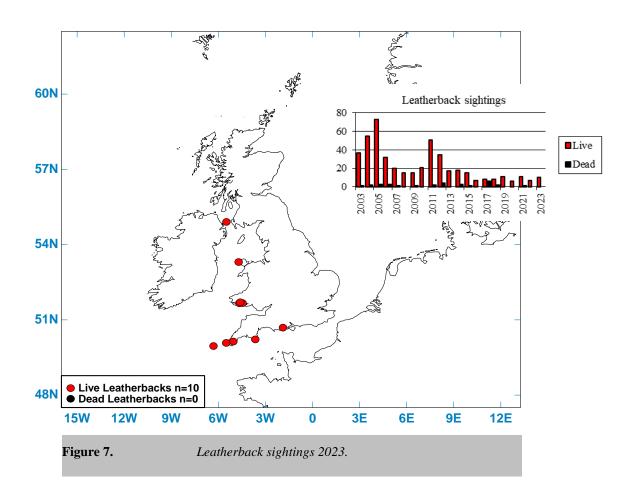
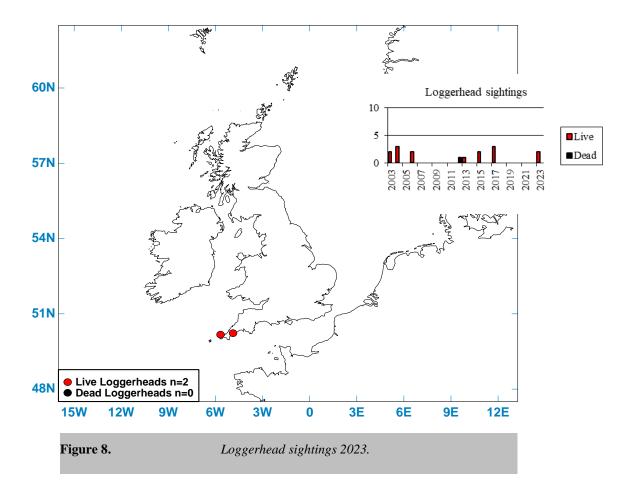


Figure 6. Kemp's ridley sightings 2023.





No live or dead unidentified sightings were reported during 2023. However, sightings of unidentified turtles have been recorded in recent years as shown in **Figure 9.**

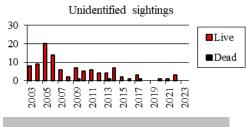


Figure 9. Unidentified sightings 2023.

.

No live or dead Green turtle strandings were reported during 2023. However, strandings of dead Green turtles have been recorded in recent years as shown in **Figure 10**.

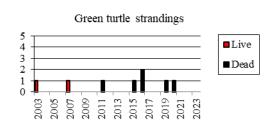
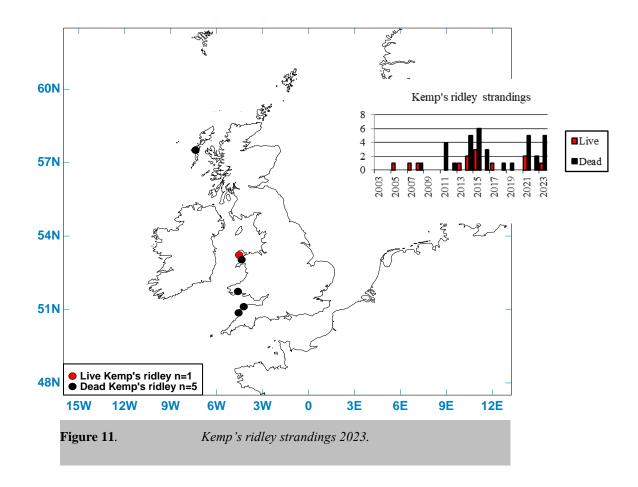
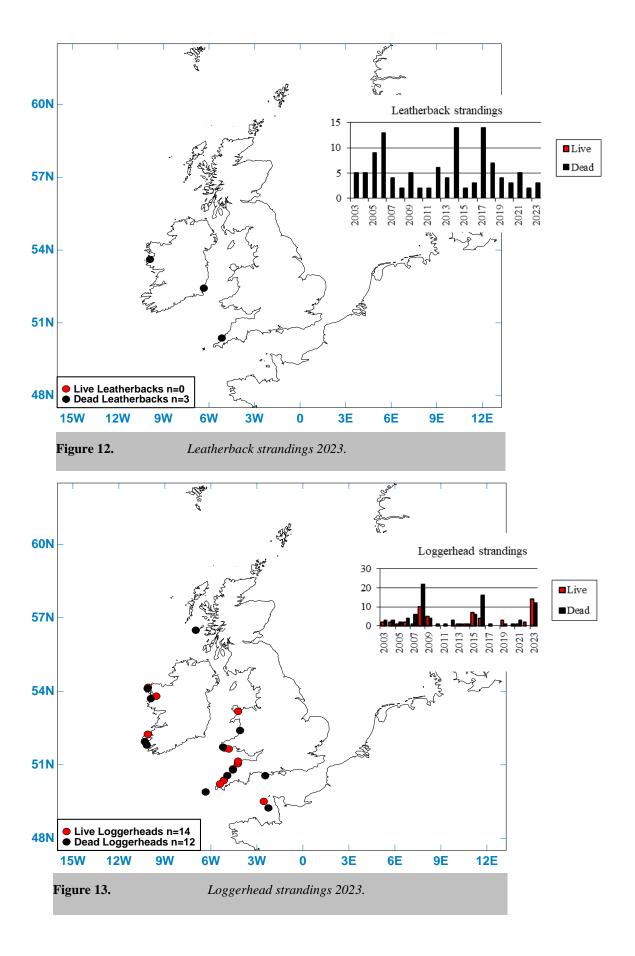


Figure 10. Green turtle strandings 2023.

No live or dead hawksbill turtle strandings were reported during 2023. 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 2023. However, a live stranding of an olive ridley turtle was recorded in recent years as shown in **Figure 14.**

Olive ridley strandings

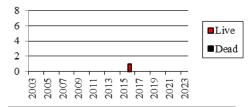


Figure 14. Olive ridley strandings 2023.

No live or dead unidentified turtle strandings were reported during 2023. However, strandings of unidentified turtles have been recorded in recent years as shown in **Figure 15**.

Unidentified strandings

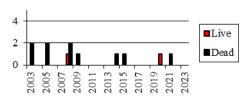


Figure 15. Unidentified strandings 2023.

All leatherback strandings and sightings, both dead and alive have been plotted by month for the period 2013 - 2023 (n=201) shown in **Figure 16.** The average figure was taken over 2013-2023 and plotted in **Figure 17.** 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 2013 - 2023 period is the loggerhead (n=80). The data for this species are plotted in **Figure 18** and **Figure 19.**

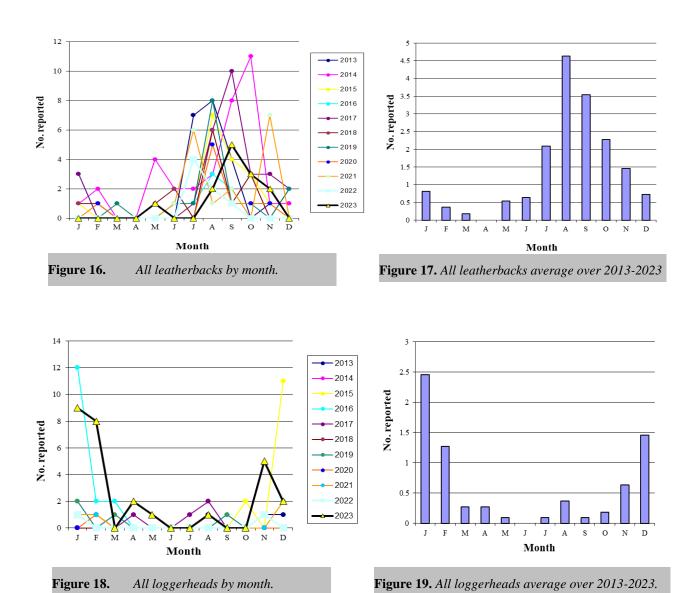


Table 4.

Cumulative number of records in the TURTLE database.									
Country	Al	l Species							
	2023	1748 - 2023							
Rep. of Ireland	9	1372							
England	21	729							
Scotland	2	435							
Wales	12	305							
N. Ireland	0	41							
Isle of Man	0	37							
Channel Islands	2	19							
Offshore	1	14							
Total	47	2952							

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 - 2023 column.

Table 5.

Species comparison from all TURTLE database records														
							2003	3 - 201	3					
Country	2013 - 2023													
	G	T	Н	В	K	R	LB	ВТ	LC	G	O	R	UN	I
England	0	0	0	0	2	16	125	76	22	32	0	0	49	23
Scotland	1	1	0	0	3	8	67	37	22	6	0	0	12	2
Rep. of Ireland	1	0	0	0	1	3	163	48	22	23	0	0	15	2
Wales	0	4	0	0	5	12	80	34	15	12	0	1	11	1
Channel Islands	1	0	0	0	0	1	1	1	0	4	0	0	1	0
N. Ireland	0	0	0	0	0	0	4	1	0	0	0	0	2	1
Isle of Man	0	0	0	0	0	0	13	2	0	3	0	0	4	0
Offshore	0	0	0	0	0	0	7	2	0	0	0	0	1	0
Total	3	5	0	0	11	40	460	201	81	80	0	1	95	29

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.

Species	TOTAL
Green turtle (Chelonia mydas)	15
Hawksbill turtle (Eretmochelys imbricata)	1
Kemp's ridley turtle (Lepidochelys kempii)	84
Leatherback turtle (Dermochelys coriacea)	2155
Loggerhead turtle (Caretta caretta)	298
Olive ridley turtle (Lepidochelys olivacea)	1
Unidentified	398
Total animals	2952

The total records held in TURTLE are 2952 (end of 2023). 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, 2003-2013 / 2013-2023 shown in **Table 5,** shows a marked decline in leatherback turtles recorded for most countries, this decline of leatherback turtles is likely to be a reflection of reduced effort. The increase in Kemp's ridley turtles is likely to be the result of successful management of the breeding beach in Mexico where eggs have been introduced to additional sites and the nests have been afforded greater protection.

5. MATTERS ARISING.

5.1 Retrospective Reports.

No retrospective reports were received during 2023.

6. LIVE STRANDING EVENTS 2023.

Fifteen turtles were reported as live-stranding in 2023, these consisted of 14 loggerheads and one Kemp's ridley turtle, these are listed below;

T2023/03 was a loggerhead turtle found alive stranded cold-stunned at Moel-Y-Don beach, Anglesey on the 5th January. The turtle was recovered to Anglesey Sea Zoo where it made a full recovery.

T2023/06 was a loggerhead turtle found alive stranded cold-stunned at Perran Sands, Perranporth. Cornwall on the 13th January. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery.

T2023/11 was a loggerhead turtle found alive stranded cold-stunned at Bude, Cornwall on the 3rd of February. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery.

T2023/12 was a loggerhead turtle found alive stranded cold-stunned at Perranporth. Cornwall on the 3rd of February. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery.

T2023/14 was a loggerhead turtle found alive stranded cold-stunned at Belmullet, Mayo, Ireland on the 12th February. The turtle was recovered to Dingle Aquarium, Kerry where it made a full recovery.

T2023/15 was a loggerhead turtle found alive stranded cold-stunned at West Angle Bay, Pembrokeshire on the 17th February. The turtle was returned to the sea by the finder, a subsequent search for the animal was unsuccessful.

T2023/16 was a loggerhead turtle found alive stranded cold-stunned at Swan Lake Bay, Pembrokeshire on the 22^{nd} February. The turtle was returned to the sea by the finder.

T2023/19 was a loggerhead turtle found alive stranded cold-stunned at Saunton Sands, Devon on the 15th April. The turtle was returned to the sea by the finder.

T2023/31 was a loggerhead turtle found alive stranded cold-stunned at Chouet, Guernsey on the 6th November. Recovered by GSPCA where it made a full recovery.

T2023/32 was a loggerhead turtle found alive stranded cold-stunned at Hayle beach, Cornwall on the 10th November. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery.

T2023/33 was a loggerhead turtle found alive stranded cold-stunned at Westward Ho, Devon on the 20th November. The turtle was recovered to Blue Reef Aquarium, Cornwall where it unfortunately died.

T2023/37 was a Kemp's ridley turtle found alive stranded cold-stunned at Rhosneigr, Anglesey on the 13th December. The turtle was recovered to Anglesey Sea Zoo where it made a full recovery.

T2023/39 was a loggerhead turtle found alive stranded cold-stunned at Putsborough beach, Devon on the 22nd December. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery.

T2023/42 was a loggerhead turtle found alive stranded cold-stunned at Kilcumin Brandon, Kerry on the 27th August. The turtle was recovered to Dingle Aquarium, Kerry where it made a full recovery.

T2023/43 was a loggerhead turtle found alive stranded cold-stunned at Westport, Mayo on the 23rd November. The turtle was recovered to Dingle Aquarium, Kerry where it made a full recovery.

6.1 Rehabilitation

Of the fifteen 2023 live-strandings, eleven turtles, survived in rehabilitation.

T2023/03 was a loggerhead turtle found alive stranded cold-stunned at Moel-Y-Don beach, Anglesey on the 5th January. The turtle was recovered to Anglesey Sea Zoo where it made a full recovery. The turtle has been PIT tagged, CITES paperwork completed and ready to go.

T2023/06 was a loggerhead turtle found alive stranded cold-stunned at Perran Sands, Perranporth. Cornwall on the 13th January. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery.

The turtle has been PIT tagged, CITES paperwork completed and ready to go.

T2023/11 was a loggerhead turtle found alive stranded cold-stunned at Bude, Cornwall on the 3rd of February. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery. The turtle has been PIT tagged, CITES paperwork completed and ready to go.

T2023/12 was a loggerhead turtle found alive stranded cold-stunned at Perranporth. Cornwall on the 3rd of February. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery.

The turtle has been PIT tagged, CITES paperwork completed and ready to go.

T2023/14 was a loggerhead turtle found alive stranded cold-stunned at Belmullet, Mayo, Ireland on the 12th February. The turtle was recovered to Dingle Aquarium, Kerry where it made a full recovery. The turtle was released near Gibraltar with the aid of the Irish Navy on the 15th June.

T2023/31 was a loggerhead turtle found alive stranded cold-stunned at Chouet, Guernsey on the 6th November. The turtle was recovered by GSPCA where it made a full recovery. The turtle is awaiting release.

T2023/32 was a loggerhead turtle found alive stranded cold-stunned at Hayle beach, Cornwall on the 10th November. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery.

The turtle has been PIT tagged, CITES paperwork completed and ready to go.

T2023/37 was a Kemp's ridley turtle found alive stranded cold-stunned at Rhosneigr, Anglesey on the 13th December. The turtle was recovered to Anglesey Sea Zoo where it made a full recovery. The turtle is waiting to be PIT tagged.

T2023/39 was a loggerhead turtle found alive stranded cold-stunned at Putsborough beach, Devon on the 22nd December. The turtle was recovered to Blue Reef Aquarium, Cornwall where it made a full recovery.

The turtle is waiting to be PIT tagged.

T2023/42 was a loggerhead turtle found alive stranded cold-stunned at Kilcumin Brandon, Kerry on the 27th August. The turtle was recovered to Dingle Aquarium, Kerry where it made a full recovery. The turtle was released in the Azores 27th November.

T2023/43 was a loggerhead turtle found alive stranded cold-stunned at Westport, Mayo on the 23rd November. The turtle was recovered to Dingle Aquarium, Kerry where it made a full recovery. The turtle is awaiting release.

Climate change? with Brexit – the perfect storm.

2023 saw the highest number of live-stranded hard-shelled turtles strand since the TURTLE database started in 1748 coupled with the highest ocean surface temperature ever recorded³.

No UK turtles have been repatriated to Gran Canaria since the UK left the EU. Where once unhindered flights to the Canaries could be conducted, all turtles now require CITES Import and Export permits. Unfortunately, the required Health Certificates are not clear and don't apply to vagrant UK turtles travelling for release into the wild.

≺ Heathrow Animal Recepti...

Q

Posts

About More ▼



Heathrow Animal Reception Centre - HARC

15 Feb · 🕥

Last week we helped care for 5 #loggerheadturtles overnight who sadly couldn't make their scheduled... See more



Plate 1. All 5 loggerheads at HARC overnight.

An attempt was made to fly 5 loggerheads to Gran Canaria T2023/03, T2023/06, T2023/11, T2023/12 and T2023/32 on the 8th February 2024, all PIT tagged with CITES Export and Import permits and fit to fly certificates from their respective veterinarians. The cost of all transportation to be covered by Defra to whom we are extremely grateful, but the consignment was refused by the Spanish Authorities at Heathrow.

Our error was to try and fly direct to Gran Canaria, as we had done previously on many occasions, to try and keep travel time to a minimum.

As we have left the EU, all live animals have to enter via a mainland port of entry, before free onward movement can be conducted within the EU. The flights were quickly re-booked to travel via Madrid but were again refused, presumably due to non-harmonized Health Certificates.

All 5 turtles were held overnight at Heathrow Animal Reception Centre (HARC) and then driven back to their respective aquaria in Cornwall and Anglesey with the help of Airpets Ltd to get them quickly back into a safe environment.

It would appear each country has slightly different requirements on their Health Certificates, ie Spain requires all turtles to be tested for Salmonella in an official laboratory and most require that the turtles are held in a registered/approved facility for 30 days before transport. However, finding what

registration/approval is needed or indeed finding a facility with the agreed registration/approval has been proving difficult. Needless to say, both Anglesey Sea Zoo and Blue Reef Aquarium don't comply although Blue Reef Aquarium has been involved in rehabilitation of vagrant marine turtles for us for over 23 years.

Defra are in communication with the Spanish Authorities to seek a specific certificate to address the problems highlighted above. However, we have not been informed of any timeline.

In the meantime, alternative destinations are being investigated as available aquaria in the south-west of England are unable to receive further animals due to the backlog.

³ Cheng,L. et al. New Record Ocean Temperature and Related Climate Indicators in 2023. 11th Jan 2024. Advances in Atmospheric Sciences 2024.

Of the 2022 live-stranded turtles **T2022/03** 'Iona' the small loggerhead found on the Scottish Island in 27th January 2022 was taken into care at Sea Life Loch Lomond and later moved to Sea Life Scarborough. Arrangements were made by Sea Life to fly this turtle via Portugal for eventual release in the Azores on the 2nd October 2023. This repatriation route costs several thousand pounds, paid for by SEA LIFE Aquariums & Attractions.

Arrangements were made by Anglesey Sea Zoo to fly **T2021/13** the Kemp's ridley turtle found at Talacre, Flintshire on the 28th November 2021 to the US. The turtle was finally flown to the US on the 30th August 2023 and released in Galveston, Texas on the 5th September 2023.

Flights to the US have remained unchanged.

7. BYCATCH.

No reports of bycaught marine turtles were received during 2023.

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.

Six turtles were recovered to the project in 2023 in a suitable condition to undergo a full post-mortem examination. These were 4 loggerheads and 2 Kemp's ridleys listed below.

T2023/02 a Kemp's ridley turtle found stranded dead at Marros beach, Carmarthenshire, Wales 4th January in a state of slight decomposition.

Pending examination.

T2023/04 a loggerhead turtle found stranded dead at Chesil beach, Dorset 10th January. Stored locally frozen.

Pending examination.

T2023/09 a loggerhead turtle found stranded dead at Marloes sands, Pembrokeshire 22nd January in a state of slight decomposition.

Pending examination.

T2023/33 a loggerhead turtle found stranded alive at Westward Ho, Devon 20th November, taken to Blue Reef Aquarium for rehabilitation but unfortunately died the next day. Cause of death was given as cold-stunning.

T2023/34 a loggerhead turtle found stranded dead at Daymer bay, Padstow, Cornwall 27th November in a state of slight decomposition.

Cause of death was given as cold-stunning.

T2023/40 a Kemp's ridley turtle found stranded dead at Clynnog Fawr beach, Gwynedd 28th December.

Pending examination.

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.

As stated previously in this report 2023 saw the highest number of live strandings of hard-shelled species coupled with the highest ocean surface temperature ever recorded

Two juvenile loggerheads found live-stranded in Guernsey **T2023/31** and Cornwall **T2023/32** were found to have large clusters of goose barnacles attached which would hinder their mobility immensely.



Plate 2. Juvenile loggerhead turtle **T2023/31** from Guernsey with mass of goose barnacles attached.

Photo by: Steve Byrne GSPCA



Plate 3. Juvenile loggerhead **T2023/32** from Cornwall with mass of goose barnacles attached.

Photo by: Dan Jarvis BDMLR

Both turtles were taken into rehabilitation where they fully recovered. Both now are waiting for repatriation to Gran Canaria for release.

11. PUBLICITY.

A dedicated web-site to bring all turtle related information concerning turtles in the UK & Ireland together with online reporting forms for both sightings and strandings has been constructed at www.ukturtles.online

The Strandings Web-site has been maintained to provide details of MEM and the CSIP. 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 https://strandings.com/annual-reports/

Posters and leaflets produced to increase awareness of the project have continued to be distributed.

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

12. ACKNOWLEDGEMENTS.

Marine Environmental Monitoring wishes to acknowledge the following;

Cornwall Wildlife Trust, Dr Tom Doyle, Irish Whale and Dolphin Group (IWDG), University of Exeter's Cornwall campus, Gabriel King, Julia Cable and Dan Jarvis British Divers Marine Life Rescue, Nick Davison SMASS, Peter Richardson MCS, Pascual Calabuig, Anglesey Sea Zoo, Sea Life Loch Lomond, Todd German at Sea Life Scarborough, Blue Reef Aquarium, Dingle Oceanworld,

Doug Herdson, Sarah Jones, Lin Gander, Miriam Ojeda Carrasco, Rafael Zamora Padrón, Prof. Antonio Fernandez, Steve Byrne GSPCA, John Knight and Jake Biggs at Airpets.

Natural England, NatureScot, National Parks & Wildlife Service and the Welsh Government for financial support towards the British & Irish TURTLE database.

Defra for providing funds for transportation of turtles for release into the wild.

13. APPENDICES.

Appendix 1. 2023 TURTLE data. Appendix 2. UK Turtle Code. Appendix 3. Morphometrics.









Ariennir yn Rhannol gan Lywodraeth Cymru Part Funded by Welsh Government

Appendix 1.

RecordKeye	ciesCgl	htStra	AliveDea	EndDate	Country	County	Location	Notes
T2023/01 L	LOG S	SEA	ALIVE	01/01/2023	ENGLAND	CORNWALL	Seen from Pendeen Watch, just off the Wra rocks at Pendeen Watch, Cornwall	Sighted with binoculars and telescope.
T2023/02	KR S	ST	DEAD	04/01/2023	WALES	CARMARTHENSH	Marros beach	Carcass recovered by Mat Westfield. Delivered to ZSL for pm examination 9th Jan 2023.
T2023/03 L	LOG S	ST	ALIVE	05/01/2023	WALES	ANGLESEY	Moel-Y-Don beach	Recovered to Anglesey Sea Zoo.
T2023/04 L	LOG S	ST	DEAD	10/01/2023	ENGLAND	DORSET	Chesil beach	Turtle to be recovered from Craig Pinter by Sarah Hodgson DWT for freezer storage.
T2023/05 L	LOG S	ST	DEAD	12/01/2023	ENGLAND	ISLES OF SCILLY	St Agnes	
T2023/06 L	LOG S	ST	ALIVE	13/01/2023	ENGLAND	CORNWALL	Perran Sands, Perranporth.	Taken to Blue Reef Aquarium 13/01/2023. Finder: Tracy Williams. Air temp 10C, Water temp 8-10C.
T2023/07 L	LOG S	ST	DEAD	13/01/2023	EIRE	MAYO	Port Glais	
T2023/08 L	LOG S	ST	DEAD	21/01/2023	ENGLAND	CORNWALL	Widemouth	Left on beach, no sign of it in morning.
T2023/09 L	LOG S	ST	DEAD	22/01/2023	WALES	PEMBROKESHIRE	Marloes sands	Recoverd by Louise Beal to Sue Burton. Picked-up from Sue Monday afternoon 23/01/2023.
T2023/10 L	LOG S	ST	DEAD	25/01/2023	EIRE	MAYO	Killadoon beach	Tom Doyle to recover
T2023/11 L	LOG S	ST	ALIVE	03/02/2023	ENGLAND	CORNWALL	Bude	Recovered by British Divers Marine Life volunteers to Blue Reef Aquarium.
T2023/12 L	LOG S	ST	ALIVE	03/02/2023	ENGLAND	CORNWALL	Perranporth	Recovered by British Divers Marine Life volunteers to Blue Reef Aquarium. Found with small crab in carapace.
T2023/13 L	LOG S	ST	DEAD	07/02/2023	SCOTLAND	ARGYLL & BUTE	Traigh Ghrianal, Isle of Tiree.	Turtle was found by a local crofter on the beach. He said the eyes were missing. Went down a few days later due to the bad weather and didn't spot it.
T2023/14 L	LOG S	ST	ALIVE	12/02/2023	EIRE	MAYO	Belmullet	Recovered and transported to Oceanworld Aquarium Dingle. Released via Irish Navy 15/06/2023.
T2023/15 L	LOG S	ST	ALIVE	17/02/2023	WALES	PEMBROKESHIRE	West Angle Bay	Returned to the sea by the finder, strandings co-ordinator to search location.
T2023/16 L	LOG S	ST	ALIVE	22/02/2023	WALES	PEMBROKESHIRE	Swan Lake Bay	Returned to the sea by the finder.
T2023/17 L	LOG S	SEA	ALIVE	27/02/2023	ENGLAND	CORNWALL	30 metres off May's rock, Veryan.	Retro report. Sighted 30 metres off May's rock, Veryan, surfacing regularly approx. 1 metre in length.
T2023/18 L	LOG S	ST	DEAD	03/04/2023	CHANNEL ISLANDS	JERSEY	St Ouens Bay. ///natively.lodges.enrichment	Recovered by BDMLR to New Era Vets where it was confirmed dead.
T2023/19 L	LOG S	ST	ALIVE	15/04/2023	ENGLAND	DEVON	Saunton Sands	Returned to the sea by finder.
T2023/20 L	BT S	SEA	ALIVE	30/05/2023	OFFSHORE	IRISH SEA	Sighted from ferry between Belfast and Cairnryan.	Sighted from ferry between Belfast and Cairnryan also hundreds of Lion's Mane Jellyfish.
T2023/21 L	LBT S	SEA	ALIVE	11/08/2023	ENGLAND	DORSET	Sighted at Outer Poole Patch.	Sighted from boat. "Turtle was swimming along on surface, then raised its head out for a few seconds before diving".
T2023/22 L	LBT S	SEA	ALIVE	03/09/2023	WALES	PEMBROKESHIRE	Sighted 4 miles off Tenby.	Sighted from fishing boat, "swam next to fishing boat for three hours".
T2023/23 L	_BT S	SEA	ALIVE	10/09/2023	WALES	CARMARTHENSH	Sighted off Pendine sands	Sighted from CEFAS Endeavour by the Second Officer, reported as "Turtle was sighted swimming on the surface and as the vessel passed, it then dived below the surface". Possibly T2023/22 as multiple reports have been received.
T2023/24 L	LBT S	SEA	ALIVE	07/09/2023	ENGLAND	CORNWALL	Off Falmouth	
T2023/25 L	BT S	SEA	ALIVE	18/09/2023	WALES	ANGLESEY	Seen from South Stack Lighthouse.	Sighted by Andrew Clarke, bird watcher.
T2023/26 L	LBT S	SEA	ALIVE	05/10/2023	ENGLAND	DEVON	Seen at Start Point	Reported by Michael Brooking. "i saw leatherback turtle at Start Point (South Devon) sx 83 37 on 5/10/23 at 11.00 hrs, it came to the surface for air and could clearly see ridges down the side of his back"
T2023/27 L	BT S	SEA	ALIVE	06/09/2023	WALES	CARMARTHENSH	Seen at DZ1 MOD range marker bouy.	Seen at DZ1 MOD range marker bouy by Tenby Boat Trips.
T2023/28 L	LBT S	ST	DEAD	28/10/2023	EIRE	WEXFORD	Curraclloe beach	Record reported on IWDG Facebook page.
T2023/29 L	_BT S	SEA	ALIVE	25/08/2023	ENGLAND	CORNWALL	Seen from the Scillonian	From RMS Scillonian at sea south of Mousehole Cornwall.
T2023/30 L	_BT S	ST	DEAD	04/11/2023	ENGLAND	CORNWALL	Panhale beach, Perran Sands	Found in surf with rear flippers missing together end of carapace missing. (possible Pre or Post-mortem large prop injury).
T2023/31 L	LOG S	ST	ALIVE	06/11/2023	CHANNEL ISLANDS	GUERNSEY	Chouet	Found on beach following Storm Ciaran with a mass of goose barnacles attached. Under the care of Steve Byrne GSPCA with veterinarian John Knight. PIT Tagged 977 200 010 471 114 ready for flight to Las Palmas.
T2023/32 L	LOG S	ST	ALIVE	10/11/2023	ENGLAND	CORNWALL	Hayle beach	Found on Hayle beach with goose barnacle burden and Columbus crab under carapace. Taken to Blue Reef Aquarium. 26cm carapace.
T2023/33 L	LOG S	ST	ALIVE	20/11/2023	ENGLAND	DEVON	Westward Ho	Collected by Dan Jarvis BDMLR. Overnighted at Blue Reef Aquarium, died the the next day. Suspected pablofibraloma. Taken to James Barnett for pm examination the next day within the CSIP.
T2023/34 L	LOG S	ST	DEAD	27/11/2023	ENGLAND	CORNWALL	Daymer Bay, Padstow	To be examined by James Barnett, Cornwall Marine Pathology Team/CSIP 27/11/2023.
T2023/35 L	LBT S	ST	DEAD	21/11/2023	EIRE	GALWAY		Carapace only.
T2023/36 P	KR S	ST	DEAD	28/11/2023	SCOTLAND	WESTERN ISLES	North Uist	Found on Baleshare beach. It's shell length is 280mm, width 250mm. Not sent for pme.
T2023/37	KR S	ST	ALIVE	13/12/2023	WALES	ANGLESEY	Rhosneigr	Recovered by Frankie Hobro to Anglesey Sea Zoo.
T2023/38 L	LOG S	ST	DEAD	13/12/2023	WALES	CEREDIGION	Tanybwlch, Aberystwyth	Carcass recovered by Mat Westfield, Strandings Coordinator for investigation within the CSIP.
T2023/39 L	LOG S	ST	ALIVE	22/12/2023	ENGLAND	DEVON	Putsborough beach	Recovered to Blue Reef Aquarium.
T2023/40 P	KR S	ST	DEAD	28/12/2023	WALES	GWYNEDD	Clynnog Fawr beach.	Recovered from the finder for examination within the CSIP.
T2023/41 F	KR S	ST	DEAD	30/12/2023	ENGLAND	CORNWALL	Bude	Examined on beach by Debbie Destecroix. Samples collected for Rob Deaville ZSL.
T2023/42 L	LOG S	ST	ALIVE	27/08/2023	EIRE	KERRY	Kilcumin Brandon	Released 27/11/2023 Azores.
T2023/43 L	LOG S	ST	ALIVE	23/11/2023	EIRE	MAYO	Westport	Ready for release.
T2023/44 L	LOG S	ST	DEAD	05/02/2023	EIRE	KERRY	Waterville	Not decomposed but missing head.
T2023/45 L	LOG S	ST	DEAD	22/05/2023	EIRE	KERRY	Beginish Island	
T2023/46	KR S	ST	DEAD	25/01/2023	ENGLAND	DEVON	Saunton Sands	Recovered for pm. Rob Deaville CSIP.
T2023/47 L	LBT S	SEA	ALIVE	17/10/2023	ENGLAND	ISLES OF SCILLY	St Martin's Flats	Seen from ferry St Martins to St Marys

The United Kingdom & Irish 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 & SCOTLAND

ALL RECORDS

Rod Penrose or Mat Westfield, Marine Environmental Monitoring. 01239 683033 (24hrs) info@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)

SCOTLAND

DEAD STRANDINGS

Nick Davison, Scottish Marine Animal Strandings Scheme (SMASS) 07979 245893 reports@strandings.org

LIVE STRANDINGS/ ENTANGLEMENTS

SSPCA 03000 999999

NORTHERN IRELAND

ALL RECORDS

The Portrush Coastal Zone (DAERA) 028 7082 3600

REPUBLIC OF IRELAND

ALL RECORDS

Dr Tom Doyle 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.

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 dry towel or blanket.
 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 dry towel, 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 & Ireland

http://www.ukturtles.online

Endorsed by:

SEAFISH

marine scotland

Of the world's seven marine turtle species, six have been recorded in UK waters. They are the leatherback, loggerhead, Kemp's ridley, olive 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 five 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.

PISTINCTIVE FEATURES: large, up to 916 kg, pronounced longitudinal ridges on shell, which tapers to a blunt

SCALE L

spike.

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.

PEATURES: shell width equal to or greater than shell length.

COLOUR: grey/olive.

8 pores visible on underside (4 either side)

NB: The olive ridley turtle

(Lepidochelys olivacea) occurs in the Atlantic, but has been recorded only once 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.



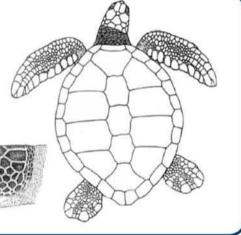
GREEN TURTLE

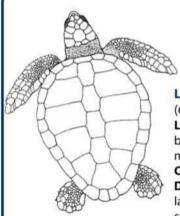
(Chelonia mydas)

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.

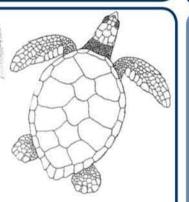
HAWKSBILL TURTLE

(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.





















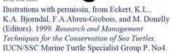










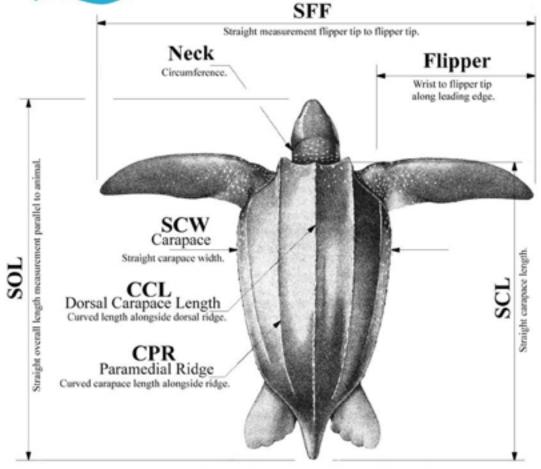


Appendix 3.

Marine Environmental Monitoring

UK & Eire Marine Turtle Morphometrics.

Ver.1.2



Other Measurements Required.

COL Curved Overall Length.

CFF Curved Flipper tip to Flipper tip over Animal.

CCW Curved Carapace Width.

DMAX Maximum Body Depth. (Straight).
TTL Total Tail Length from Plastron.

PTL From Centre of Cloacal Opening to end of Tail.

WEIGHT In Kilograms. SEX If Known.

