



Protecting *Manx Wildlife*
for the future

Dead marine megafauna strandings annual report 2019



Tobey Cheng – Marine Volunteer

Dr Lara Howe – Marine Officer



Introduction

On behalf of the Isle of Man Department of Environment, Food and Agriculture (DEFA), Manx Wildlife Trust have collated information regarding dead marine megafauna strandings since 2013. The present report summarises the annual findings from 2019. Cetacean data obtained is additionally utilised in the annual UK Cetacean Strandings Investigation Programme (CSIP-UK) report.

Training

During 2019, eight volunteers were trained to attend marine mammal strandings and were added to the database.

Methodology

Dead marine megafauna strandings observed around the Isle of Man are reported to Dr Lara Howe (Marine Officer, Manx Wildlife Trust) via phone, email or social media. Details obtained from the reporter, including location and any other available information, are passed on to a trained volunteer who will attend the stranding. As of 2019 there are 64 trained volunteers and each possesses a 'stranding pack' which contains all necessary equipment to effectively and safely record data in the field/on site (Appendix 1). Following location of the stranded individual, volunteers must report findings on the appropriate recording form (seal stranding recording form, stranded whales/dolphins/porpoises or basking shark stranding recording form) (Appendix 2/Appendix 3/Appendix 4). Initially, date, time and site details (name of location, OS six-figure grid reference and GPS coordinates) must be recorded. Following this, details of the stranded individual are recorded including: species, sex, age, carcass condition (e.g. fresh or decomposed), identifiable markings, presence of trauma and presence of tags. Additionally, measurements are taken. The measurements required vary, depending on whether the individual is a cetacean, pinniped or other. Finally, photographs are taken of the body and head, and any notable features including evidence of trauma. In some circumstances it may not be possible to obtain all of the required data/complete the recording form, however volunteers are asked to record as much information as possible. Forms and photographs are submitted and added to the stranding database. Cetacean stranding forms are also sent to CSIP-UK.

Results

In total there were 48 stranded individuals recorded around the Isle of Man (Figure 1/Figure 2). Of these, there were 31 pinnipeds (20 grey seals, *Halichoerus grypus*, 7 'likely' Grey seals and 4 individuals for which species was unknown), one shark/unknown species and the other 16 individuals were cetaceans (10 harbour porpoise, *Phocoena phocoena*, 2 short beaked common dolphins, *Delphinus Delphis*, 2 Minke Whales, *Balaenoptera acutorostrata* and 2 Cetaceans for which species was unknown) (Figure 4).

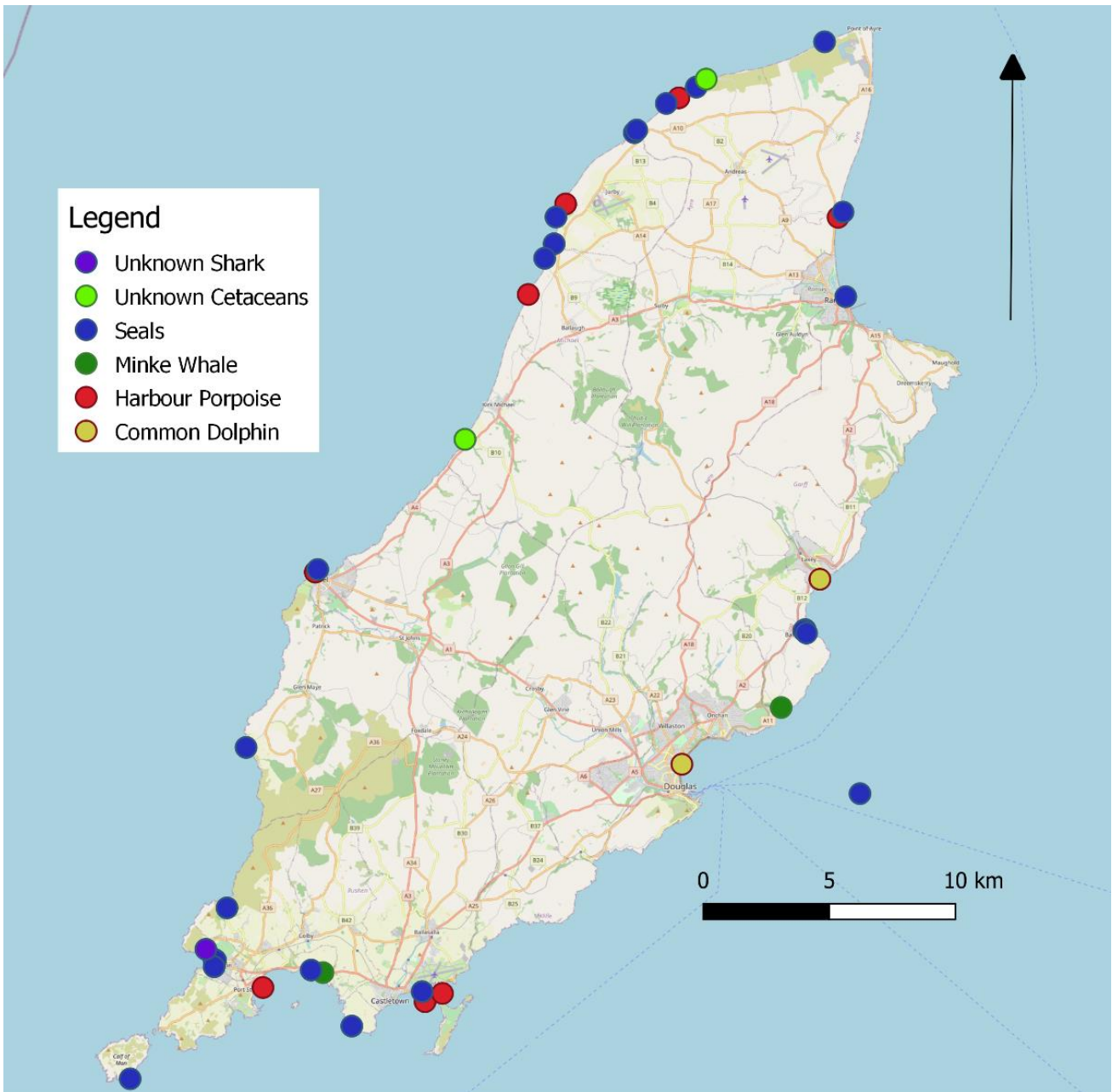


Figure 1 – Strandings reported around Isle of Man in 2019 (n= 48). 10 seals, 3 Harbour porpoises, an unknown shark, an unknown cetacean and 1 Minke Whale were not found so an estimated Grid reference was used for their locations.



Figure 2 – Closer view of the south of the Isle of Man, depicting strandings in this area during 2019.



Figure 3 – Closer View of the North of the Isle of Man, depicting strandings in the area during 2019.

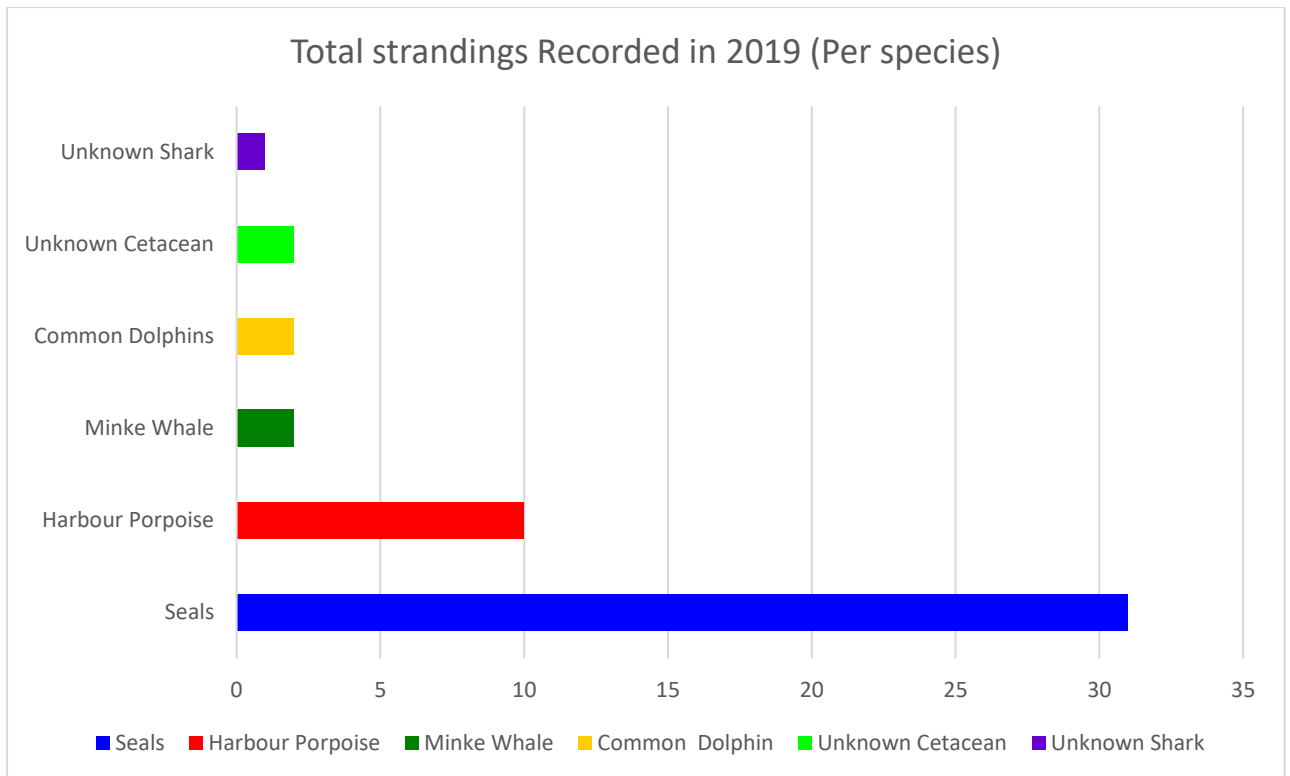


Figure 4 – Total number of stranded individuals (N= 48) (per species) recorded around Isle of Man in 2019.

Figure 5 depicts the pattern of strandings reported per month. Overall, the number of reported seal strandings was low during the months of January-May and no cetacean strandings were reported in January, March and April. October had the greatest number of strandings, when considering both seals (n= 5) and cetaceans (n=2). May was the only month in which no seal strandings were reported, however one Minke whale was reported. Overall 52.1% of strandings occurred in the winter months (January/February/March and October/November/December).

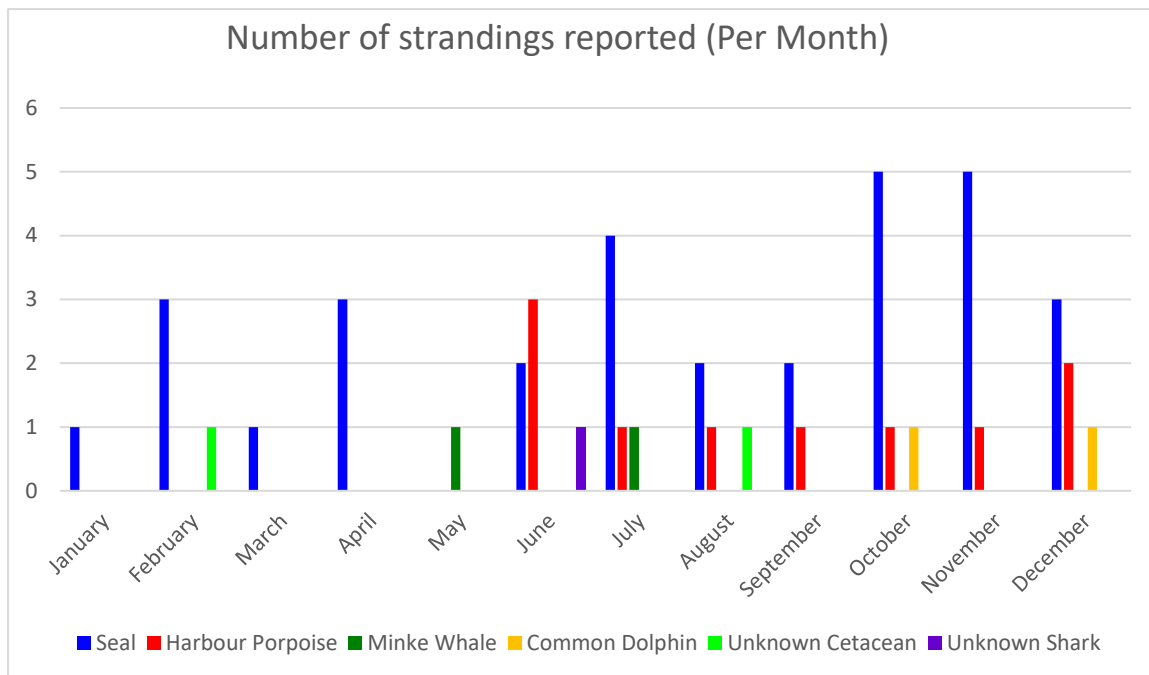


Figure 5 – Number of strandings reported per month around Isle of Man in 2019.

Seals

In total, 31 seal strandings were reported (20 Grey Seals, 7 ‘likely’ Grey Seals and 4 Seals of Unknown Species). Of these, 10 seals were not found by volunteers (7 ‘likely’ Grey Seals and 3 Unknown Seals). Those stated as likely seals, were not found but identification was based from photos. The other unknown seal, which was found, had undergone advanced decomposition and was missing the head. As a result of this, the individual could not be reliably identified to species level. Had they been identified, these individuals may have been grey seals or possibly the less frequently sighted common seal (*Phoca vitulina*) (Stone et al., 2013). No other species have been formally recorded in Manx waters (with the exception of a live ringed seal, *Phoca hispida*, in 1940), though it is possible that vagrant individuals visit the Irish Sea (Bruce et al., 1963; Stone et al., 2013).

The following results are based upon data from the 21 seals (1 unknown species, 20 Grey Seals) that were successfully located by volunteers. When considering the distribution of seal strandings, the greatest proportion were observed up north past Ramsey/Ballaugh (n= 6) and down in the south Port Erin/Castletown (n=6). Overall, strandings appear to be relatively evenly distributed (Figure 6).

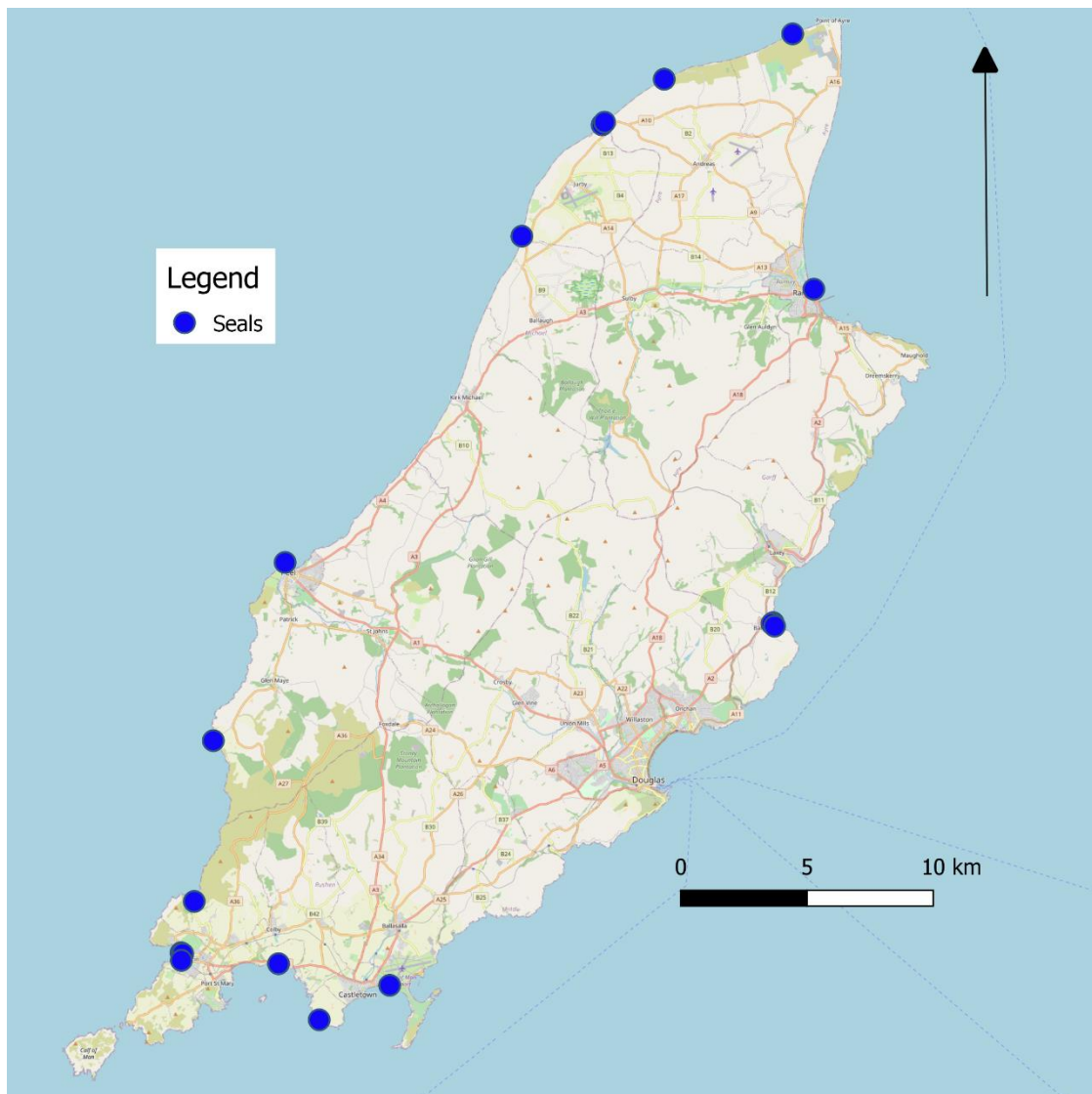


Figure 6 – Seal strandings reported around Isle of Man in 2019 (n= 31). In total, 21 of the 31 seals reported were found by volunteers and thus GPS coordinates were obtained. The remaining 10 individuals were not located and therefore have been omitted from Figure 6.

The majority of stranded individuals showed some degree of decomposition (73.1%) and of these, 10 individuals had undergone advanced decomposition. 7 individuals were reported as fresh (26.9%),

Several individuals had missing body parts, predominantly the head. The whole head was missing on seven. This is somewhat typical of stranded megafauna and can be considered ‘wear and tear’. Furthermore, several seals were missing additional soft body parts as a result of scavenging. However, no individuals appeared to show abnormal trauma that may have been caused by an injury obtained pre-mortality or that cause of death could be attributed to.

The relative proportions of individuals belonging to each age group is displayed in Table 1. The majority were recorded as adults (73.91%) (based on size and physical appearance). Sex was unknown for almost all stranded grey seals, with the exception of 6 individuals where 4 were determined to be female and 2 were male.

Table 1 – Relative proportion (%) of stranded seals belonging to each age group (adult, juvenile, or pup).

Adult (%)	Juvenile (%)	Pup (%)
73.91	19.57	6.52

Harbour porpoise

In total, 10 harbour porpoise strandings occurred in 2019 (Figure 7). Of these, seven were located but one was floating within the water but was close enough to get most details such as sex and that there was no damage. One was also found on the calf and so was not recorded and was washed out to sea. The other individual was not found so limited details were supplied.

Harbour porpoise distribution does not appear to show any particular pattern (Figure 7), though it is perhaps interesting to note that no strandings occurred around the East coast region.

Of those recorded, 71.43% (n= 5) of carcasses showed a degree of decomposition and 28.57% (n= 2) were fresh. One individual was concluded to be female, 4 were determined to be male and the other two were unknown. Four individuals displayed signs of trauma as one had half of its head badly decomposed whilst the other 3 had slits, scrapes, scratches and bones were visible. It is a possibility that these wounds were obtained post-mortality and as a result stranding ‘wear and tear’ and/or scavenging.

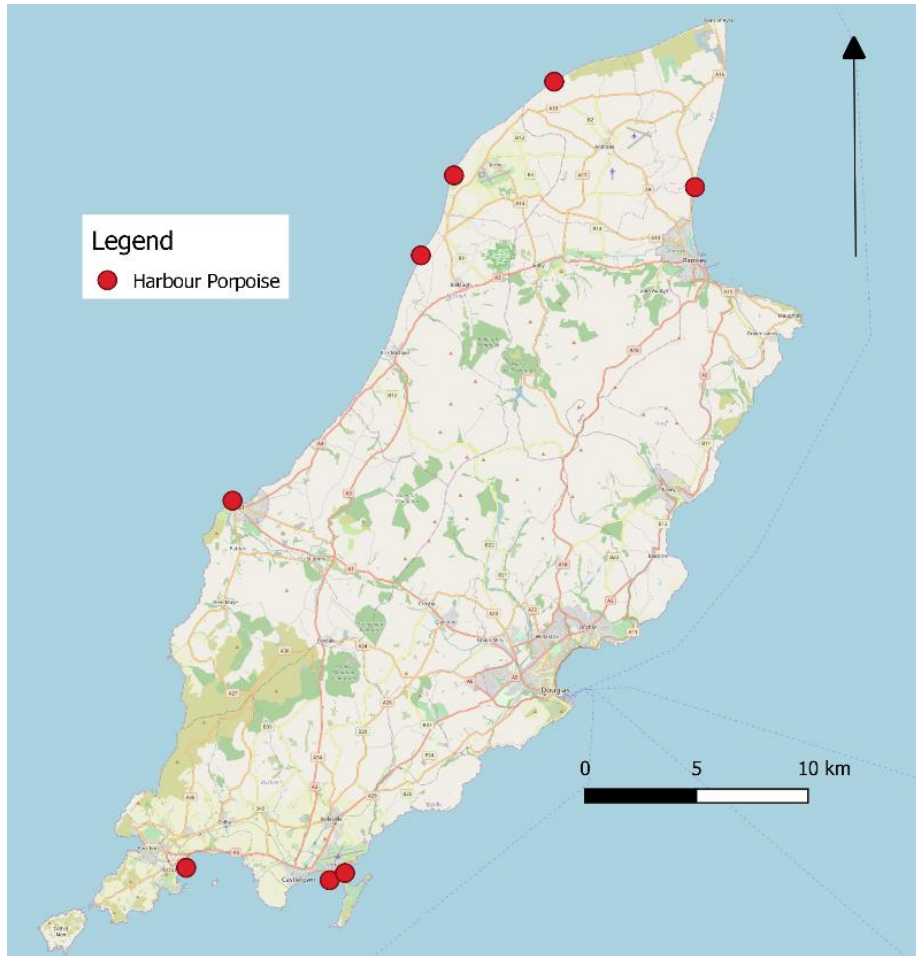


Figure 7 – Harbour porpoise strandings recorded around Isle of Man in 2019 (n= 10). In total, 7 of the 10 Harbour Porpoises were found and thus GPS coordinates were obtained. The other 3 could not be located therefore have been omitted from Figure 7.

Minke Whale

Two Minke whales were reported around the Isle of Man in 2019 (Figure 8). Of these, details could not be collected for one specimen as it was submerged underwater at the sealion pool at Groudle Glen. Photos were taken of it but not much could be seen. The other one was a Juvenile male found on Fishers hill in Castletown and was attended by Lara Howe and Natassja Chadwick on the 27/7/2019. A basic autopsy was conducted on the carcass and it was concluded that there may have been some trauma to the intestines which could suggest possible signs of peritonitis. The lower jaw was also broken so could have possibly been hit by something.

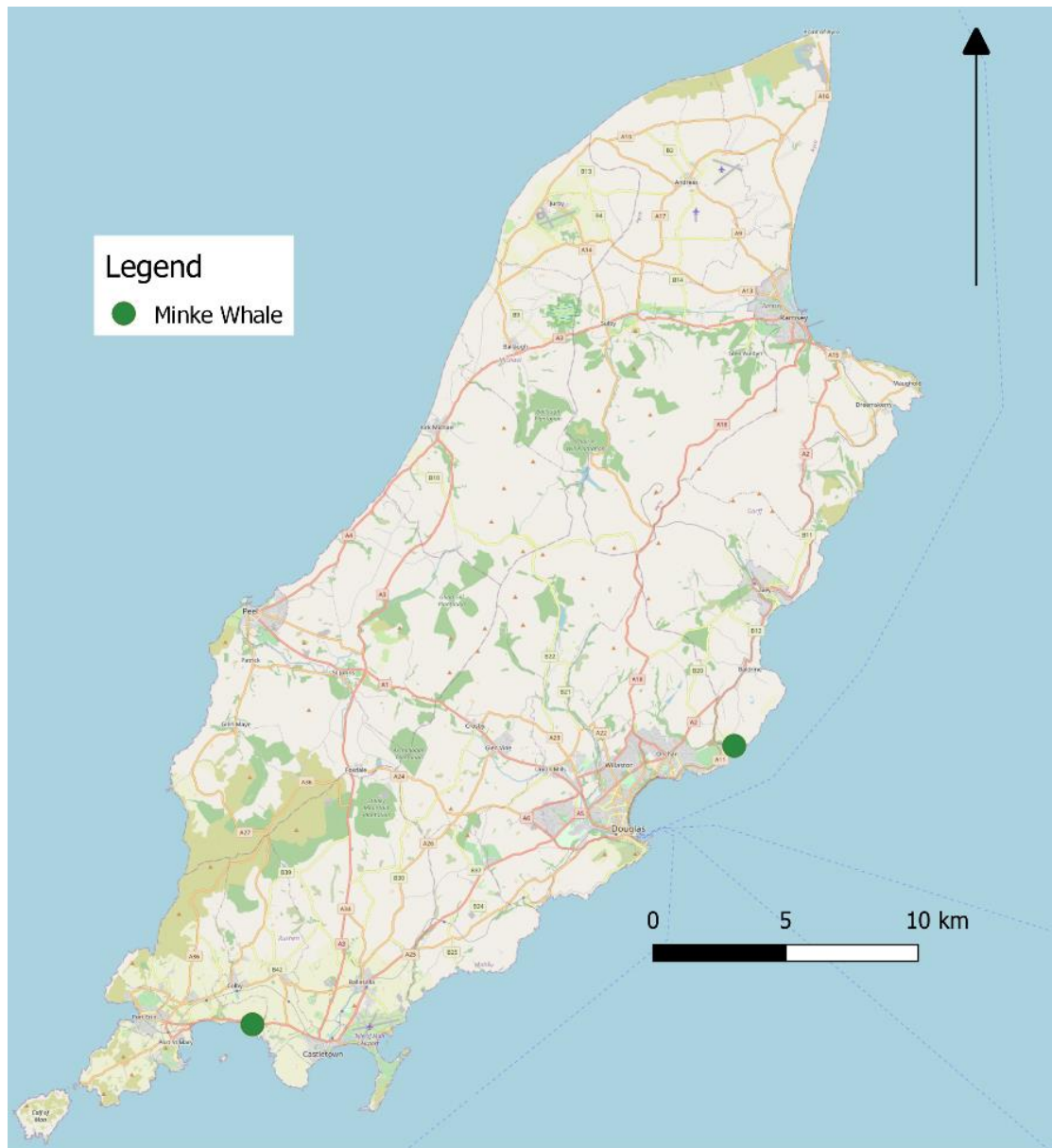


Figure 8 – Minke Whale Strandings reported around the Isle of Man in 2019 (N=2).

Common Dolphin

2 dolphin strandings occurred during 2019 (Figure 9). One was a juvenile male and the other was an adult male. Both carcasses were found fresh with no obvious signs of trauma. The carcasses were located on the beaches in Laxey and Douglas. The locations of which are depicted in Figure 9.



Figure 9 – Common dolphin strandings reported around Isle of Man in 2019 (n= 2).

Unknown Cetaceans

2 strandings of unknown cetaceans occurred in 2019 (Figure 10). One individual was found up north in between Blue Point and Rue Point and there were no obvious signs of trauma. The second individual was reported to be in the Glen Mooar area and was attended by Mike Prior on the 16/8/2019 however the carcass could not be located.

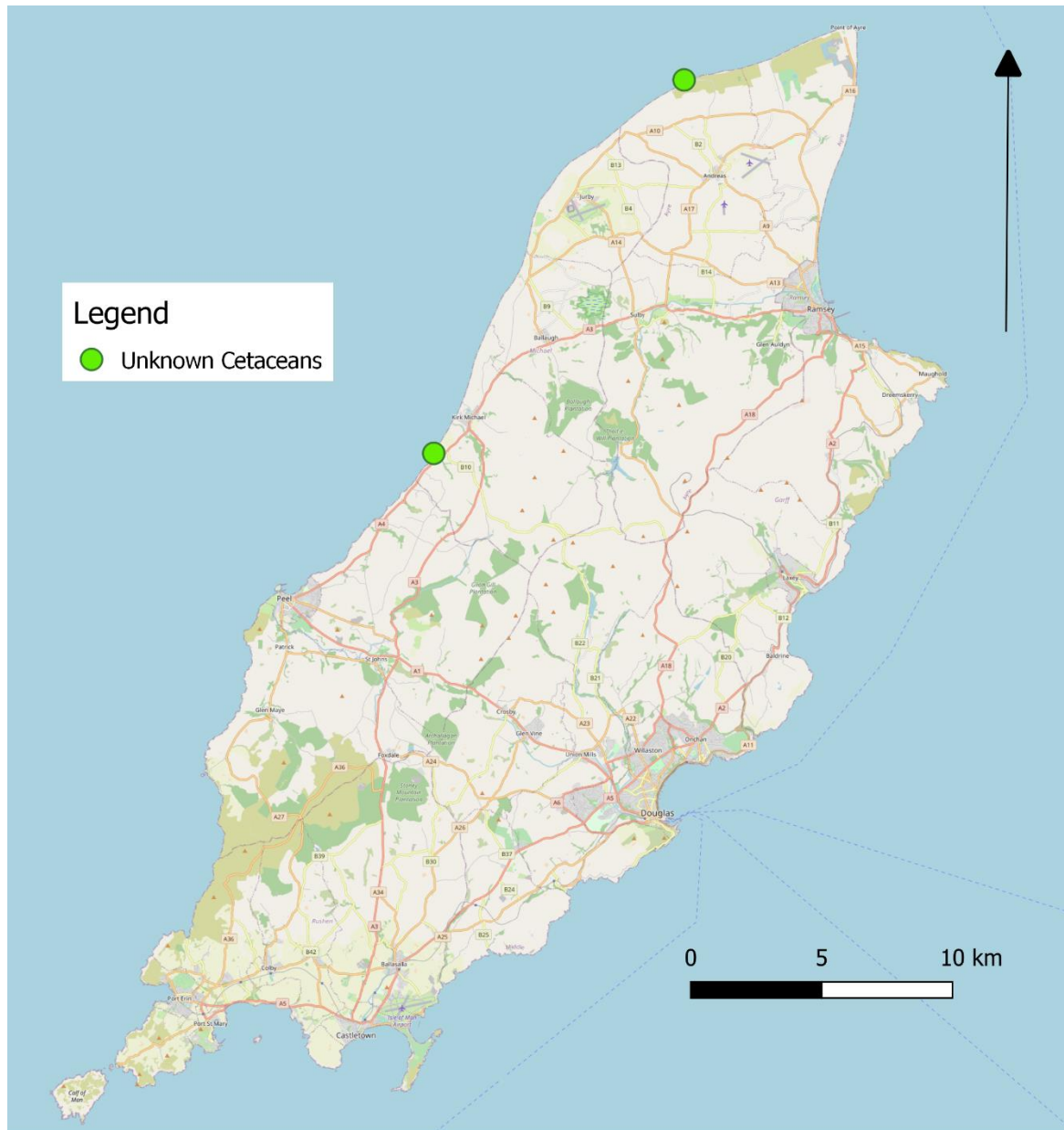


Figure 10 – Unknown Cetacean strandings reported around the island in 2019 (N=2).

Unknown shark/unknown species

In 2019, one individual of unknown shark/unknown species was reported. It was reported to be floating in the water at Spaldrick in Port Erin, but it could not be located. The estimated location of which is shown in Figure 11.

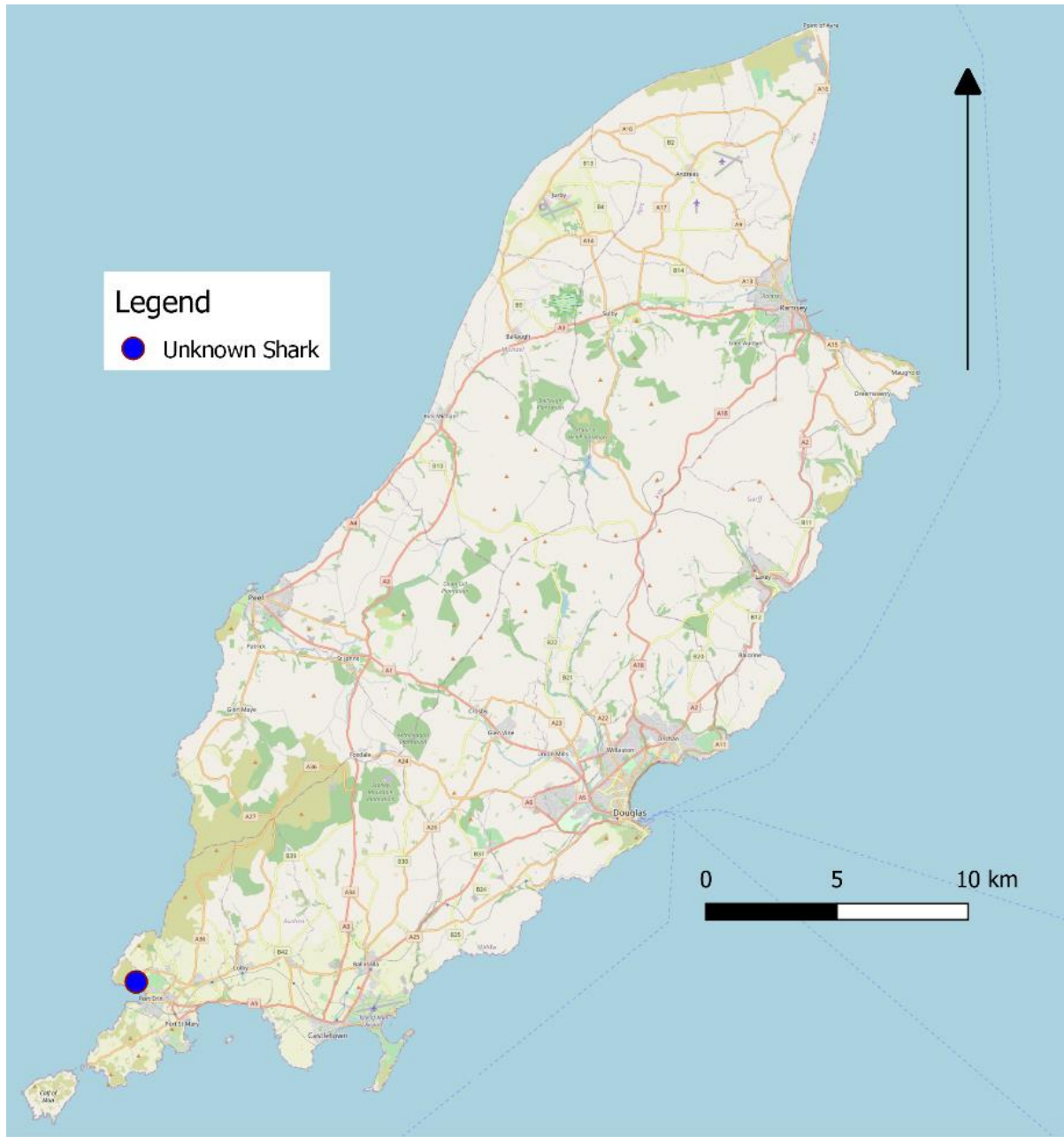


Figure 11 - Unknown Shark Strandings reported around the Isle of Man in 2019 (N=1).

Conclusions

This year, the total number of strandings has remained relatively high (N= 48), when compared to all previous years (2018 (N= 51), 2017 (N= 48), 2016 (N= 42), 2015 (N= 16, 2014(N= 27) and 2013 (N=13). It is possible that the increase after 2015 may be somewhat a result of increased public awareness and thus a greater proportion of strandings being reported. It is perhaps expected that the majority of strandings were either grey seal or harbour porpoise as these are the most common species of pinniped and cetacean, respectively, occurring in Manx waters.

The majority of strandings occurred during January/February/March and October/November/December. Adverse weather conditions typically occur during these cooler, winter months and thus it is possible that greater wind/wave action during these temporal periods resulted in a greater number of carcasses washing ashore. Furthermore, autumn coincides with grey seal pupping season. Pups are unable to swim well and thus if they get washed off land, they are unable to re-position themselves on haul-out sites and can drown.

There were no substantial, abnormal signs of trauma/injury that are thought to extend beyond the level expected for washed-up marine megafaunal carcasses. However, necropsies were not conducted on all individuals due to state of decomposition and thus cause of death was not determined in all cases.

The CSIP 2019 Annual Report has not yet been published and therefore comparisons between Isle of Man strandings data and the wider UK results cannot be made at this time.

References

- Bruce, J.R., Colman, J.S. & Jones, N.S. (1963) The marine fauna of the Isle of Man. LMBC Memoir 36. Liverpool University Press.
- Stone, E., Gell, F.G. & Hanley, L. (2013). Marine Mammals – Seals. In Hanley et al., (eds.), Manx Marine Environmental Assessment. Isle of Man Marine Plan. Isle of Man Government, pp. 19. Available at: https://www.gov.im/media/983589/3.4b_seals.pdf.

Appendices

Appendix 1: Stranding volunteer equipment list.

MWT Marine Strandings Network Marine Strandings Equipment List	
Item	
Tape measure	
Waterproof kit bag	
Waterproof, washable trousers and jacket	
Warm clothing	
Suitable footwear	
Disposable gloves and disposable bag to put used gloves in	
Surgical mask	
Bactericidal wipes for tape measures etc.	
First aid kit (in car or taken on site if working more than 1km from vehicle)	
Map	
Tide times	
Mobile phone - charged up (check network coverage)	
Whistle and/or alarm if working alone	
Digital camera of mobile phone with camera of 6 megapixels or higher	
Risk assessment form	
Recording forms	
Change of clothes	
Clear plastic bag/clipboard/pencil/pen	

Appendix 2: Seal stranding recording form, used by volunteers when attending a seal stranding.

Seal Stranding Recording Form			
Please remember your own health and safety is paramount: watch for the tide, always wear gloves and do not lift heavy weights.			
Reported by:		Recorded by:	
Telephone:		Telephone:	
Date/Time:		Date recorded:	
Location:		Grid ref:	
Alive when stranded?		yes	no
Species (see id notes below):		grey	common harp hooded
Sex (male, female or unknown):		male	female unknown
Age (adult, juvenile, pup or unknown):		adult	juvenile pup unknown
Is carcass complete (head, tail, all flippers present):		yes	no
Carcass condition (e.g. fresh, decomposed or advanced decomposition):		fresh	decomp adv decomp
Obvious traumas other than scavenging (e.g. gunshot, net marks, etc.):			
Identifiable markings (scars, patterns on coat, missing claws, digits, etc.):			
Flipper tags, or hole between digits where tag may have been (if so please note which flipper, tag colour and any number or address):			
Hat tags (colour and number):			
Body Measurements: (cm)			
1. Head – hind flipper. Tip of the nose to the end of the hind flippers.			
2. Head – tail. Tip of the nose to the end of the tail.			
3. Girth. Taken beneath the flipper pits around the body.			
4. Head. Tip of the nose to the back of the head.			
5. Partial digit. Measured on the leading digit from the joint below the claw to the knuckle.			
<p>Photos: If possible please take photos (digital are ideal) of the whole body and also close-ups of the left and right hand side of the head. If there are any unusual traumas such as gunshot, net marks, missing head, etc., please photograph those too.</p> <p>Seal Species Identification: There are two resident species of seal in the UK, the common seal and almost exclusively encountered around the Cornish coast, the grey seal. It is the head shape and its characteristics that offer most easily recognisable features:</p> <p>The common seal has a small head with rounded crown and a blunt nose which is sloping forming a concave bridge between the forehead and nose. The nostrils form a V shape, joining at the base.</p> <p>The grey seal has a large head with flattened crown and a straight long roman nose which offers a straight or convex profile. The nostrils are parallel and do not meet.</p> <p>Occasionally other species such as harp or hooded seals visit our waters. For identification of these and other species use a reliable reference book or id chart.</p>			
Please return this form and your photos to:			
Strandings Records Coordinator, c/o Cornwall Wildlife Trust, Five Acres, Allet, Truro TR4 9DJ Email: records@cwstrandings.org Website: www.cwstrandings.org			
CORNWALL WILDLIFE TRUST WORKING IN ASSOCIATION WITH C-SMOG, THE NATIONAL SEAL SANCTUARY AND THE GODREVY SEAL GROUP			

Appendix 3: Stranded whales/dolphins/porpoise recording form, used by volunteers when attending cetacean strandings.

This form should be filled in and posted, immediately after telephoning or sending a fax, to:

Department of Zoology,
The Natural History Museum,
Cromwell Road, London SW7 5BD
Tel: 0207 942 5155 Fax: 020 7942 5054



Stranded Whales, Dolphins and Porpoises

Note: Rubber gloves should be worn when handling cetaceans, alive or dead.

Place and date where carcass first seen
The position of a locality not likely to be given on an OS map should be indicated by its relation to some better known place, bay or headland.

Place Date

County Grid ref.

Name of Finder

Is the tail horizontal? If the answer to this question is 'No', it is not necessary to fill up the rest of this form as the animal is therefore not a whale, dolphin or porpoise.

Yes No

Is there a hole ('blowhole') on the top of the head? Yes No

Is it a single hole or a pair of holes? Single Pair

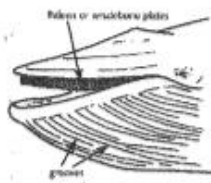
Does the mouth contain teeth/tooth sockets or baleen/whalebone plates? Teeth Baleen

If neither teeth nor baleen can be found, state whether the two halves of the lower jaw are:

(a) Arched outwards and widely separated half way back
(In which case the specimen is a Whalebone Whale, and the baleen has been washed out): (a)

(b) Close together in front, where the jaw is accordingly narrow
(A Toothed Whale in which the teeth are concealed beneath the gum). (b)

Whalebone Whales if baleen present, state:



(a) **The colour of the baleen plates.**
If not everywhere alike indicate the arrangement; e.g. 'white for ...cm at front end of right side, the rest as stated'

(b) **The colour of the hairy fringes of the plates**

Grooves is the throat marked by numerous deep grooves? Yes No

Grooves is the throat marked by a pair of grooves? Yes No

Toothed Whales if teeth are present, state:

(a) Whether they occur in both jaws or in the lower jaw only. Both Lower

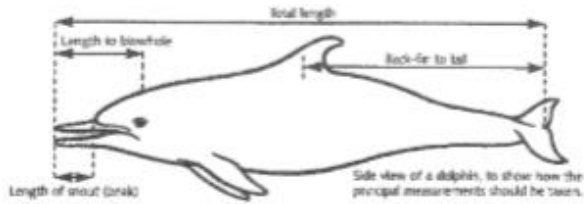
(b) The number of teeth and empty sockets of one side of the upper jaw. Teeth Empty sockets

(c) The number of teeth and empty sockets of one side of the lower jaw. Teeth Empty sockets

(d) If only few teeth & sockets present, their position in the jaw. Front Middle Back

(e) The diameter of one of the largest teeth. Diameter

(f) Whether teeth spade-shaped or conical/needle-shaped. Spade-shaped Needle-shaped



Total length of the animal measured in a straight line (preferably in metric units)

Length from the tip of the snout to the blowhole.

Length from the middle of the base of the back-fin to the middle of the tail

Length of one of the two flippers.

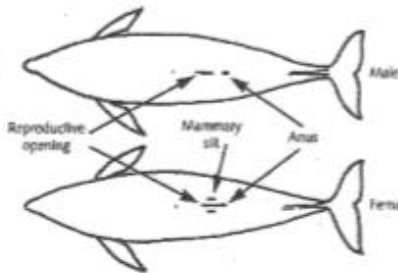
Length, in the middle line, of the snout or beak if present

Vertical height of the back-fin if present.

Is the animal male or female? (In male, penis may be extruded. In female, mammary slits usually visible).

Male

Female



Shape of the head (for instance, 'beak absent' or 'beak six inches long, forehead much swollen').

Length of gap between Reproductive opening and The anus.

 cm

Colour of the skin, calling attention to the position of any white parts or stripes observed.

Please fill in diagram at top of page.

Condition of the animal when first seen:

Live

Dead

Fresh

Uncertain

Decomposed

Comments on condition (e.g. smelly, leaking body fluids, bones visible, penis extruded, small cuts, big wounds).

Is it lying in such a position that it could be secured for the Museum if wanted, either entire, or its head, flippers or complete skeleton?

Additional Comments (if tangled in netting, please keep a sample).

Name and address (please print).

Tel. nos

Fax. nos

Appendix 4 – Basking shark stranding recording form, used by volunteers when attending a basking shark stranding.

Basking Shark Stranding Recording Form

Reported by: Telephone: Address:	Recorded by: Telephone: Date recorded:
Date first seen: Time first seen: Alive when stranded? <input type="checkbox"/> YES <input type="checkbox"/> NO	Location: Grid ref:
<p><i>Look for the gill rakers in the mouth looking through to the gill area—they will appear as black combs between the arches:</i></p> <p><i>Take muscle sample here*</i></p> <p><i>Presence/absence of paired claspers on pelvic fins Claspers=white tubular organs protruding from pelvic fins</i></p>	
Total length: m	Claspers present? <input type="checkbox"/> YES (male) <input type="checkbox"/> NO (female)
Snout to 1 st dorsal length: cm	Gill rakers present? <input type="checkbox"/> YES <input type="checkbox"/> NO
1 st dorsal to caudal: cm	Food in back of throat (orange paste)? <input type="checkbox"/> YES <input type="checkbox"/> NO
Snout to 1 st gill slit: cm	Tissue samples taken (*where requested):
1 st dorsal height: cm	Muscle for genetic analysis? <input type="checkbox"/> YES <input type="checkbox"/> NO
Pectoral length: cm	Fin sample? <input type="checkbox"/> YES <input type="checkbox"/> NO
Girth (half way around x2): cm	Skin sample? <input type="checkbox"/> YES <input type="checkbox"/> NO
Caudal height: cm	Photos taken? <input type="checkbox"/> YES <input type="checkbox"/> NO
Natural scars/markings (take photos if possible):	By-catch evidence (take photos if possible):

Please return this form and your photos to:

Strandings Co-ordinator, Cornwall Wildlife Trust, Five Acres, Allet, Truro TR4 9DJ
 Email: coordinator@cwststrandings.org Website: www.cwststrandings.org



CORNWALL WILDLIFE TRUST IN ASSOCIATION WITH THE MARINE BIOLOGICAL ASSOCIATION

