



Protecting *Manx Wildlife*
for the future

Dead marine megafauna strandings annual report 2018



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Introduction

Since 2013, the Manx Wildlife Trust have collated information regarding dead marine megafauna strandings on behalf of the Isle of Man Department of Environment, Food and Agriculture (DEFA). This report summarises the annual findings from 2018. The Isle of Man's cetacean data also feeds into the CSIP-UK final report for the year of 2018.

Training

During 2018, ten volunteers were trained to attend marine mammal strandings and were added to the database. Eight were initially trained in January whilst two others were trained later in the year.

Methodology

Any dead marine megafauna observed on the Isle of Man are reported to Dr Lara Howe (current Marine officer) via phone, email or social media. Details obtained from the reporter including location and other important information are then passed onto a trained volunteer who will go out and attend the stranding. As of 2018, there are 56 trained volunteers who each possess 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 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 51 stranded individuals recorded around the Isle of Man (Figure 1/Figure2). Of these, 36 were Pinnipeds (18 grey seals, *Halichoerus grypus*, 2 Common Seals, *Phoca vitulina*, and 16 individuals for which species was unknown), 1 Otter (most likely *Lutra lutra*) and the other 14 individuals were Cetaceans (11 Harbour porpoises, *Phocoena phocoena*, 1 unknown dolphin species and 2 unknown Cetaceans) (Figure 3).

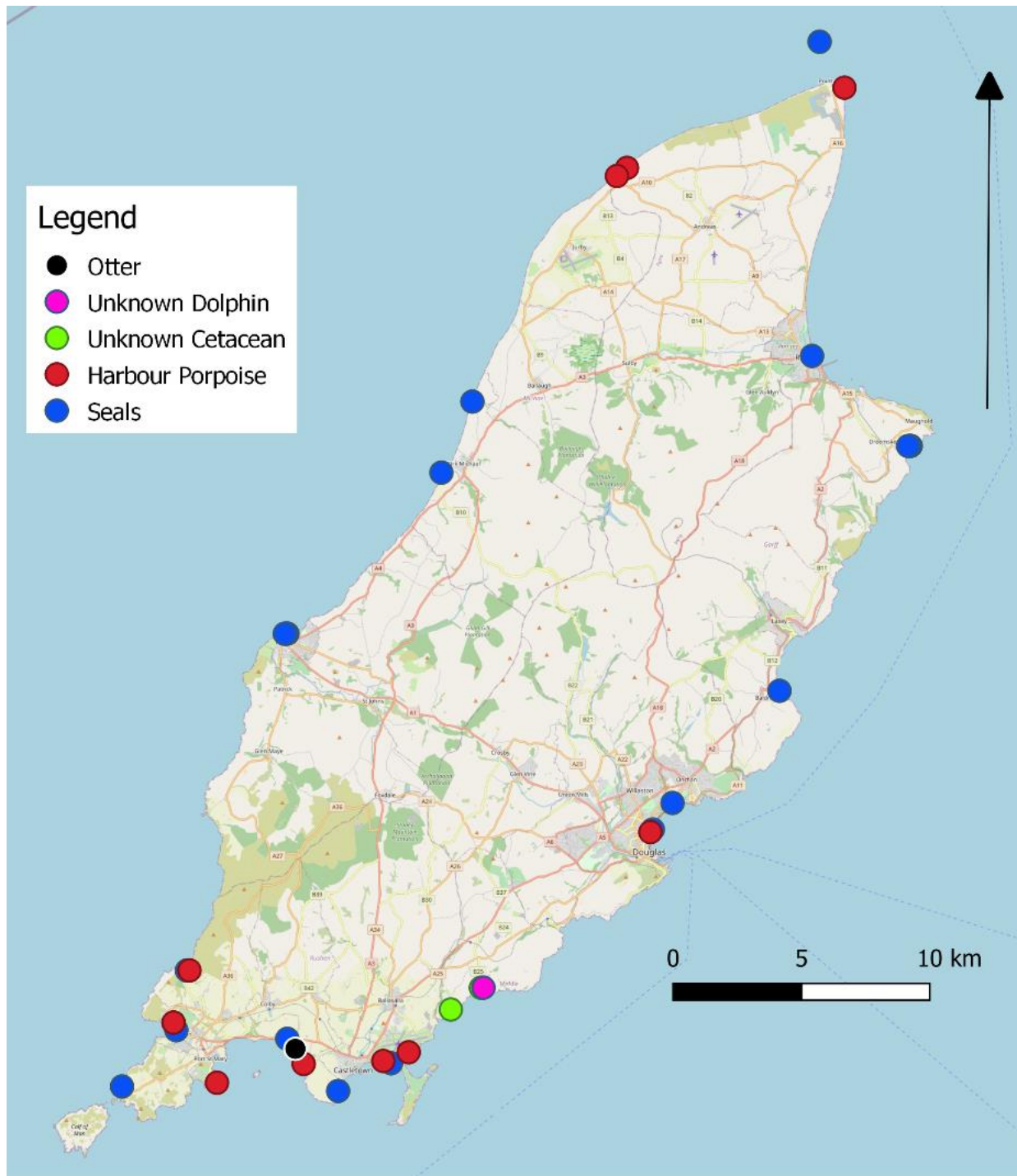


Figure 1 - Strandings recorded around Isle of Man in 2018 (n=45). An additional 5 seals and one Harbour Porpoises GPS coordinates describing location were not found. Consequently, these individuals have been omitted from Figure 1.

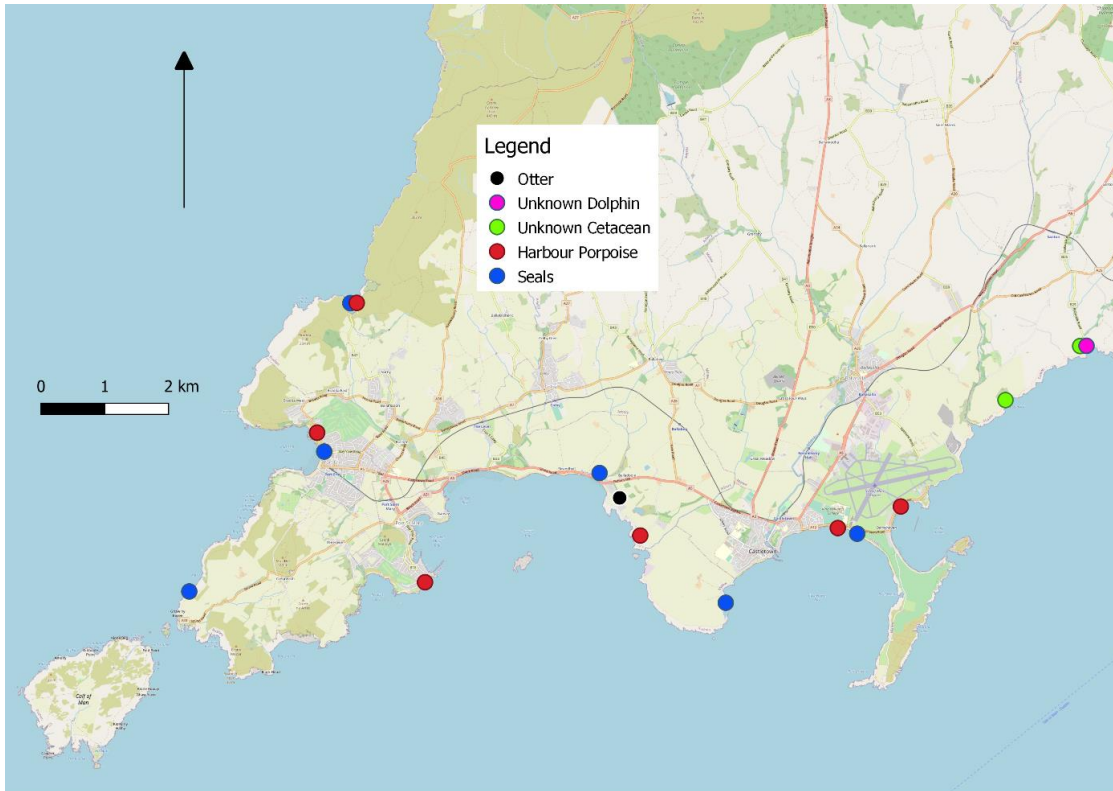


Figure 2 – Closer view of south of the Isle of Man depicting strandings in this area during 2018.

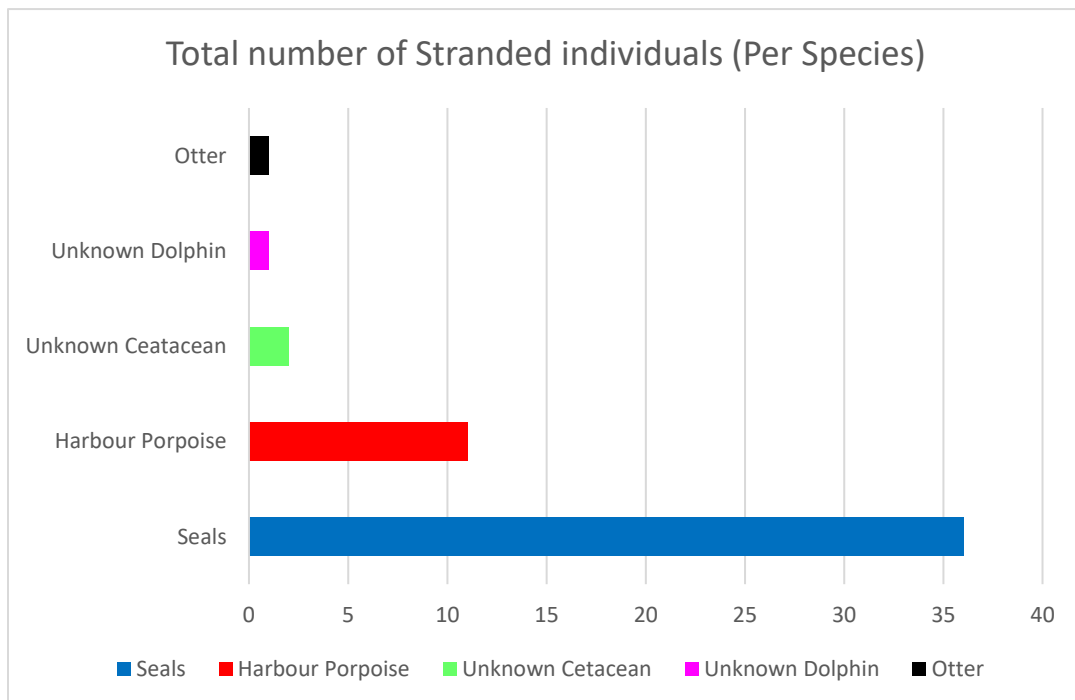


Figure 3 - Total number of stranded individuals (N= 51) (per species) recorded around Isle of Man in 2018.

Figure 4 depicts the pattern of strandings reported per month. Overall, the number of reported seal strandings was relatively low during the summer months (June-August) and no cetacean strandings were reported in April or September. February had the greatest number of strandings, when considering both seals (n= 6) and cetaceans (n=3). June was the only month in which no seal strandings were reported, however 2 harbour porpoise were reported. Overall, 64.7% of strandings occurred in the winter months (January to March and October to December).

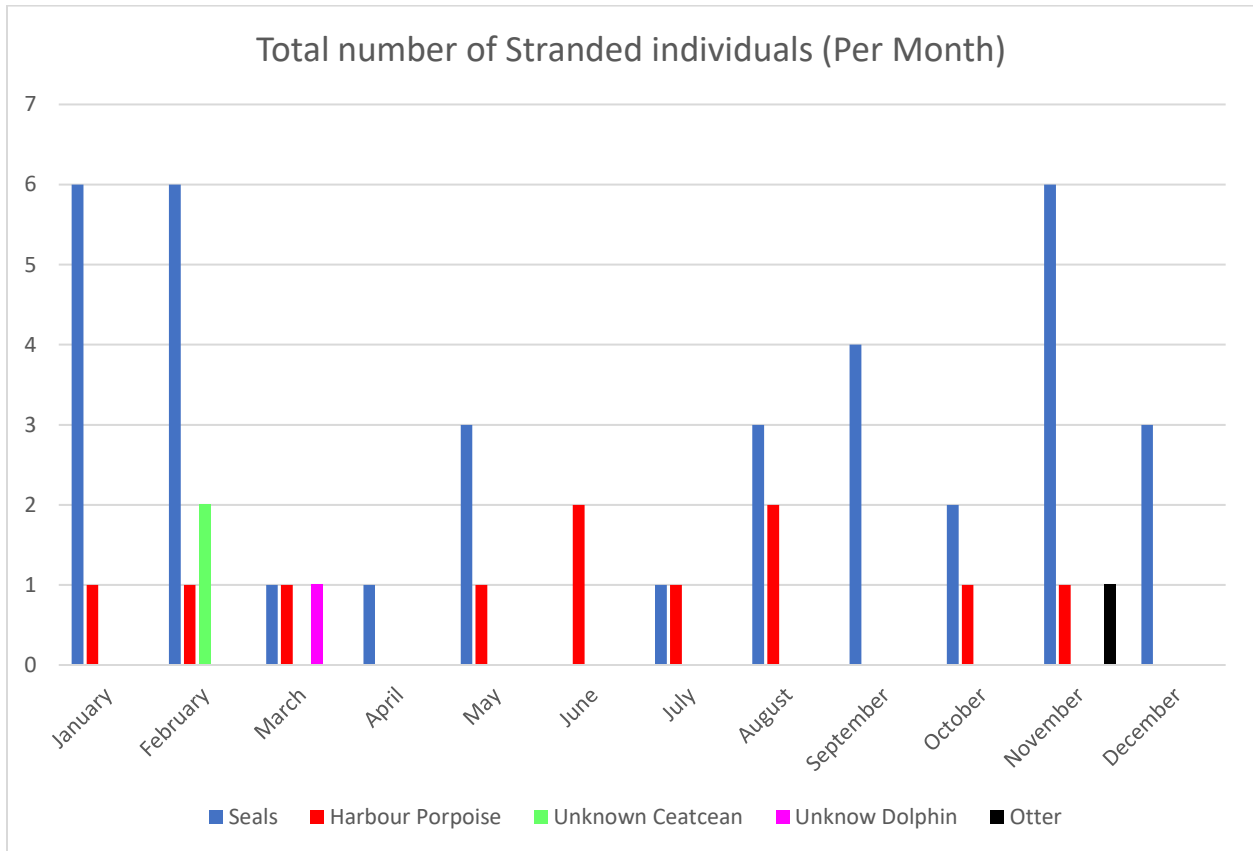


Figure 4 – Number of strandings reported per month around Isle of Man in 2018.

Seals

In total, 15 grey seals and 2 common seals were found and recorded. A further 4 individuals were found and recorded however the species could not be confirmed as they were too decomposed to tell and was reported as unknown. 3 'likely' Grey seal carcasses and 12 unknown seal carcasses were not found by volunteers, so no details were recorded. 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*

hispidus, 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 (4 unknown species, 2 common seals and 15 grey seals) that were successfully located by volunteers. When considering the distribution of seal strandings, the greatest proportion were observed around the south of the island, in the Port Erin/Castletown area (n= 10). Overall, strandings appear to be relatively evenly distributed (Figure 5).

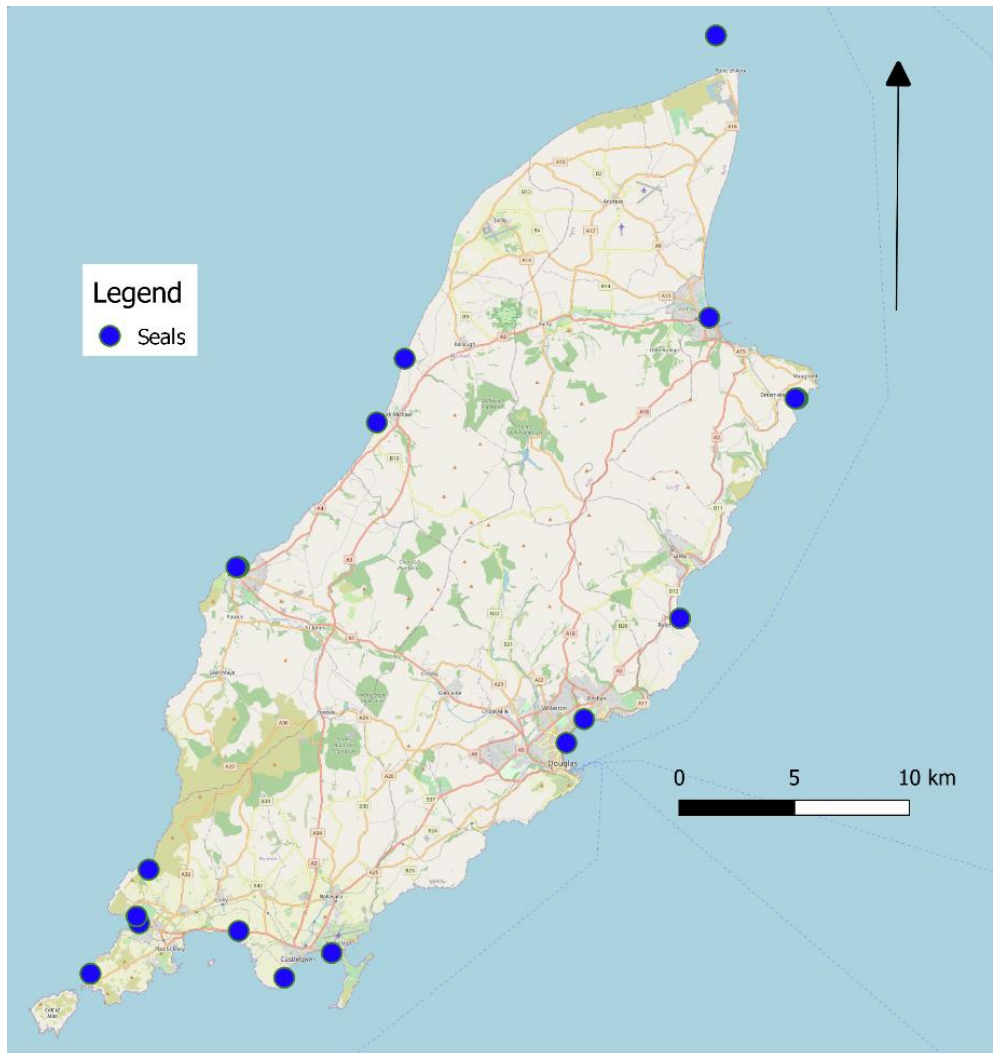


Figure 5 - Seal strandings reported around Isle of Man in 2018 (n= 36). In total, 21 of the 36 seals reported were found by volunteers and thus GPS coordinates were obtained. The remaining 15 individuals were not located and therefore these individuals have been omitted from Figure 5.

12 of the individuals which were recorded to have undergone some sort of decomposition (54.55%) and of these, 7 had undergone advanced decomposition. 10 individuals were recorded as being fresh carcasses (45.45%)

3 individuals had missing body parts. The whole head was missing on one individual, another was missing half of its face and one was missing its claw. 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 and juveniles (33.3%) with pups not far behind (29.166%) (based on size and physical appearance) however, developmental stage was only determined for one pup (obvious stage 1 as umbilical still attached). Sex was unknown for almost all grey seals recorded, with the exception of 6 individuals of which 5 were determined to be male whilst one was female.

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

Adult (%)	Juvenile (%)	Pup (%)	Unknown (%)
33.33	33.33	29.166	4.166

Harbour Porpoise

In total, 11 Harbour porpoise strandings occurred in 2018. All the carcasses were found, and details, measurements and photos taken.

Harbour Porpoise Strandings seem to be concentrated in the south of the Island in 2018 (figure 6) (N=7) in contrary to 2017 where no harbour porpoise strandings occurred in the south.

64.3% (n=9) showed some degree of decomposition and 35.7% (n=5) were found fresh. 7 individuals were able to be sexed. Of these, 5 were determined to be male and 2 were female. One was concluded to be 'likely male'. One individual was confirmed to be a baby however, the others' ages could not be determined. The majority of individuals displayed signs of external damage, albeit minor. Many had holes or scratches but we cannot be certain whether these had anything to do with the deaths but are most likely to have been from scavenging or 'wear and tear'.

The baby was stranded alive and showed signs that it had lost its mother as it was very skinny and obviously had not been fed in a long time. It unfortunately died shortly after.

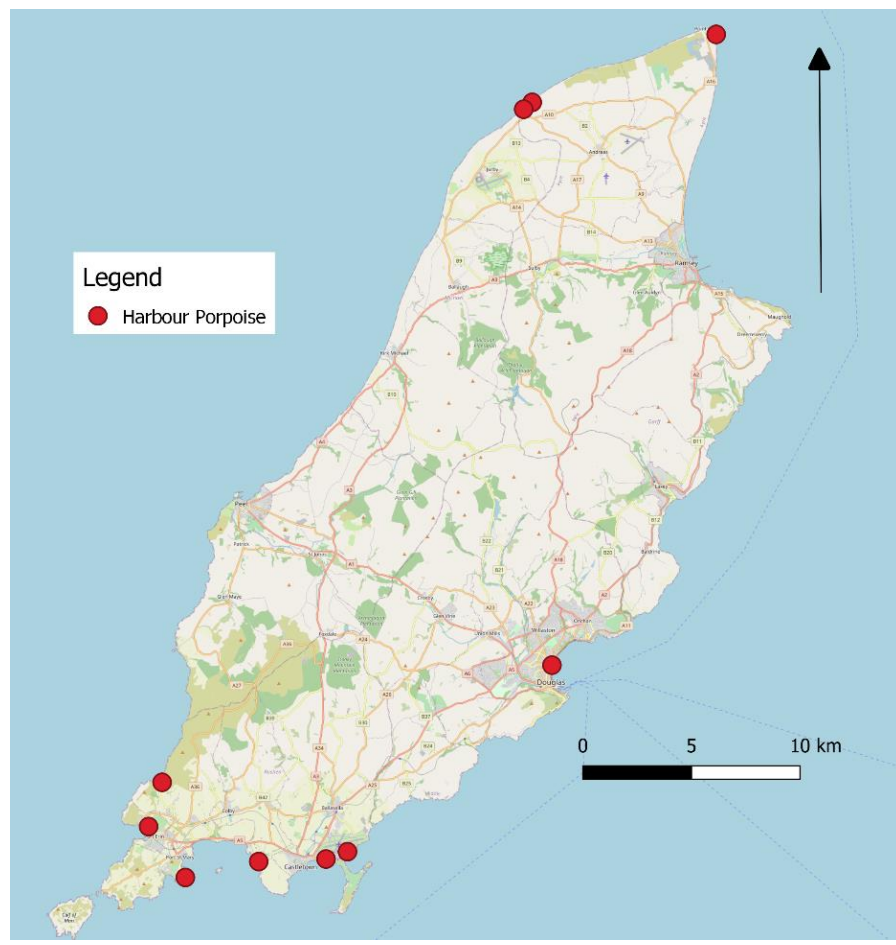


Figure 6 – Harbour Porpoise strandings reported around the Isle of Man in 2018 (N=11).

Unknown Cetacean

2 individuals were reported but not found (Figure 7). The species could not be identified as no photos were provided either. These strandings both occurred in Port Grenaugh and were reported around the same time.

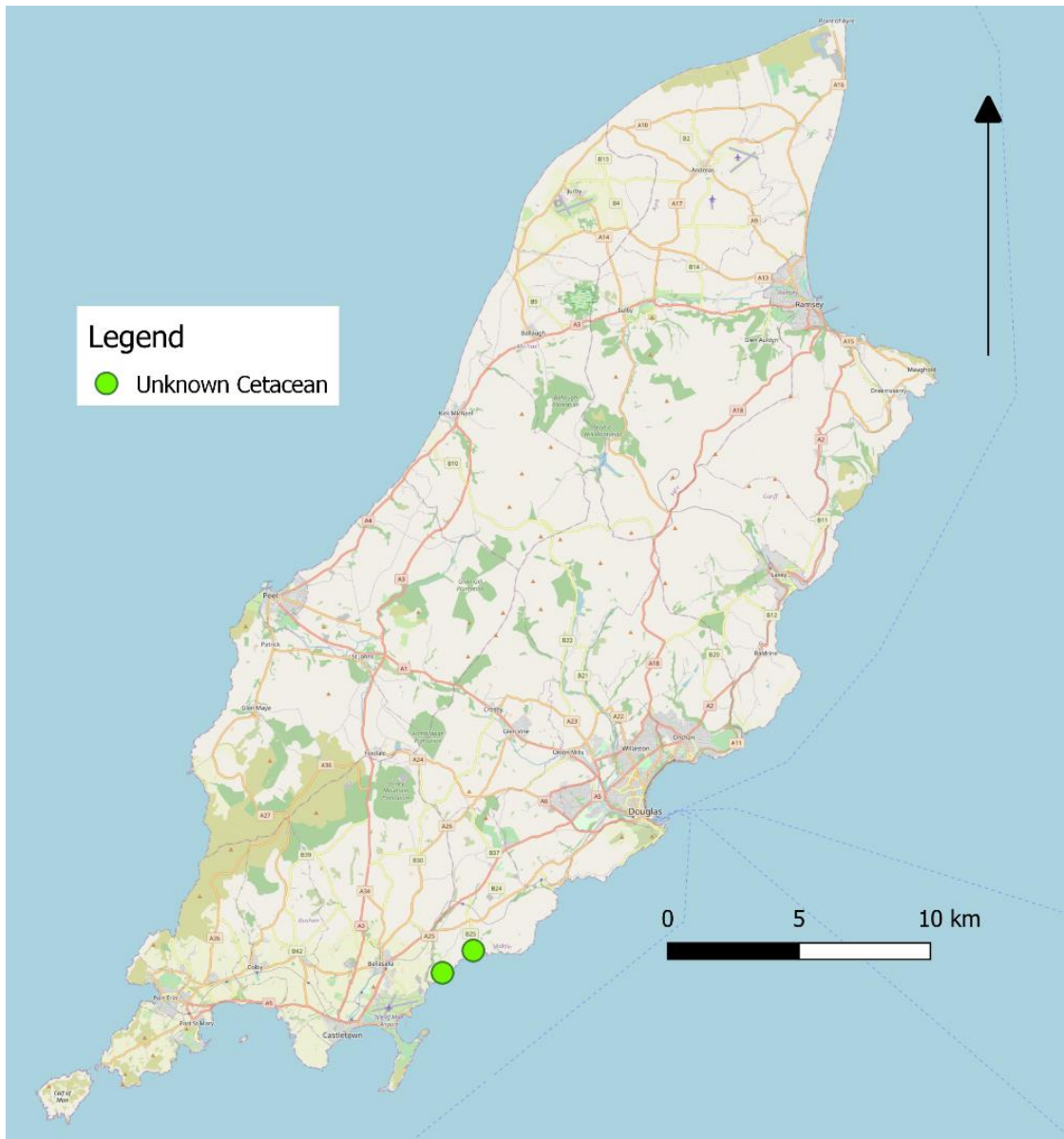


Figure 7 – Unknown Cetacean Strandings reported around the Isle of Man in 2018 (N=2).

Unknown Dolphin

Only one dolphin has been reported this year (Figure 8) as they very rarely wash up on beaches on the Isle of Man. The Carcass was located in Port Grenaugh. The body was decomposed and the top beak was missing however, it was concluded that it was most likely a juvenile bottlenose.

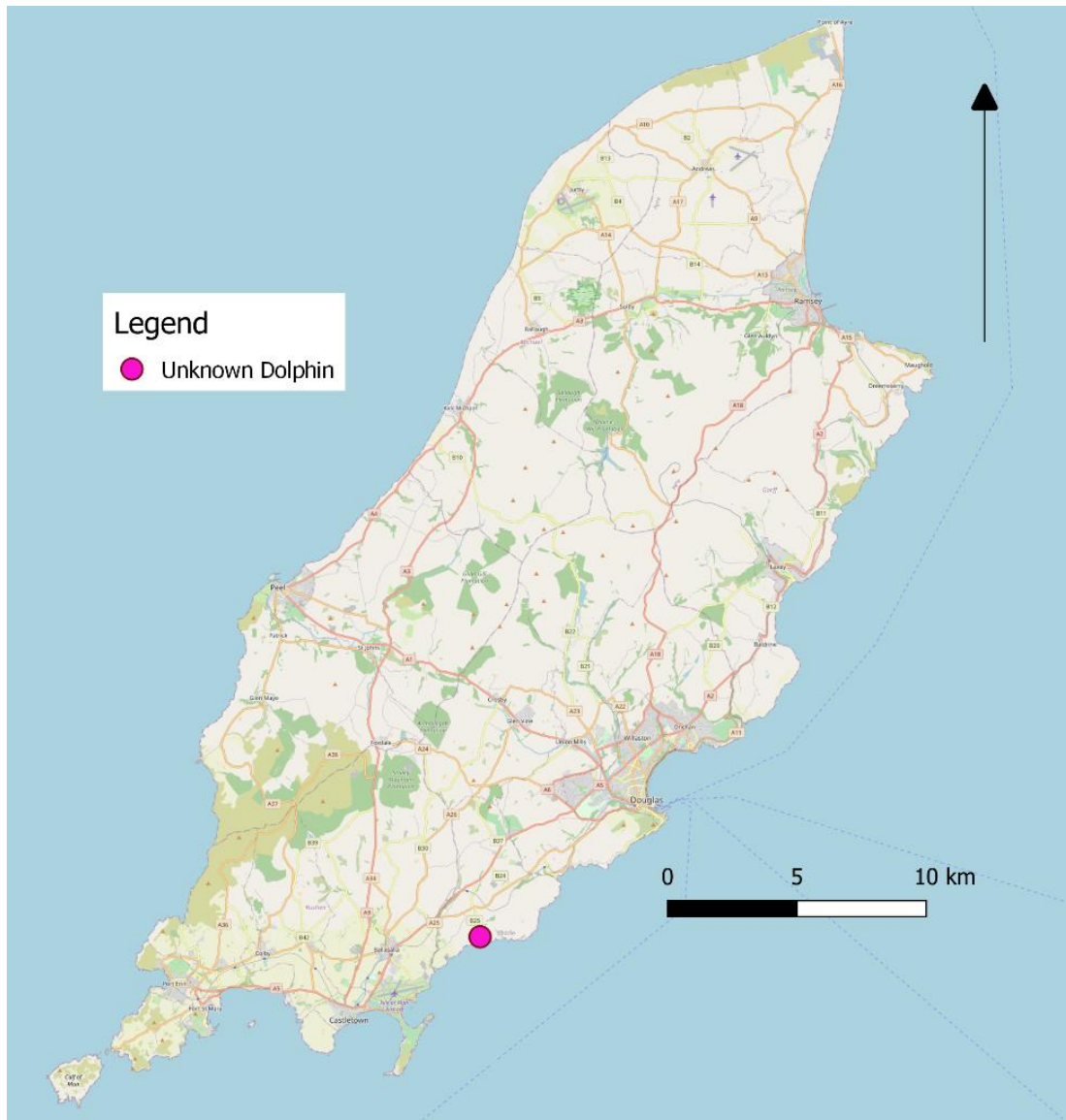


Figure 8 – Unknown Dolphin Strandings reported around the Isle of Man in 2018 (N=1).

Otter

One otter stranding was reported on the island in 2018 (Figure 9). Otter strandings are very rare on the island as this is only the second on record since MWT started to record strandings on DEFA's behalf since 2013. The Carcass was reportedly found in Poil Vaash and photos were sent in by Robin Gawne but could not be found by the volunteer.

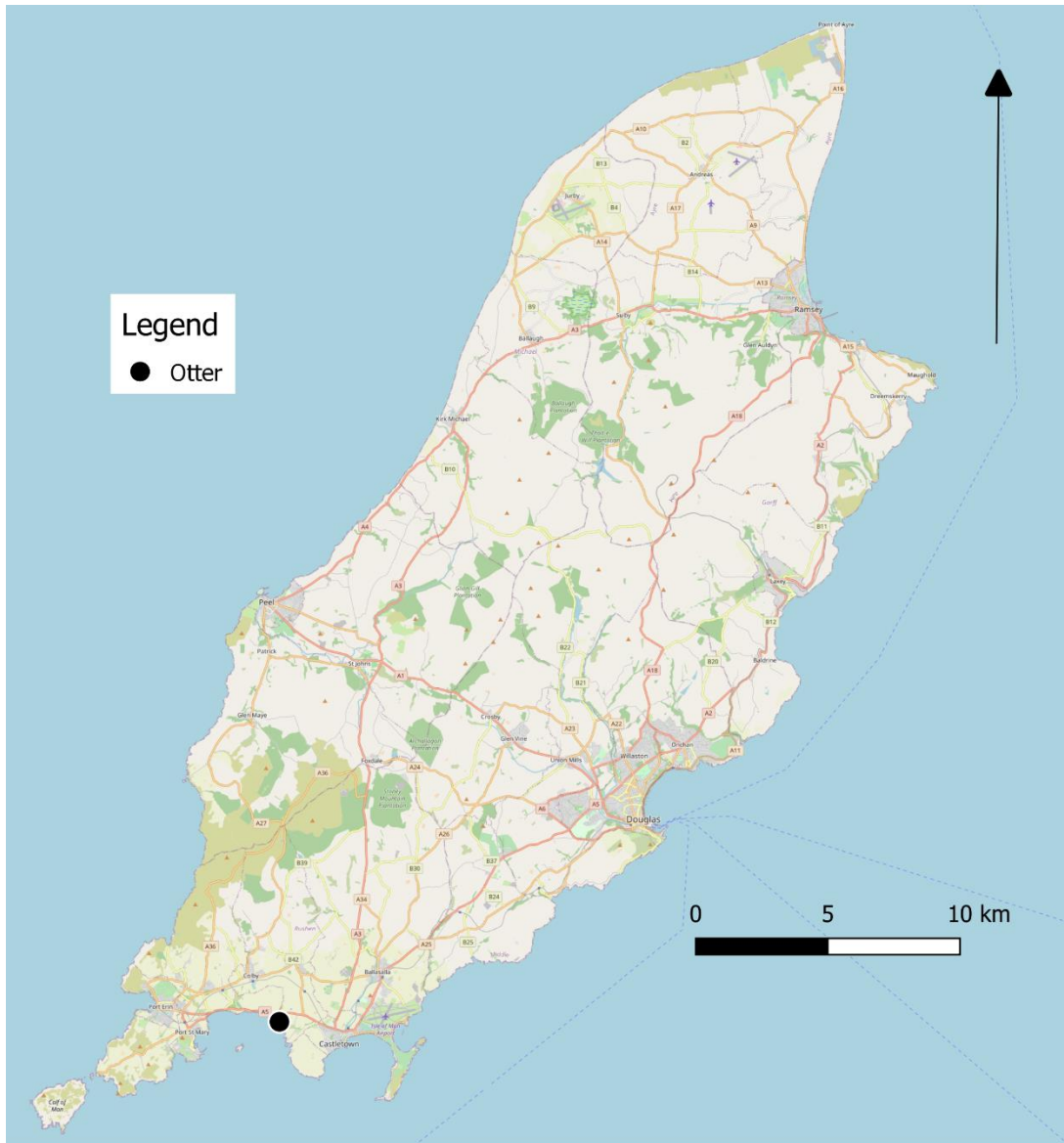


Figure 9 – Otter strandings reported on the Isle of Man in 2018 (N=1).

Conclusion

The total number of stranded individuals this year has been quite high (N=51), when compared to previous years (2017 (N=48), 2016(N=42), 2015 (N=16), 2014 (N=27) and 2013 (N=13)). It is possible that this increase 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.

Most strandings occurred during September-February. 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.

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 or 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@cwststrandings.org Website: www.cwststrandings.org	
CORNWALL WILDLIFE TRUST WORKING IN ASSOCIATION WITH C-SMOG, THE NATIONAL SEAL SANCTUARY AND THE GODFREY SEAL GROUP	

Appendix 3 – Stranded whales/dolphins/porpoises recording form, used by volunteers when attending a cetacean stranding.

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

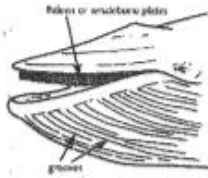
Does the mouth contain teeth/tooth sockets or baleen/whalebone plates? Teeth Baleen

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

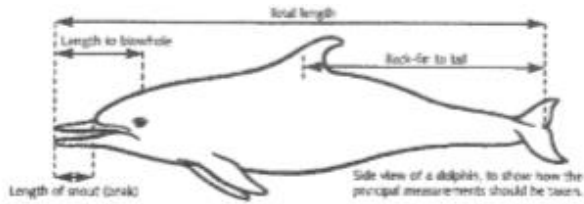
(b) The number of teeth and empty sockets of one side of the upper jaw. Teeth Empty sockets

(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

Length of gap between Reproductive opening and The anus. cm

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

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 style="text-align: center;"><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

