



Protecting *Manx Wildlife*  
for the future

## Dead marine megafauna strandings annual report 2017



Melissa Parsons – 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 2017. Cetacean data obtained is additionally utilised in the annual UK Cetacean Strandings Investigation Programme (CSIP-UK) report.

## **Training**

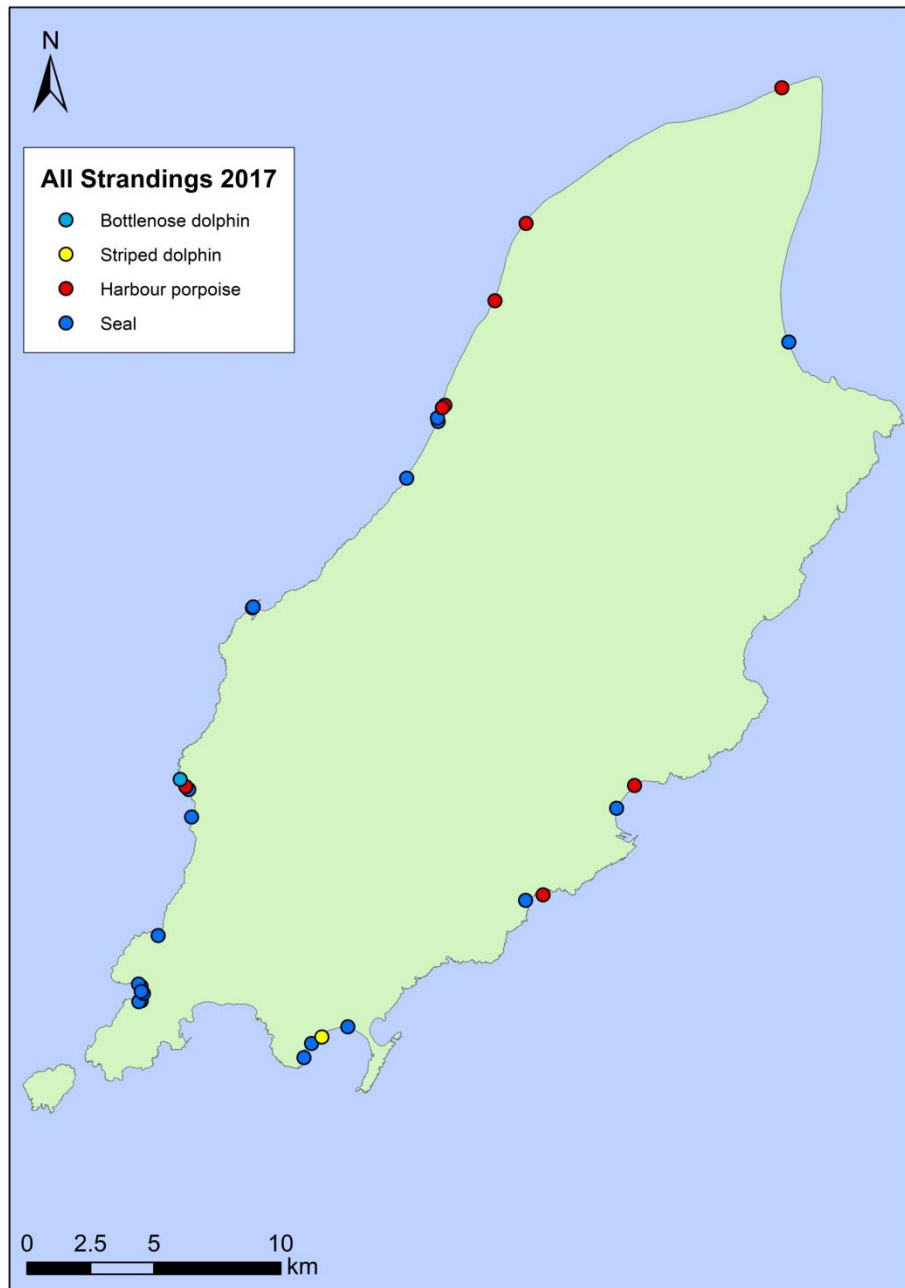
During 2017, 18 new volunteers were trained to attend marine mammal strandings and added to the volunteer database.

## **Methodology**

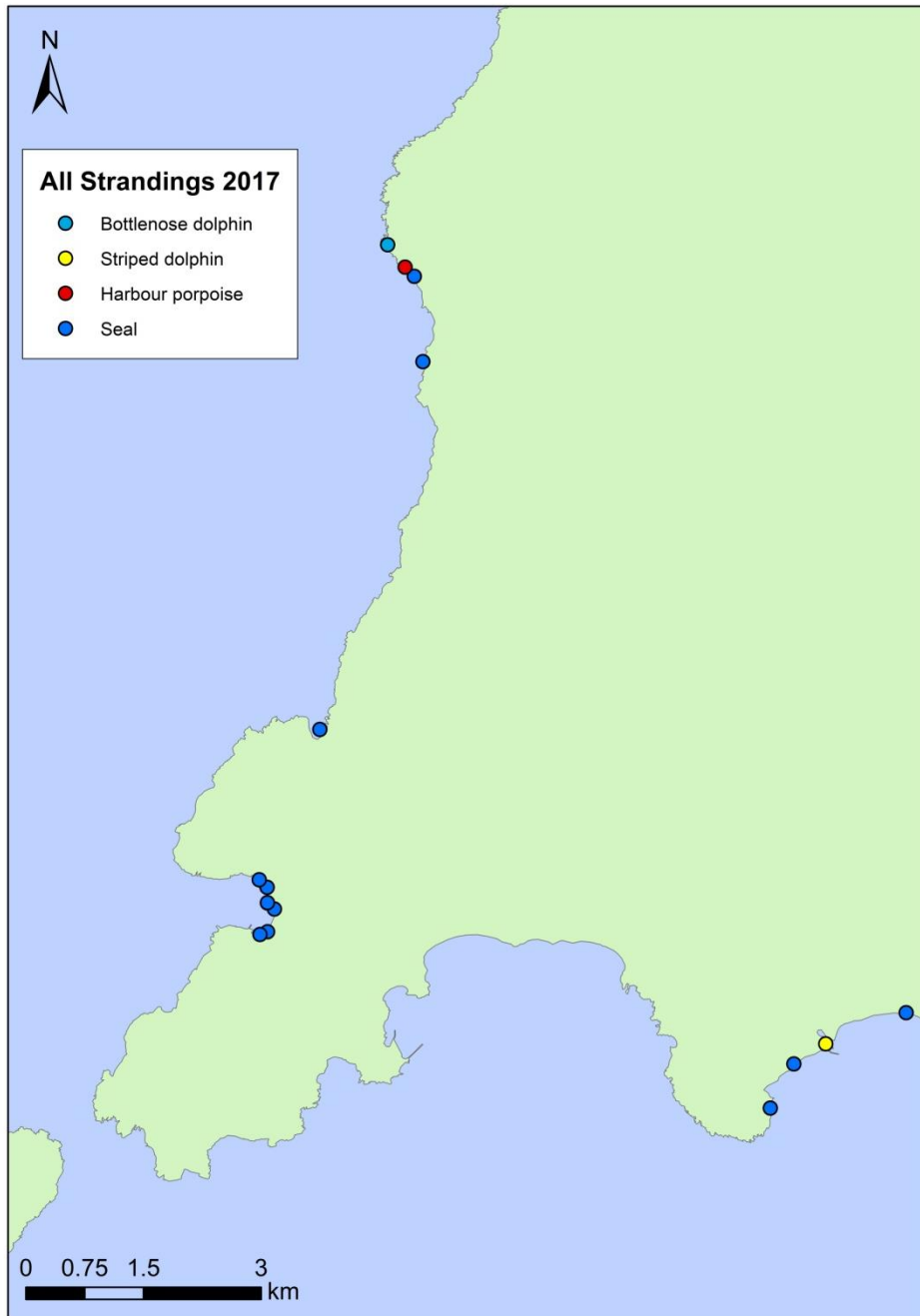
Dead marine megafauna strandings observed around the Isle of Man are reported to Dr Lara Howe (Marine Officer, Manx Wildlife Trust) via phone, email or social media. Details obtained from the reporter, including location and any other available information, are passed on to a trained volunteer who will attend the stranding. As of 2017 there are 47 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**

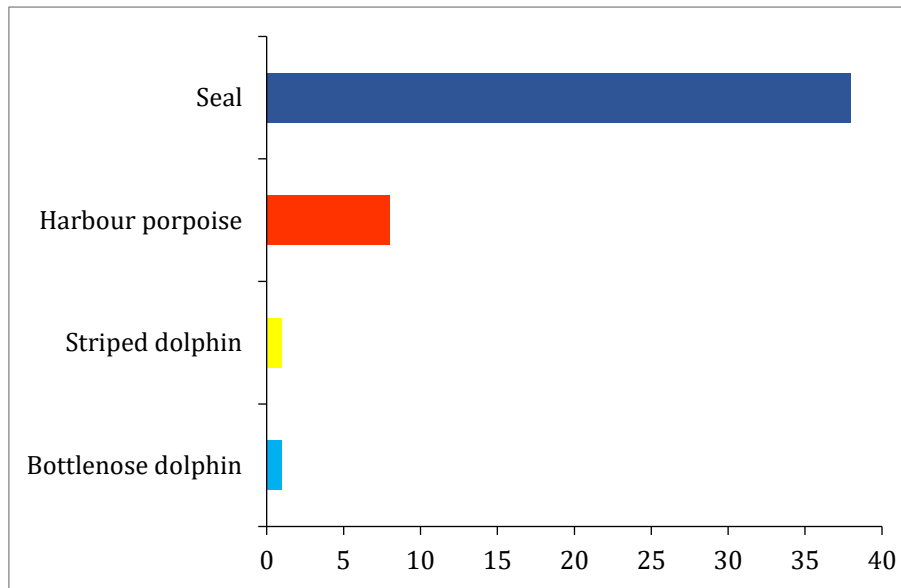
In total there were 48 stranded individuals recorded around the Isle of Man (Figure 1/Figure 2). Of these, 38 were pinnipeds (22 grey seals, *Halichoerus grypus*, and 16 individuals for which species was unknown). The other 10 individuals were cetaceans (8 harbour porpoise, *Phocoena phocoena*, 1 bottlenose dolphin, *Tursiops truncatus*, and 1 striped dolphin, *Stenella coeruleoalba*) (Figure 3).



**Figure 1** – Strandings reported around Isle of Man in 2017 (n= 37). An additional 11 seals were not located by volunteers and therefore GPS coordinates describing location were not obtained. Consequently, these individuals have been omitted from Figure 1.

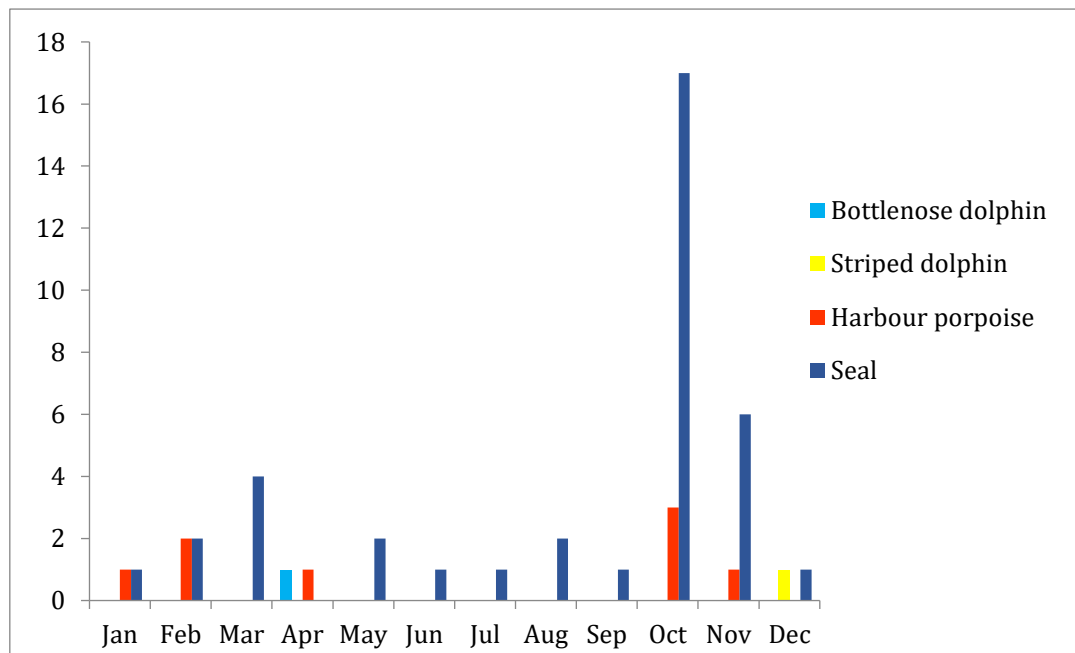


**Figure 2** – Closer view (1:62,500) of southwest Isle of Man, depicting strandings in this area during 2017.



**Figure 3** – Total number of stranded individuals (N= 48) (per species) recorded around Isle of Man in 2017.

Figure 4 depicts the pattern of strandings reported per month. Overall, the number of reported seal strandings was low during the summer months (June-September) and no cetacean strandings were reported between May and September. October had the greatest number of strandings, when considering both seals (n= 18) and cetaceans (n=3). April was the only month in which no seal strandings were reported, however one harbour porpoise and one bottlenose dolphin were reported. Overall 81.25% of strandings occurred in the winter months (January/February/March and October/November/December).



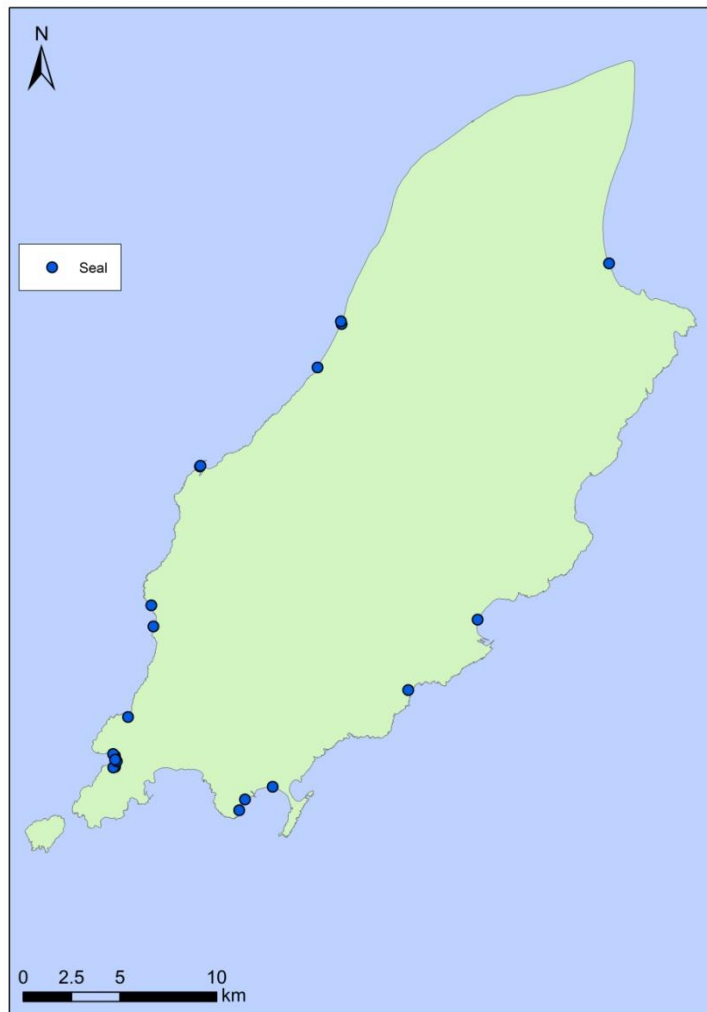
**Figure 4** – Number of strandings reported per month around Isle of Man in 2017.

### Seals

In total, 22 grey seals were recorded. A further five individuals were recorded as ‘likely’ to be grey seals. Of these, one individual was missing the head region and had undergone a degree of decomposition, thus making it difficult to identify to species level. The other four ‘likely’ grey seals were not found by volunteers and thus whilst reported as this species, it was not confirmed. There were also an additional 11 seal strandings for which species was reported as unknown. Of these, nine seals were not found by volunteers (and species was not detailed by the reporter), explaining why species was not known or confirmed. The other two unknown seals, which were found, had both undergone advanced decomposition and both were missing the head. As a result of this, these individuals 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).

After initial reporting, 14 seals were not found (9 unknown species, 4 ‘likely’ grey seals and 1 grey seal) and therefore further information could not be recorded. It is interesting to note that the unfound grey seal was sighted at Blue Point (10/10/2017) with a flipper tag (UK1513729) and subsequently reported, however despite the search effort of different volunteers on two separate occasions, it was not found again and therefore no further information was obtained.

The following results are based upon data from the 24 seals (2 unknown species, 1 'likely' grey seal and 24 grey seals) that were successfully located by volunteers. When considering the distribution of seal strandings, the greatest proportion were observed around the southwest corner of the island, in the Port Erin/Fleshwick Bay area (n= 7). Overall, strandings appear to be relatively evenly distributed with the exception of the section of coastline between Ramsey and Douglas and the northwest corner of the island, where no seal strandings occurred (Figure 5).



**Figure 5** – Seal strandings reported around Isle of Man in 2017 (n= 24). In total, 24 of the 38 seals reported were found by volunteers and thus GPS coordinates were obtained. The remaining 14 individuals were not located and therefore these individuals have been omitted from Figure 5.

The majority of stranded individuals showed some degree of decomposition (91.67%) and of these, three individuals had undergone advanced decomposition. Two individuals (both pups) were reported as fresh (8.33%),

Several individuals had missing body parts, predominantly the head. The whole head was missing on nine individuals and a further six were missing half or part of the face area. 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 pups (58.33%) (based on size and physical appearance), but developmental stage was only known for three individuals (stage 1/2, 3 and 4). Sex was unknown for almost all stranded grey seals, with the exception of five individuals that were determined to be male.

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

<b>Adult (%)</b>	<b>Juvenile (%)</b>	<b>Pup (%)</b>	<b>Unknown (%)</b>
25.00	8.33	58.33	8.33

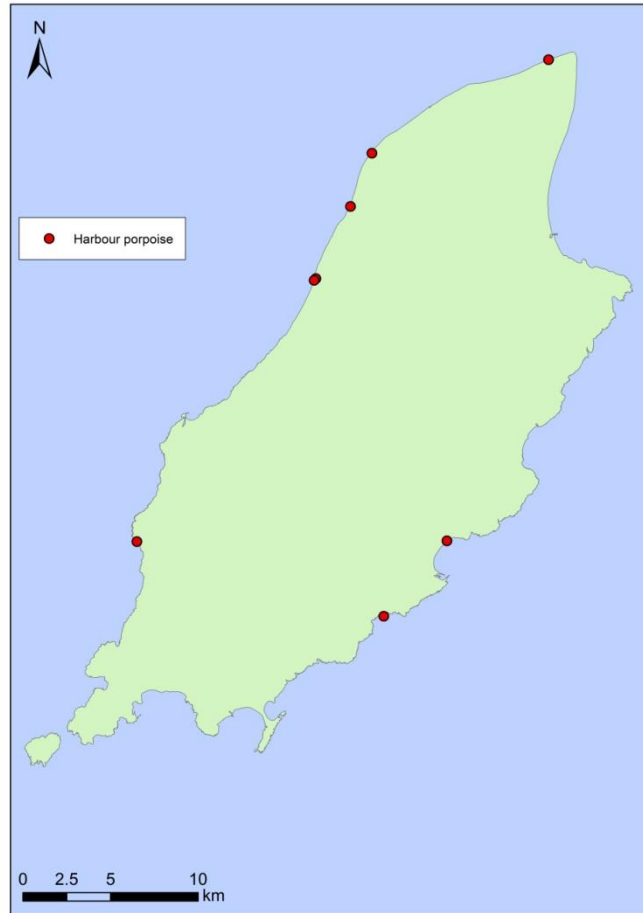
### **Harbour porpoise**

In total eight harbour porpoise strandings occurred in 2017. Of these, seven were located but one was floating within the water and was too far away to ascertain any information. Similarly, limited information was obtained for the stranded individual that was reported (at Orrisdale) but not found.

Harbour porpoise distribution does not appear to show any particular pattern (Figure 6), though it is perhaps interesting to note that no strandings occurred around the southern end of the island. In contrast, the majority of seal strandings appear to have occurred in the region, particularly around Port Erin.

75% (n= 6) of carcasses showed a degree of decomposition and 25% (n= 2) were fresh. It was only possible to sex the fresh individuals, which were determined to be a male and a female, and age was unknown for all eight individuals. Three individuals displayed trauma around the head and three had holes in body resulting in partial exposure of internal organs and/or bone. It is likely that these wounds were obtained post-mortality and as a result stranding ‘wear and tear’ and/or scavenging. One individual showed substantial trauma around the head that the reporter thought may not be simply a result of natural trauma but possibly a bite wound, though this is uncertain.





**Figure 6** – Harbour porpoise strandings reported around Isle of Man in 2017 (n= 8).

**Bottlenose dolphin**

A single bottlenose dolphin stranding occurred during 2017. It was reported and attended 11/04/2017. The individual was believed to be a male of unknown age. The carcass condition was relatively fresh with no obvious wounds/trauma, except for the absence of eyes and jaw partially missing. The carcass was located at Niarbyl Bay, the location of which is depicted in Figure 7.



**Figure 7** – Bottlenose dolphin stranding reported around Isle of Man in 2017 (n= 1).

### **Striped dolphin**

A single striped dolphin stranding occurred in 2017. It was reported and attended 20/12/2017. The individual was believed to be a male of unknown age and the carcass was fresh with no signs of trauma or injury. This individual had been seen in the surf in the morning of this day and a re-float was attempted. The individual was stranded at Castletown Harbour, the location of which is displayed in Figure 8. In 2019 there was an update, following an autopsy, which stated the suspected cause of death was a bone spur in the skull, as the carcass appeared otherwise healthy. During the autopsy blubber and liver samples were taken for analysis, however results are not currently available.



**Figure 8** – Striped dolphin stranding reported around Isle of Man in 2017 (n= 1).

### **Conclusions**

This year, the total number of strandings is relatively high (N= 48), when compared to all previous years (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.

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 of 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 2017 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](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.

<b>Seal Stranding Recording Form</b>			
<b>Please remember your own health and safety is paramount: watch for the tide, always wear gloves and do not lift heavy weights.</b>			
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):			
<b>Body Measurements: (cm)</b>			
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><b>Photos:</b> 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><b>Seal Species Identification:</b> 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>			
<b>Please return this form and your photos to:</b>			
Strandings Records Coordinator, c/o Cornwall Wildlife Trust, Five Acres, Allet, Truro TR4 9DJ Email: <a href="mailto:records@cwstrandings.org">records@cwstrandings.org</a> Website: <a href="http://www.cwstrandings.org">www.cwstrandings.org</a>			
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

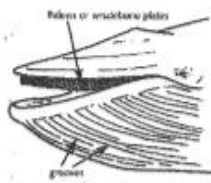
**Does the mouth contain teeth/tooth sockets or baleen/whalebone plates?** Teeth  Baleen

**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

**Appendix 4:** Basking shark stranding recording form, used by volunteers when attending basking shark strandings.

### 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>Look for the gill rakers in the mouth looking through to the gill area - they will appear as black combs between the arches.</p> <p>Take muscle sample here*</p> <p>Presence/absence of paired claspers on pelvic fins Claspers = white tubular organs protruding from pelvic fins</p>	
Total length: m	Claspers present? <input type="checkbox"/> YES (male) <input type="checkbox"/> NO (female)
Snout to 1 <sup>st</sup> dorsal length: cm	Gill rakers present? <input type="checkbox"/> YES <input type="checkbox"/> NO
1 <sup>st</sup> dorsal to caudal: cm	Food in back of throat (orange paste)? <input type="checkbox"/> YES <input type="checkbox"/> NO
Snout to 1 <sup>st</sup> gill slit: cm	Tissue samples taken (*where requested):
1 <sup>st</sup> 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](mailto:coordinator@cwststrandings.org) Website: [www.cwststrandings.org](http://www.cwststrandings.org)



CORNWALL WILDLIFE TRUST IN ASSOCIATION WITH THE MARINE BIOLOGICAL ASSOCIATION

