Manx Wildlife Trust
Treisht Bea-Feie Vannin

Dead marine megafauna strandings annual report 2021

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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 2021. Cetacean data obtained is additionally utilised in the annual UK Cetacean Strandings Investigation Programme (CSIP-UK) report.

Training

During 2021, 11 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, and including 2021, there are 101 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 66 stranded individuals recorded around the Isle of Man. Of these, there were 42 pinnipeds (29 grey seals, *Halichoerus grypus*, 0 common seals, *Phoca vitulina*, and 13 individuals for which species was unknown), and the other 24 individuals were cetaceans (20 harbour porpoise, *Phocoena phocoena*, 2 short beaked Common dolphin, *Delphinus delphis*, 1 Minke Whale, *Balaenoptera acutorostrata*, and 1 Cetaceans for which species was unknown).

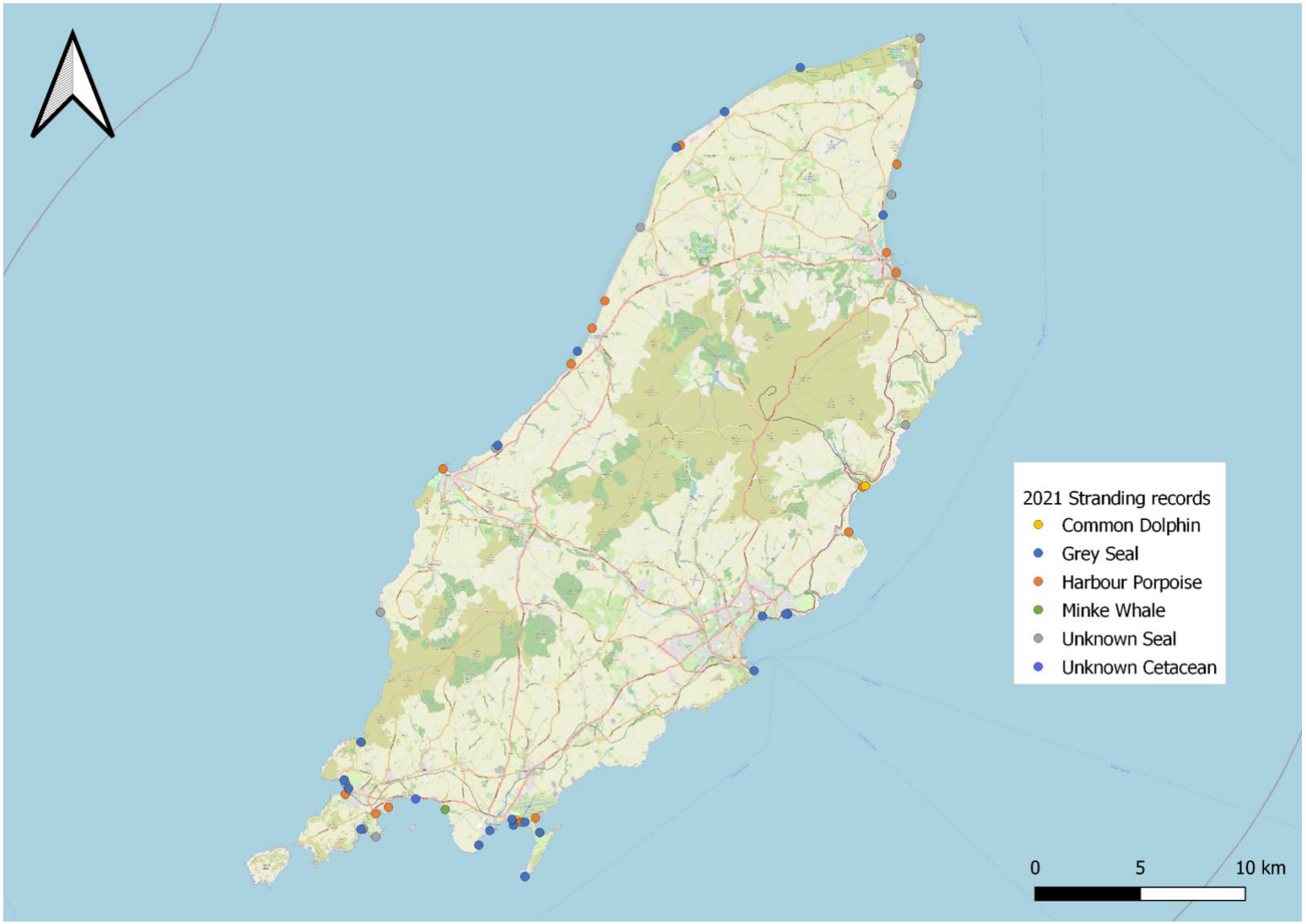


Figure 1 – Strandings reported around Isle of Man in 2021 (n= 66).

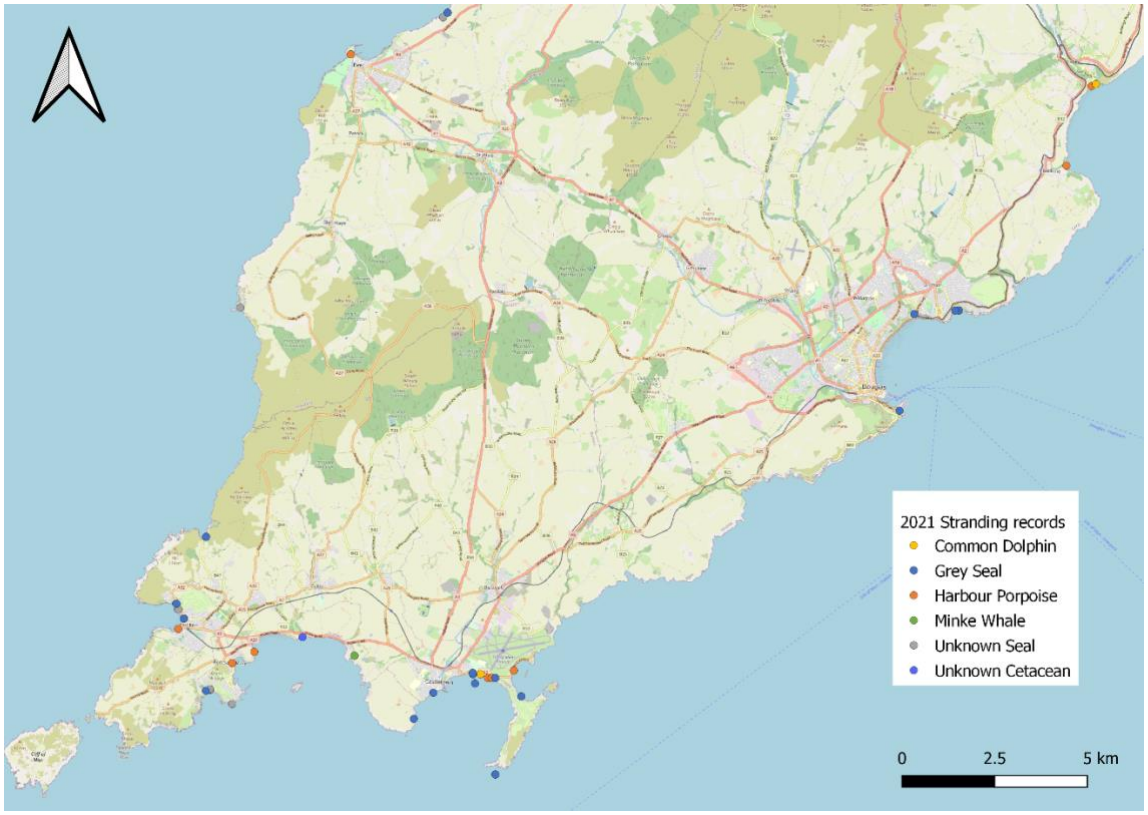


Figure 2 – Closer view of the south of the Isle of Man, depicting strandings in this area during 2021.

Figure 3 – Closer View of the North of the Isle of Man, depicting strandings in the area during 2021.

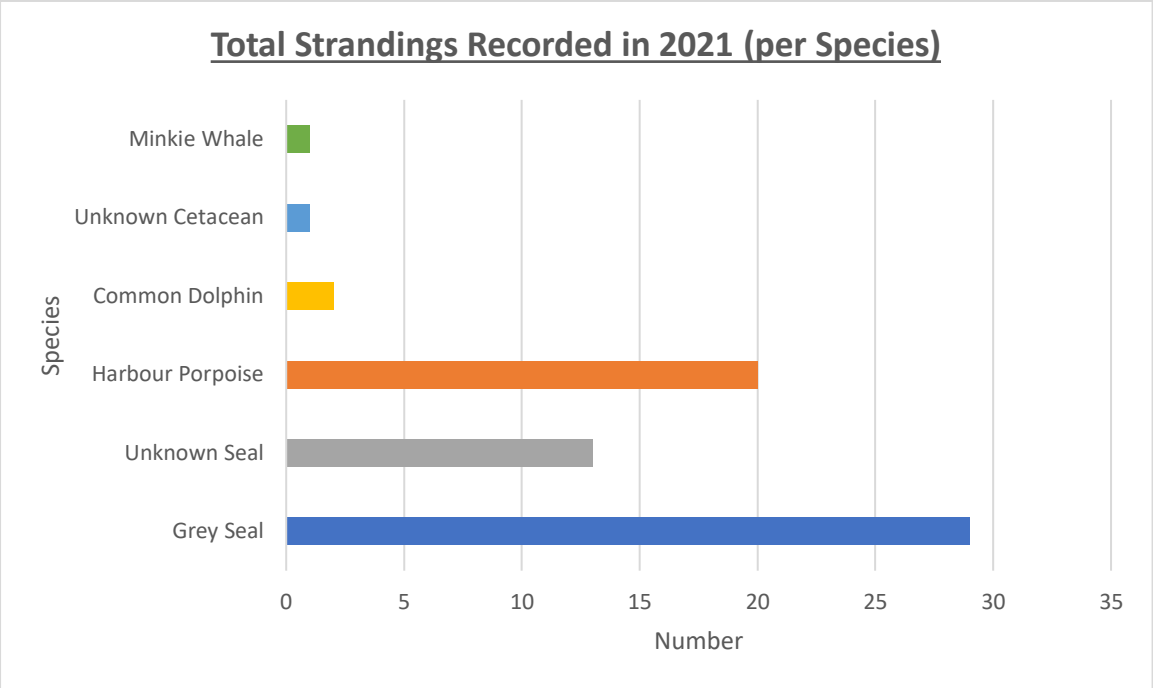


Figure 4 – Total number of stranded individuals (per species) recorded around Isle of Man in 2021

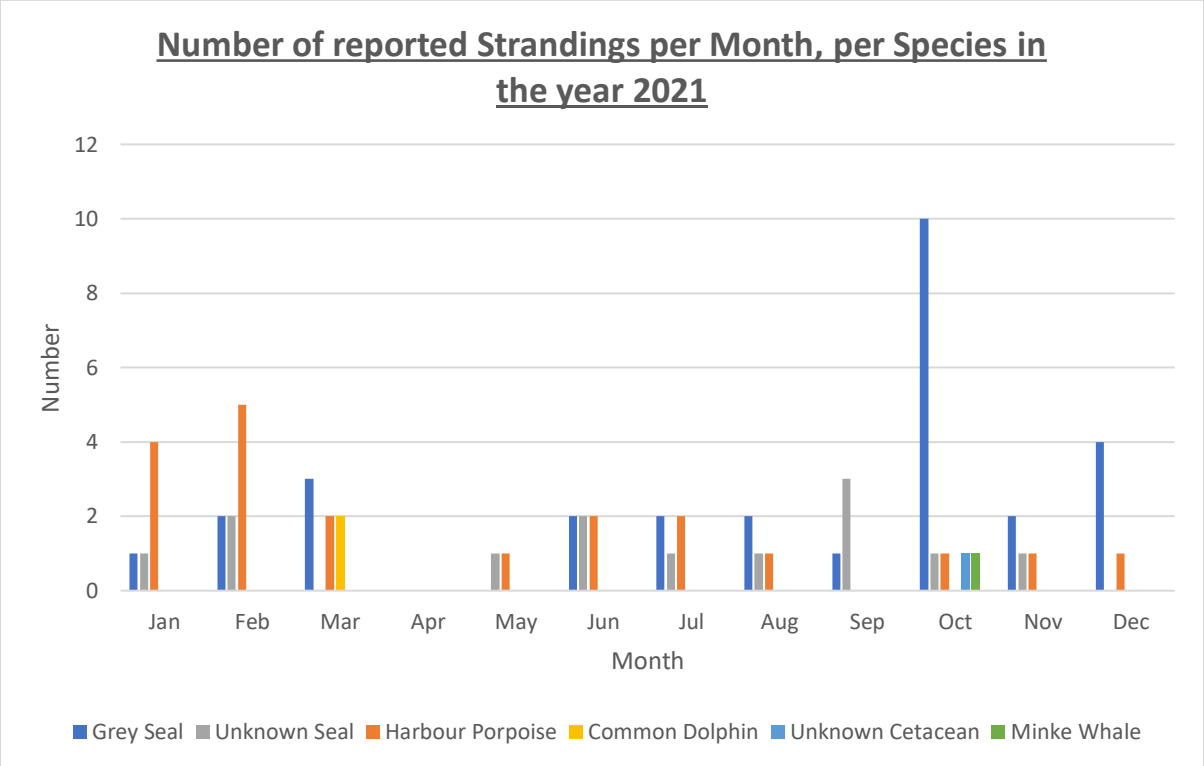


Figure 5 – Number of strandings reported per month around Isle of Man in 2020.

Figure 5 depicts the pattern of strandings reported per month. Overall, the number of reported seal strandings was highest in October, and no cetacean strandings were reported in April or September. October had the greatest number of strandings, due to the number of seals reported, which is over twice as much as any other month. April was the only month with no stranding reports. Overall, 68.2 % of strandings occurred in the winter months (January/February/March and October/November/December).

Seals

In total, 42 seal strandings were reported (29 grey seals, *Halichoerus grypus*, and 13 individuals for which species was unknown). Of these, 19 seals were unfound or unattended by volunteers with COVID-19 being a reason for not attending 4 of these times.

The following results are based upon data from the seals that were successfully located by volunteers. When considering the distribution of seal strandings, the greatest proportion were observed in the south Port Erin/Castletown. Overall, strandings appear to be relatively evenly distributed (Figure 6, Figure 7).

Figure 6 – Grey seal strandings reported around Isle of Man in 2021 (n= 29).

Figure 7 – Unknown seal strandings reported around Isle of Man in 2021 (n= 13).

20 stranded individuals were reported to show some degree of decomposition and of these, 6 individuals had undergone advanced decomposition. 7 individuals were reported as fresh, and the remaining did not have their carcass condition reported.

12 individuals had missing body parts. The whole head was missing on 3. This is somewhat typical of stranded seals and can be considered 'wear and tear'. Furthermore, several seals were missing additional soft body parts as a result of scavenging. 1 was reported as possibly being pregnant.

2 were alive when found, one of which was put to sleep by a vet and the other died of unknown causes.

The relative proportions of individuals belonging to each age group is displayed in Table 1 (of which were identified). Pups and juveniles made up the majority of strandings (57.1%). Sex was unknown for almost all stranded grey seals, apart from 5 individuals where 1 was determined to be female and 4 were male.

Pup	Juvenile	Adult	Unknown
32.1	25	39.3	3.6

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

Harbour porpoise

In total, 20 harbour porpoise strandings occurred in 2021 (Figure 8). Of these, 6 were unattended due to Covid 19 restrictions.

Harbour porpoise distribution does not appear to show any pattern (Figure 8).

Of those recorded, 44.44% (n= 4) of carcasses showed a degree of decomposition, one of which had advanced decomposition, and 55.55% (n= 5) were fresh, and the rest did not have their condition recorded. 3 individuals were concluded to be female, 3 were determined to be male and the other two were unknown. One of the males was recorded as being juvenile with unerupted teeth.

Most damage to be classed as wear and tear or due to scavenging. One harbour porpoise was reported when decomposed to skin and blubber, but not found by recorder.

Figure 8 – Harbour porpoise strandings recorded around Isle of Man in 2021 (n= 20).

Common Dolphin

2 common dolphin strandings were reported in 2021 (Figure 9). One of these was not attended due to COVID restrictions.

The attended common dolphin was a juvenile male at an advanced decomposition level.

Figure 9 – Common dolphin strandings recorded around the Isle of Man in 2021 (n=2)

Unknown Cetacean

1 male cetacean was recorded but decomposition made it difficult to identify the species (Figure 10). Much of the skin and flippers were missing with bones visable and penis pretruding.

Minke Whale

One minke whale was recorded in 2021 (Figure 11). The stranding had advanced levels of decomposition with the tail and most of the head missing. Gender and age were unidentifiable.

Figure 10 – Unknown cetacean stranding reported around the island in 2021 (N=1).

Figure 11 – Minke Whale stranding reported around the island in 2021 (N=1).

Conclusions

This year, the total number of strandings was the highest on record (N= 66). There is a clear positive trend in the number of strandings reported since monitoring began in 2013 (Figure 12).

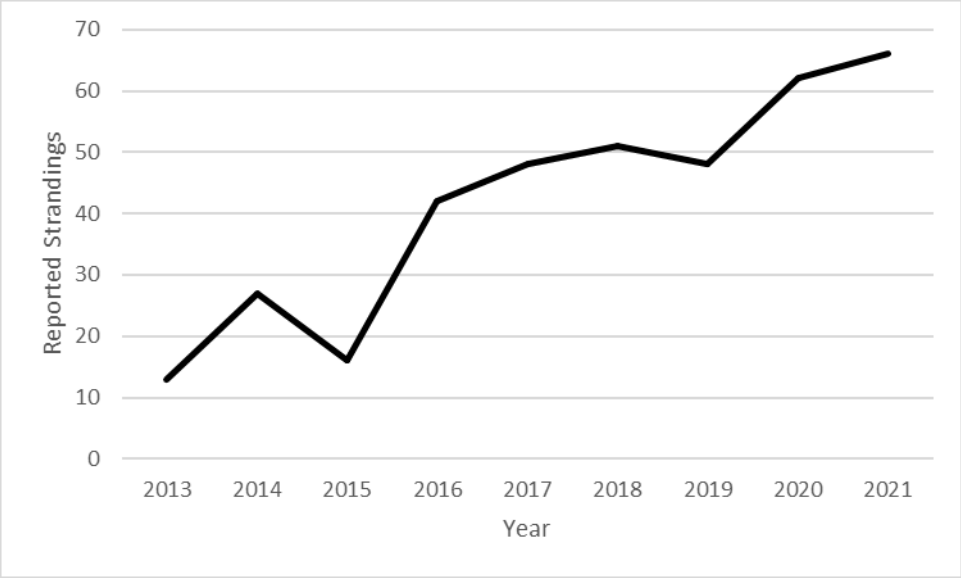


Figure 12 – Number of strandings reported each year since monitoring began in 2013.

It is accepted that the primary cause for the positive trend is the increased level of public perception and knowledge of how to report a stranding.

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 over winter months. Adverse weather conditions typically occur during this period 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 was 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 2021 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.

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.

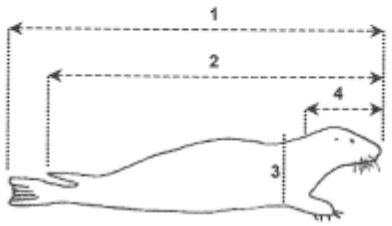
Seal Stranding Recording Form

Please remember your own health and safety is paramount: watch for the tide, always wear gloves and do not lift heavy weights.	
Reported by: Telephone: Date/Time:	**Recorded by:** Telephone: 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.	



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.

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:

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.

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.

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.

Please return this form and your photos to:

Strandings Records Coordinator, c/o Cornwall Wildlife Trust, Five Acres, Allet, Truro TR4 9DJ
Email: records@cwtstrandings.org **Website: www.cwtstrandings.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.

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

THE NATURAL HISTORY MUSEUM

Stranded Whales, Dolphins and Porpoises

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

Place and date where carcase 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.

Date

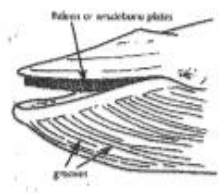
Place

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)			

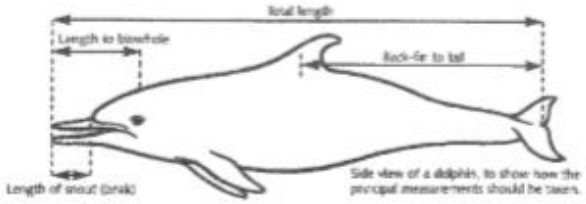
Whalebone Whales if baleen present, state:



(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

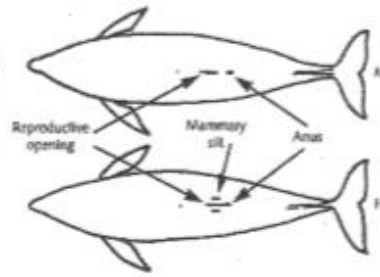
Length of one of the two flippers.

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').

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

Please fill in diagram at top of page.

Length of gap between Reproductive opening and The anus.

cm

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).

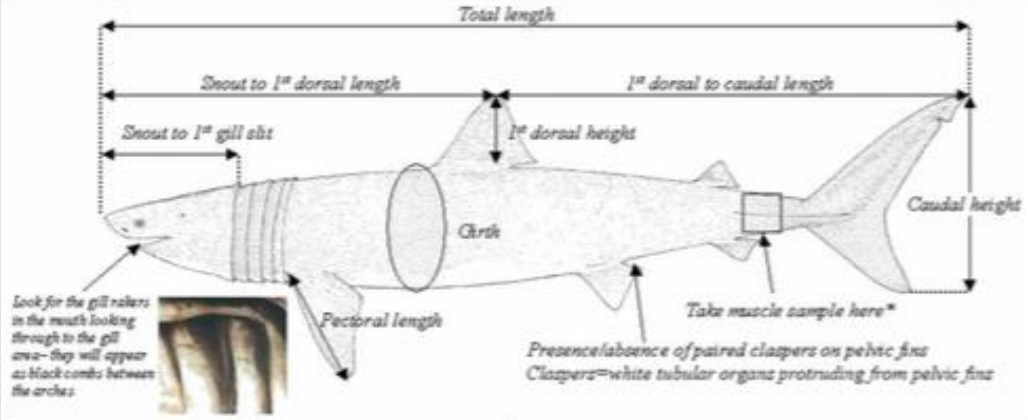
Tel. nos

Fax. nos

Appendix 4 – Basking shark stranding recording form.

Basking Shark Stranding Recording Form

Reported by: Telephone: Address:	Recorded by: Telephone: Date recorded:
Date first seen: Time first seen: Alive when stranded? ☐ YES ☐ NO	Location: Grid ref:



Total length:	m	Claspers present?	☐ YES (male) ☐ NO (female)
Snout to 1st dorsal length:	cm	Gill rakers present?	☐ YES ☐ NO
1st dorsal to caudal:	cm	Food in back of throat (orange paste)?	☐ YES ☐ NO
Snout to 1st gill slit:	cm	Tissue samples taken (*where requested):	
1st dorsal height:	cm	Muscle for genetic analysis?	☐ YES ☐ NO
Pectoral length:	cm	Fin sample?	☐ YES ☐ NO
Girth (half way around x2):	cm	Skin sample?	☐YES ☐ NO
Caudal height:	cm	Photos taken?	☐ YES ☐ 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@cwtstrandings.org Website: www.cwtstrandings.org

CORNWALL

CORNWALL WILDLIFE TRUST IN ASSOCIATION WITH THE MARINE BIOLOGICAL ASSOCIATION