Manx Wildlife Trust
Treisht Bea-Feie Vannin

Dead marine megafauna strandings annual report 2022

Clare Rogerson – Marine Conservation Assistant

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 2022. Cetacean data obtained is additionally utilised in the annual UK Cetacean Strandings Investigation Programme (CSIP-UK) report.

Training

During 2022, a further six 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. There are currently 108 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 (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, decomposed, advanced 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 or entrapment. In some circumstances it may not be possible to obtain all of the required data to 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 and pinniped stranding forms are also sent to CSIP-UK.

Results

In total there were 45 stranded individuals recorded around the Isle of Man. Of these, 33 were pinnipeds (28 grey seals, *Halichoerus grypus*, 0 common seals, *Phoca vitulina*, and 5 individuals for which species was unknown), and the other 12 individuals were cetaceans (10 harbour porpoise, *Phocoena phocoena*, 1 short beaked Common dolphin, *Delphinus delphis*, and 1 Cetacean (a baleen whale) for which species was unknown).

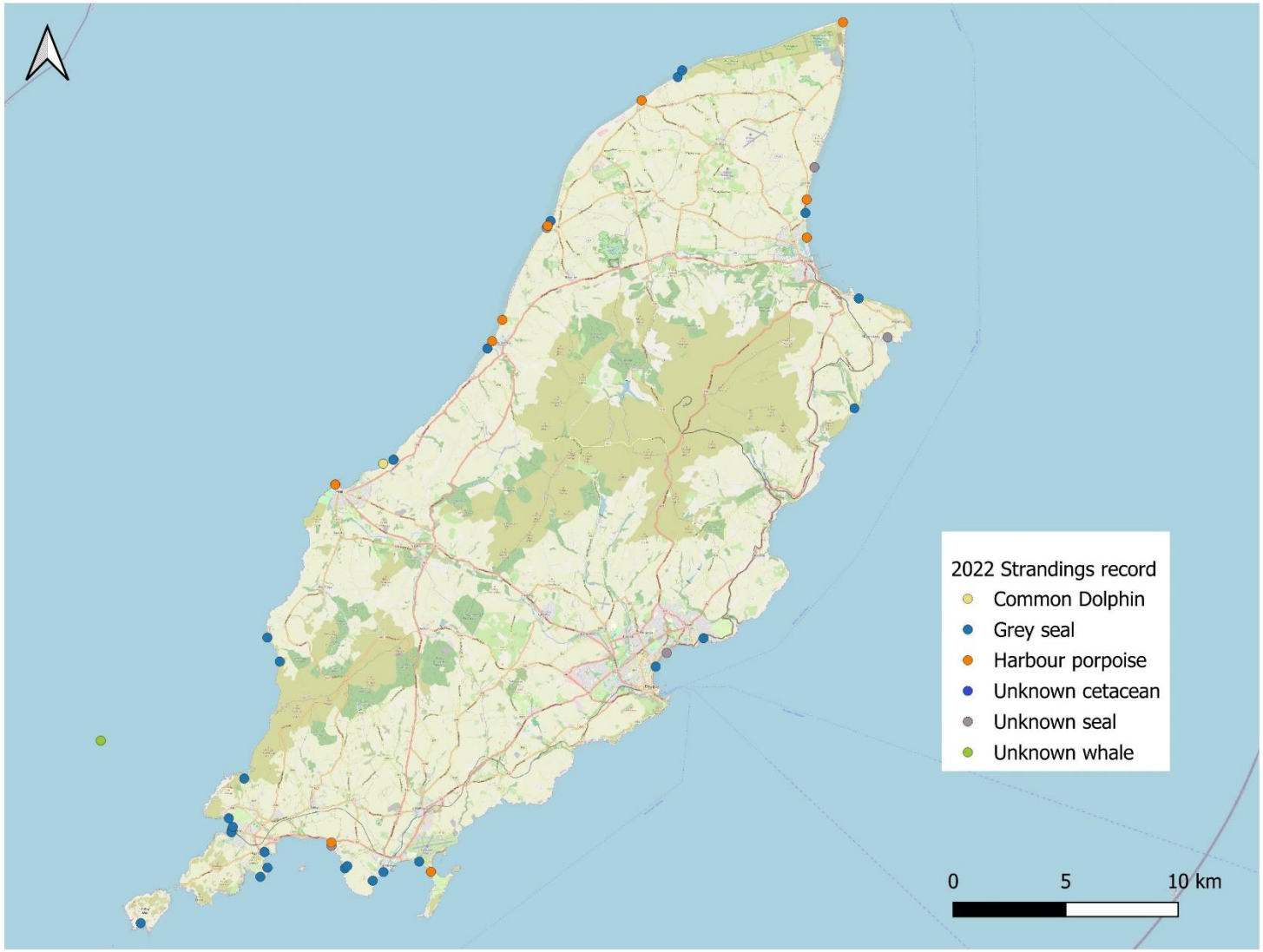


Figure 1 – Strandings reported around Isle of Man in 2022 (n = 45).

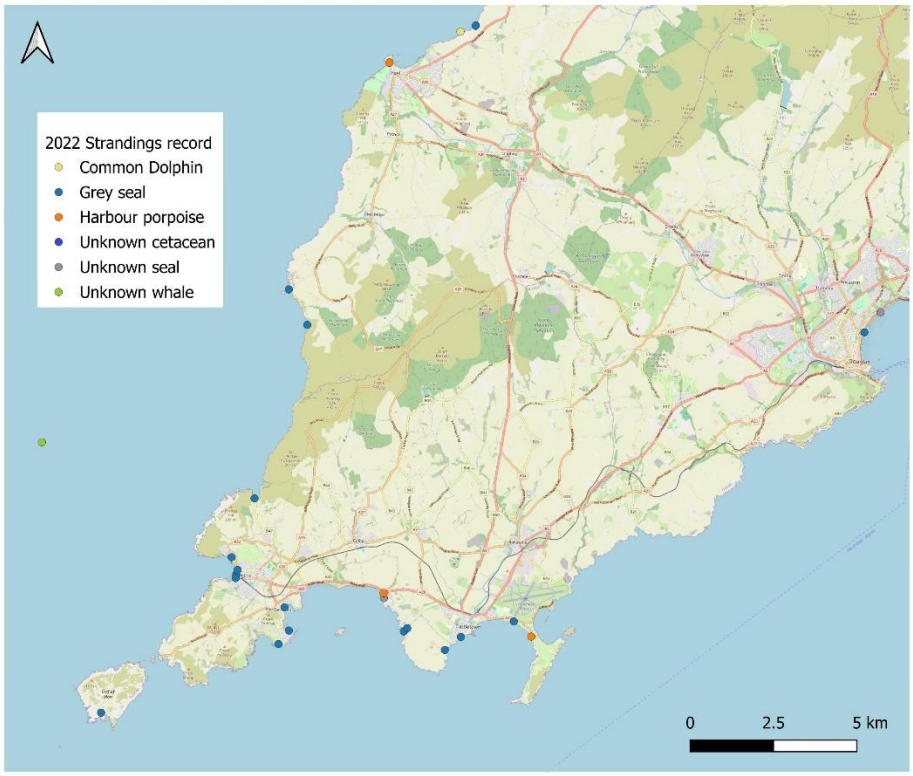


Figure 2 – Closer view of the south of the Isle of Man, depicting strandings in this area during 2022.

Figure 3 – Closer View of the North of the Isle of Man, depicting strandings in the area during 2022.

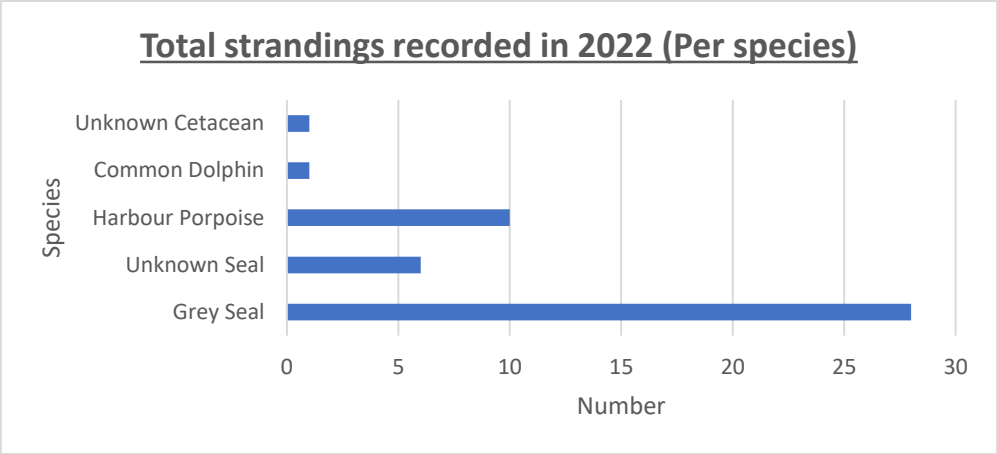


Figure 4 – Total number of stranded individuals (per species) recorded around Isle of Man in 2022

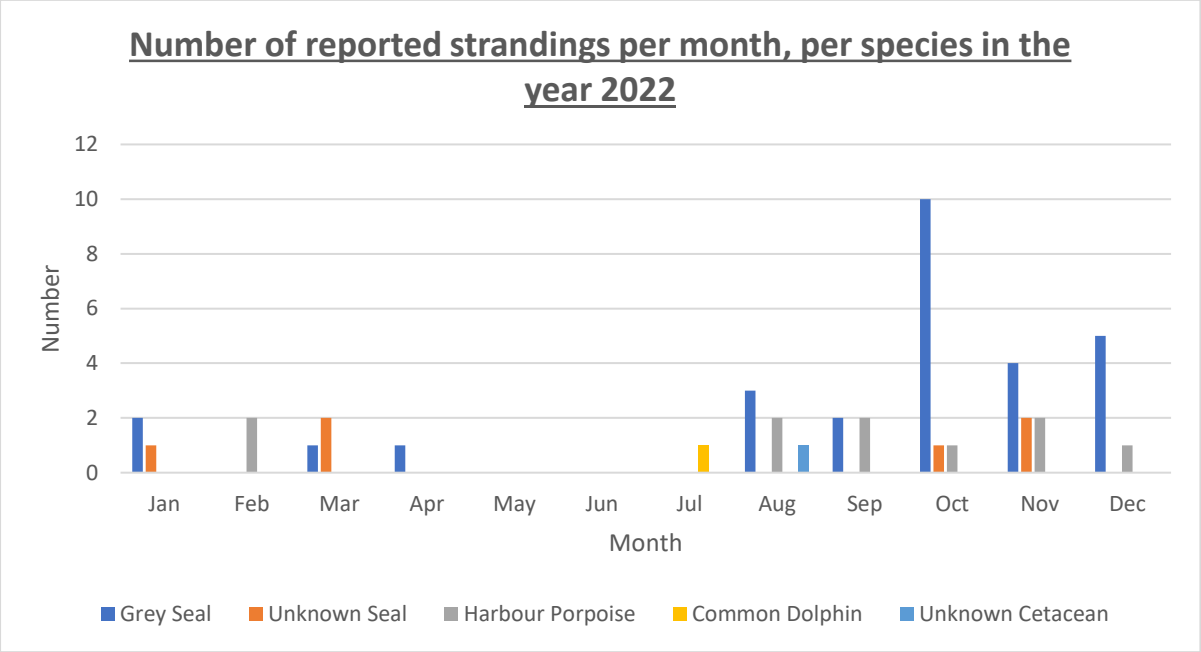


Figure 5 – Number of strandings reported per month around Isle of Man in 2022.

Figure 5 depicts the pattern of strandings reported, per month, during 2022. The number of reported seal strandings was highest in October, with November and December also showing higher numbers than the spring and summer months. No cetacean strandings were reported between March and July and May and June were the only months with no seal stranding reports. 78% of the total number of strandings occurred between August and December.

Seals

In total, 33 seal strandings were reported (28 grey seals, *Halichoerus grypus*, and 5 individuals for which species was unknown), compared with 42 in 2021. Of these, 15 seals were unfound or unattended by volunteers.

The following results (Figure 6) 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 around the coastlines of Port Erin, Port St Mary and Castletown.

Figure 6 – Grey seal strandings reported around Isle of Man in 2022 (n= 28).

Figure 7 – Unknown seal strandings reported around Isle of Man in 2022 (n= 5).

Of the attended individuals, 5 were considered freshly deceased, 12 were recorded as decomposed and two were in a state of advanced decomposition.

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 (51.5%). Sex was unknown for almost all stranded grey seals, apart from 5 individuals which were determined to be female.

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

Pup	Juvenile	Adult	Unknown
42.4	9.1	21.2	27.3

Cetacean Strandings

Harbour Porpoise

In total, 10 harbour porpoise strandings occurred in 2022, compared with 20 in 2021 (Figure 8).

Despite 58% of individuals recorded being located on the west of the Island (Figure 8) harbour porpoise distribution does not appear to show any specific pattern warranting further investigation.

Of those recorded, one was reported to be freshly deceased with the remaining in a state of decomposition. Two of the individuals were identified as female, one as male and the remaining were not identified as either female or male.

Figure 8 – Cetacean strandings recorded around Isle of Man in 2022 (n = 12).

Common Dolphin

One common dolphin stranding was reported in 2022, compared with two reported in 2021 (Figure 8).

The attended common dolphin was a juvenile male measuring 157cm in length.

Figure 9 – Stranded common dolphin, recorded July 2022

Unknown Cetacean

One unknown cetacean was recorded (Figure 8). It was reported to be a whale of unknown species (believed to be a baleen species) estimated to be around 12m long. Species confirmation and further examination were not possible due to the sighting being at sea, approximately 5500 metres from the Island's south-west coast.

Conclusions

In 2022, the total number of stranded individuals was recorded to be 45; 32% lower than the previous year (Total number of strandings in 2022 (n = 66) which was the highest on record, to date).

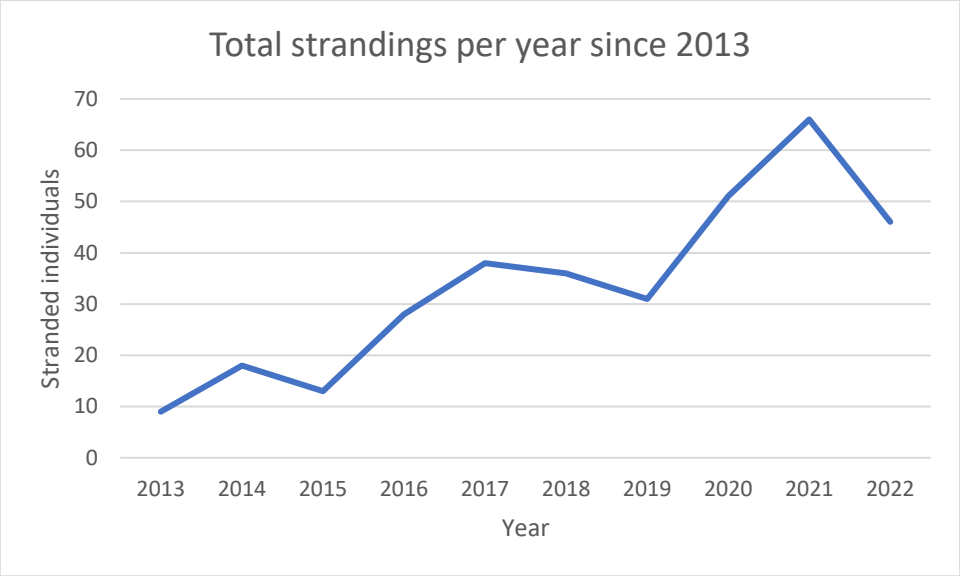


Figure 10 – Number of strandings reported each year since monitoring began in 2013.

Up until 2022, when there was a 32% decrease in recorded strandings compared with the previous year, there is a general positive trend in the number of strandings reported since monitoring began in 2013 (Figure 10). It is accepted that the primary cause for the positive trend was the increased level of public perception and knowledge of how to report a stranding. Furthermore, 2021 saw the coldest winter recorded since 2010 and two major storms (Christoph and Darcey) which may also account for the high level of stranded individuals recorded during that year.

The location of stranded individuals recorded was unremarkable in that there were no recorded concentrations of strandings in any particular area, however locations are likely related to the geographical suitability of the terrain for stranding, combined with the direction of the incoming tide and localised wave patterns.

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. This trend is confirmed by the reports of previous years, for example in 2021, 43% of total strandings recorded were grey seals and 30% of total strandings recorded were harbour porpoise.

The majority of strandings occurred during autumn and winter months, specifically the period from October to January. 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 therefore, in addition to the potential for death during their initial months (as a consequence of usual infant mortality rate), pups, which are less adept at swimming than adults, are more susceptible to drowning or death from exhaustion, exposure and malnutrition.

There was no substantial, abnormal evidence of trauma or injury that are thought to extend beyond the level expected for washed-up marine megafaunal carcasses. No necropsies were performed in 2022, largely due to the level of decomposition of the stranded individuals recorded, hence formal cause of death was not ascertained in each case.

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.

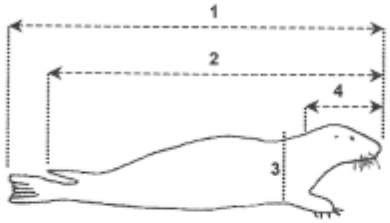
Seal Stranding Recording Form

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

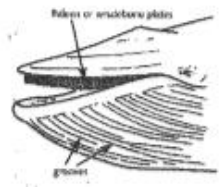
Place

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)			

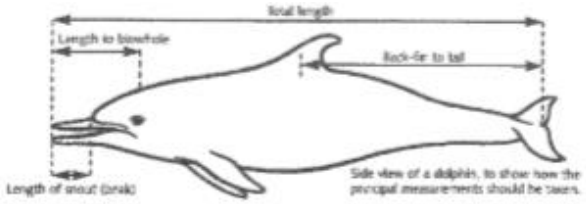
Whalebone Whales if baleen present, state:



(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

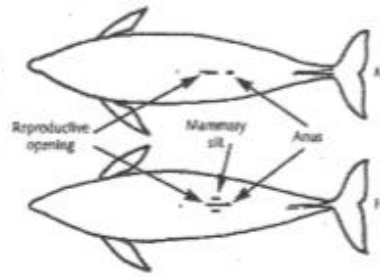
Length of one of the two flippers.

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).

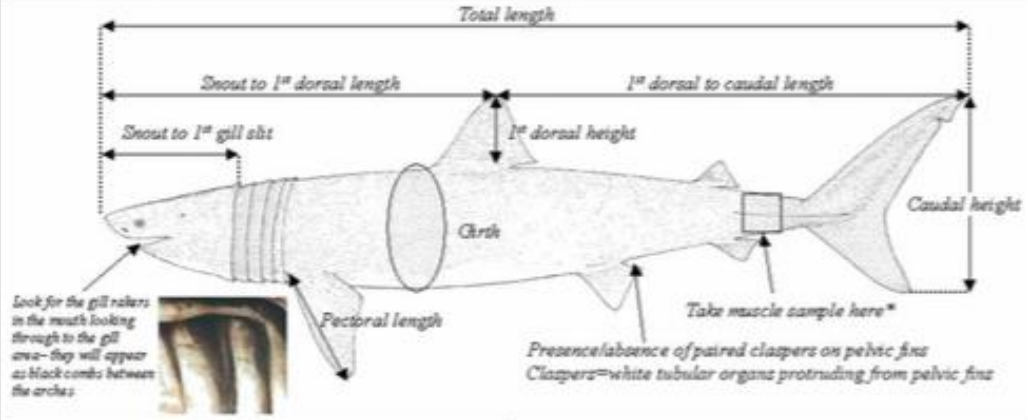
Tel. nos

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