

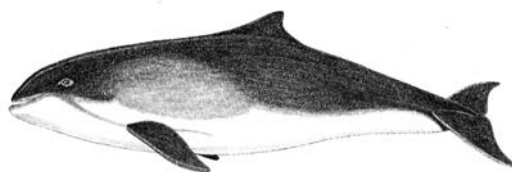


Marine Environmental Monitoring

www.strandings.com

Marine Mammal Strandings (Welsh Coast) Annual Report 1994

R.S.Penrose. April 1995



**Marine
Environmental
Monitoring**



Marine Environmental Monitoring
Penwalk
Llechryd
Cardigan
Ceredigion
West Wales
SA43 2PS
e-mail: rodpenrose@cix.co.uk

REPORT DISTRIBUTION

Welsh Office.	Dr H. Prosser
Natural History Museum.	Dr D. George A. Muir
Institute of Zoology.	P. Jepson
Countryside Council for Wales.	Dr A. Richards R. Pratt H. Arnold
Environment Agency.	R. Miln
University of Liverpool.	Dr J.R. Baker

CONTENTS

	Page
1 INTRODUCTION	4
2 MATERIALS AND METHODS	5
2.1 Live Animals.	5
2.2 Dead Animals.	5
3 RESULTS	6
3.1 Marine Mammals.	6
4 TRAVEL	8
5 ADMINISTRATION	8
6 ACKNOWLEDGEMENTS	8
7 APPENDICES	8

List of Tables.

Table 1.	1994 Total number of reported marine mammal strandings (Welsh Coast).	6
Table 2.	1994 Number of live cetacean strandings (Welsh Coast).	6
Table 3.	1994 Number of animals suitable for <i>post-mortem</i> examination.	7
Table 4.	1994 Number of animals decomposed / disposed of. (Welsh Coast).	7

1. INTRODUCTION

Little is known about disease and causes of death in marine mammals around the British Isles. Without this knowledge it is difficult to interpret the significance of sudden die-offs such as that which occurred in 1988 when approximately 17,000 seals were killed by the Phocine Distemper Virus (PDV).

At present a collaborative Marine Mammal Strandings scheme for England and Wales has been funded by the Department of the Environment (DOE) since 1990 which involves *post-mortem* and other studies of seal and cetacean carcasses. This research is being carried out by the Institute of Zoology (IOZ) in close collaboration with the Natural History Museum (NHM) and the Sea Mammal Research Unit. *Post-mortem* examinations of Welsh strandings are carried out by the Department of Veterinary Pathology, University of Liverpool and the Institute of Zoology, London. It includes studies on the correlation between contaminant levels and disease, reproduction, and immunological status. Samples taken include those for virology, bacteriology, parasitology, histopathology, measurement of heavy metals, organochlorines and radionuclides, DNA fingerprinting and fixed and frozen material for archive.

Records of live and dead strandings of cetaceans are kept by the Strandings Co-ordinator and are passed to Alex Muir for correlation at the Natural History Museum (NHM). Since 1913 records have been, and continue to be kept, by the NHM, in co-operation with the Receiver of Wrecks and HM Coastguard.

Funding towards this project in Wales has been provided by the Welsh Office through the Natural History Museum, London, the Countryside Council for Wales (CCW) and the Department of the Environment through the Institute of Zoology, London.

2. MATERIALS AND METHODS

A 24 hour Strandings Answerphone (**01348 875000**), is interrogated at regular intervals. A message requests callers to leave details of the stranding and location, along with their name and contact phone number, so they can be reached if confirmation of details are required. (If the stranding is a live stranding then a message on an answer-phone informs the caller to contact the RSPCA immediately. see 2.1)

A network of volunteers, rangers, wardens, coastal officers, harbour masters etc. has been formed who can be contacted by the Strandings Co-ordinator to confirm the stranding, assess its condition and secure the animal from the effects of the tide, predation etc. until it can be dealt with.

The following criteria are applied: -

2.1 Live Animals

(Condition code 1)¹

In 1994 the Marine Animal Rescue Coalition (MARC) was formed. This consists of all the major animal welfare and conservation bodies involved with marine mammals in the UK. It has been agreed that in the case of a live stranding the first point of call would be the RSPCA as they support a manned 24-hour emergency phone. The RSPCA would then contact the relevant organisations, Marine Environmental Monitoring etc.

2.2 Dead Animals

(Condition code 2a extremely fresh as if just died)¹

(Condition code 2b slight decomposition)¹

The animal is retrieved using a 4-wheel drive vehicle and trailer. Health and safety precautions are followed with the animal being handled only with gloved hands. It is then taken immediately for *post-mortem* examination without being frozen.

(Condition code 3 moderate decomposition)¹

The animal is retrieved using a 4-wheel drive vehicle and trailer. Health and safety precautions are followed with the animal being handled only with gloved hands. It is placed in a body-bag then taken to a storage facility where it is bagged, labelled and frozen for later transportation or transported immediately.

(Condition code 4 advanced decomposition)¹

(Condition code 5 mummified carcass)¹

Species identified, basic measurements and 6 teeth taken from the lower jaw if possible. Health and safety precautions being observed. Local council then contacted for safe disposal of remains.

All live and dead stranded cetaceans are reported to the NHM and are allocated a “SW” number. All dead seals are reported to the Institute of Zoology (IOZ) and are allocated a SS number. Records of all strandings in Wales are kept by the Strandings Co-ordinator and passed on to the NHM and ZSL on a regular basis.

¹ Body condition based on the Institute of Zoology condition code.

Copies of *post-mortem* examination reports are sent from the Strandings Co-ordinator to the finder and others associated with the relevant stranding.

3. RESULTS

3.1 Marine Mammals

Table 1.

1994 Total number of reported marine mammal strandings (Welsh Coast).													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Bottlenose dolphin	0	0	0	0	0	1	1	1	0	0	0	0	3
Common dolphin	0	0	0	0	0	0	0	1	0	0	1	3	5
Striped dolphin	0	0	1	0	0	0	0	0	2	0	1	0	4
Atlantic white-sided dolphin	1	0	0	0	0	0	0	0	0	0	0	0	1
Fin whale	0	0	0	0	0	0	0	0	0	1	0	0	1
Long finned pilot whale	0	0	0	0	0	0	0	0	0	0	0	1	1
Harbour porpoise	3	0	2	6	4	9	8	8	4	1	3	5	53
Total cetaceans	4	0	3	6	4	10	9	10	6	2	5	9	68
Grey seal	0	2	6	5	1	0	6	3	11	23	17	0	74
Total animals	4	2	9	11	5	10	15	13	17	25	22	9	142

Table 2.

1994 Number of live cetacean strandings (Welsh Coast).													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Common dolphin	0	0	0	0	0	0	0	1	0	0	0	0	1
Atlantic white-sided dolphin	1	0	0	0	0	0	0	0	0	0	0	0	1
Harbour porpoise	0	0	0	0	1	0	2	2	0	0	1	1	7
Total animals	1	0	0	0	1	0	2	3	0	0	1	1	9

Of the 142 strandings 6% live-stranded (5 cetaceans had live-stranded and subsequently died, 4 were found dead but were indicated as having live-stranded in *post-mortem* reports).

Table 3.

1994 Number of animals suitable for <i>post-mortem</i> examination.													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Bottlenose dolphin	0	0	0	0	0	0	0	0	0	0	0	0	0
Common dolphin	0	0	0	0	0	0	0	1	0	0	1	2	4
Striped dolphin	0	0	1	0	0	0	0	0	1	0	1	0	3
Atlantic white-sided dolphin	1	0	0	0	0	0	0	0	0	0	0	0	1
Fin whale	0	0	0	0	0	0	0	0	0	0	0	0	0
Long finned pilot whale	0	0	0	0	0	0	0	0	0	0	0	0	0
Harbour porpoise	1	0	2	3	3	5	7	7	1	1	3	2	35
Total cetaceans	2	0	3	3	3	5	7	8	2	1	5	4	43
Grey seal	0	1	0	1	1	0	1	0	3	8	6	0	21
Total animals	2	1	3	4	4	5	8	8	5	9	11	4	64

Of the 142 strandings 45% (64 animals) were suitable for *post-mortem* examination.

Table 4.

1994 Number of animals decomposed / disposed of. (Welsh Coast).													
Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Bottlenose dolphin	0	0	0	0	0	0	0	1	0	0	0	0	1
Common dolphin	0	0	0	0	0	0	0	0	0	0	0	1	1
Striped dolphin	0	0	0	0	0	0	0	0	1	0	0	0	1
Atlantic white-sided dolphin	0	0	0	0	0	0	0	0	0	0	0	0	0
Fin whale	0	0	0	0	0	0	0	0	0	1	0	0	1
Long finned pilot whale	0	0	0	0	0	0	0	0	0	0	0	1	1
Harbour porpoise	0	0	0	2	1	2	0	1	2	0	0	3	11
Total cetaceans	0	0	0	2	1	2	0	2	3	1	0	5	16
Grey seal	0	0	5	3	0	0	5	2	1	11	10	0	37
Total animals	0	0	5	5	1	2	5	4	4	12	10	5	53

Of the 142 strandings 37% (53 animals) were decomposed and the relevant local council contacted for safe disposal of remains.

Both the fin whale SW1994/165 and the long-finned pilot whale SW1994/183 were in various states of advanced decomposition and therefore no *post-mortem* examination took place. In the case of the 60ft juvenile fin whale SW1994/165, both the Mammal Section at the Natural History Museum and the Sea Mammal Research Unit (SMRU) were informed. Sections of the fin whale ear were removed for ageing for SMRU and skeletal remains removed and stored for collection by NHM. The skull of the long-finned pilot whale SW1994/183 was removed by NHM and taken with the fin whale skeletal remains.

The remaining 17% (25 animals) were confirmed reports but were unable to be retrieved or disposed of due to various reasons. i.e. no access, floating at sea or in one case, a porpoise, jammed under rocks on the seabed, reported by divers.

4. TRAVEL

In excess of 10,000 miles were covered by the Strandings Co-ordinator in retrieval and transportation of animals in 1994. The majority of animals were taken to the Leahurst Field Station, Liverpool University and a few to the Institute of Zoology, London. Both vehicle and especially the trailer required extensive maintenance over this period, transportation being a major part of the project.

5. ADMINISTRATION

In excess of 189 copies of *post-mortem* examination reports were posted out to finders and associated interested parties concerning each relevant stranding.

6. ACKNOWLEDGMENTS

Countryside Council for Wales for its contribution towards the Strandings Project.

Robin Pratt for providing base of operation at Fishguard, storage facilities, freezer running costs and the provision of consumables to maintain continuity of the project.

Blaise Bullimore, Phil Newman and Liz Macedo of the CCW Skomer Marine Nature Reserve Team who enabled access from the sea by boat to the fin whale SW1994/165 and assisted in the collection of blubber and skin for DNA samples and subsequent visits to obtain further samples for SMRU/NHM.

David Wheeler, CCW for lending a trailer for transportation of animals to the IOZ and Liverpool University, assistance in collecting animals, for maintaining cover enabling the Strandings Co-ordinator to attend meetings.

Tony Hartless, DCMLR for assistance in collecting animals and for maintaining cover enabling the Strandings Co-ordinator to attend meetings.

Strandings Network Volunteers too numerous to mention in their help confirming, reporting and securing animals for collection.

7. APPENDICES

Appendix 1. Cetacean strandings data for 1994.

Appendix 2. Atlantic grey seal data for 1994.

Appendix 1. Marine Environmental Monitoring 1994 Welsh Coast Strandings (Cetaceans).

SW Number	Family/Genus	species	Sex	Length	Condition	Date	County	Locality	Grid	Comment
SW1994/005	Lagenorhynchus	acutus	M	2.28	live	19-Jan-94	Swansea	Rhossili Beach	SS411900	Taken to Gweek, died 20:01:94
SW1994/005a	Phocoena	phocoena ?	?	?	?	21-Jan-94	Pembrokeshire	St Brides	SM802109	Unable to retrieve
SW1994/006	Phocoena	phocoena ?	?	?	?	23-Jan-94	Pembrokeshire	Newgale	SM850215	Unable to retrieve
SW1994/007a	Phocoena	phocoena	F	1.60	fresh	23-Jan-94	Ceredigion	Penbryn	SN291524	
SW1994/038	Phocoena	phocoena	F	1.48	slight decomposition	16-Mar-94	Ceredigion	Borth	SN606912	
SW1994/042	Stenella	coeruleoalba	M	1.72	slight decomposition	23-Mar-94	Bridgend	Kenfig NNR	SS788799	
SW1994/044	Phocoena	phocoena	M	1.39	fresh	31-Mar-94	Ceredigion	Borth	SN606916	
SW1994/051a	Phocoena	phocoena	F	1.24	slight/moderate decomposition	10-Apr-94	Gwynedd	Morfa Dyffryn	SH568228	
SW1994/053	Phocoena	phocoena	F	1.67	fresh	10-Apr-94	Gwynedd	Morfa Dyffryn	SH560240	
SW1994/053a	Phocoena	phocoena	M	?	slight decomposition	11-Apr-94	Gwynedd	Morfa Dyffryn	SH568228	Stranded with /53 & /51a
SW1994/062	Phocoena	phocoena	?	?	?	24-Apr-94	Ceredigion	Nth.Ynys Lochtyn	?	In surf, no access.
SW1994/066.1	Phocoena	phocoena ?	?	?	advanced decomposition	26-Apr-94	Carmarthenshire	Llanstephen	SN365127	council informed for disposal
SW1994/066.2	Phocoena	phocoena ?	?	?	advanced decomposition	26-Apr-94	Carmarthenshire	Llanstephen	SN365127	Stranded with /66.1
SW1994/080	Phocoena	phocoena	M	1.22	live	06-May-94	Neath Port Talbot	Port Talbot	SS734900	died same day.
SW1994/088	Phocoena	phocoena	M	1.39	moderate decomposition	17-May-94	Pembrokeshire	Tenby	SN133007	
SW1994/095	Phocoena	phocoena	F	1.36	moderate decomposition	25-May-94	Pembrokeshire	Saundersfoot	SN155065	
SW1994/098	Phocoena	phocoena	?	?	advanced decomposition	27-May-94	Gwynedd	Abersoch	SH314284	
SW1994/099	Phocoena	phocoena	M	1.20	slight decomposition	02-Jun-94	Gwynedd	Tywyn	SH564028	
SW1994/101	Phocoena	phocoena	M	0.82	slight decomposition	03-Jun-94	Gwynedd	Bardsey Is.	SH117216	
SW1994/102	Phocoena	phocoena	?	?	advanced decomposition	06-Jun-94	Carmarthenshire	MOD Pendine	SN325075	council informed for disposal
SW1994/105	Phocoena	phocoena	M	0.77	slight decomposition	16-Jun-94	Pembrokeshire	Abercastle	SM852337	
SW1994/107	Tursiops	truncatus	M	2.50	advanced decomposition	19-Jun-94	Ceredigion	Llanon	SN517684	Lower jaw 2 teeth for NHM
SW1994/107a	Phocoena	phocoena	?	?		22-Jun-94	Bridgend	Kenfig NNR	SS788799	
SW1994/109	Phocoena	phocoena	?	?		25-Jun-94	Bridgend	Kenfig NNR	SS788799	
SW1994/109a	Phocoena	phocoena	?	?	?	26-Jun-94	Ceredigion	Llangrannog	SN311544	Jammed on seabed.
SW1994/110	Phocoena	phocoena	M	0.69	advanced decomposition	27-Jun-94	Ceredigion	Ynyslas	SN604933	pm abandoned. decomposed
SW1994/111	Phocoena	phocoena	M	0.78	advanced decomposition	28-Jun-94	Ceredigion	Off Aberystwyth	SN571808	
SW1994/112	Phocoena	phocoena	?	0.85	advanced decomposition	01-Jul-94	Gwynedd	Fairbourne	SH611124	
SW1994/114	Phocoena	phocoena	F	0.82	live	02-Jul-94	Neath Port Talbot	Briton Ferry	SS724926	died 04:07:94
SW1994/115	Phocoena	phocoena	F	0.77	fresh	03-Jul-94	Ceredigion	Ynyslas	SN604925	
SW1994/118	Phocoena	phocoena	M	1.45	moderate decomposition	09-Jul-94	Ceredigion	Borth	SN606916	
SW1994/119	Phocoena	phocoena	M	1.52	moderate decomposition	10-Jul-94	Gwynedd	Criccieth	SH508381	
SW1994/120	Phocoena	phocoena	F	1.08	slight decomposition	12-Jul-94	Carmarthenshire	RAF Pembrey	SN360047	
SW1994/125	Phocoena	phocoena	?	?	advanced decomposition	15-Jul-94	Ceredigion	Borth	SN607894	too decomposed for pm
SW1994/127	Tursiops	truncatus ?	?	?	?	20-Jul-94	Ceredigion	Off New Quay	SN385607	Unable to retrieve.
SW1994/129	Phocoena	phocoena	?	?	advanced decomposition	22-Jul-94	Pembrokeshire	St Brides Haven	SM801110	Unable to retrieve
SW1994/133	Phocoena	phocoena	M	0.97	fresh	01-Aug-94	Pembrokeshire	Manorbier	SS058974	
SW1994/134	Phocoena	phocoena	M	1.49	moderate decomposition	04-Aug-94	Gwynedd	Barmouth	SH605163	
SW1994/135	Phocoena	phocoena	?	0.75	advanced decomposition	05-Aug-94	Carmarthenshire	MOD Pendine	SN259074	council informed for disposal

Appendix 1. Marine Environmental Monitoring 1994 Welsh Coast Strandings (Cetaceans).

SW Number	Family/Genus	species	Sex	Length	Condition	Date	County	Locality	Grid	Comment
SW1994/136	Phocoena	phocoena	?	?	advanced decomposition	05-Aug-94	Carmarthenshire	MOD Pendine	SN241077	too decomposed for pm
SW1994/137	Phocoena	phocoena	?	?	advanced decomposition	11-Aug-94	Pembrokeshire	Ramsey Island	SM706241	too decomposed for pm
	?	?	?	?	?	15-Aug-94	Ceredigion	Off Aberystwyth	?	floating in sea.SW1994/138 ?
SW1994/138	Tursiops	truncatus ?	?	3.00 ?	advanced decomposition	17-Aug-94	Gwynedd	Rhoslefain	?	council informed, refloated
SW1994/143	Phocoena	phocoena	F	0.87	live	24-Aug-94	Gwynedd	Fairbourne	SH640150	Euthanased 01:09:94
SW1994/144	Phocoena	phocoena	?	?	advanced decomposition	26-Aug-94	Gwynedd	Off Shell Island	SH535263	floating in sea. not retrieved
SW1994/145	Phocoena	phocoena	M	0.92	slight decomposition	28-Aug-94	Ceredigion	Ynyslas	SN604933	
SW1994/146	Delphinus	delphis	M	2.18	live	31-Aug-94	Pembrokeshire	Tenby	SN134008	
SW1994/150	Phocoena	phocoena	?	?	advanced decomposition	02-Sep-94	Ceredigion	Off New Quay	SN402605	rear half of animal only
SW1994/156	Phocoena	phocoena	?	?	advanced decomposition	06-Sep-94	Gwynedd	Morfa Dyffryn	SH570224	buried on beach
SW1994/151	Stenella	coeruleoalba	F	1.74	fresh	06-Sep-94	Pembrokeshire	Sandy Haven	SM861072	
SW1994/153	Phocoena	phocoena	M	1.53	moderate decomposition	07-Sep-94	Ceredigion	Ynyslas	SN604933	
SW1994/154	?	?	?	?	advanced decomposition	08-Sep-94	Gwynedd	Barmouth	SH611153	SW1994/138 ? refloated
SW1994/157	Stenella	coeruleoalba	M	2.00	advanced decomposition	10-Sep-94	Neath Port Talbot	Port Talbot	SS747893	shattered beak, teeth NHM
SW1994/162	Phocoena	phocoena	?	?	?	30-Sep-94	Bridgend	Kenfig NNR	SS788799	
SW1994/164	Phocoena	phocoena	F	1.22	slight decomposition	27-Oct-94	Pembrokeshire	Nolton Haven	SM857184	cause of death not established
SW1994/165	Balaenoptera	physalus	F	18.00	advanced decomposition	27-Oct-94	Pembrokeshire	St Brides	SM798111	
SW1994/166	Phocoena	phocoena	F	1.62	fresh	03-Nov-94	Gwynedd	Aberdesach	SH424514	live stranding
SW1994/167	Phocoena	phocoena	F	1.48	moderate decomposition	05-Nov-94	Gwynedd	Aberdovey	SN596964	
SW1994/169	Phocoena	phocoena	M	1.41	moderate decomposition	14-Nov-94	Carmarthenshire	MOD Pendine	SS270074	
SW1994/170	Stenella	coeruleoalba	M	1.87	slight/moderate decomposition	18-Nov-94	Swansea	Port Eynon Bay	SS470847	
SW1994/173	Delphinus	delphis	M	1.94	slight decomposition	28-Nov-94	Carmarthenshire	Llansteffan	SN346098	
SW1994/174	Phocoena	phocoena	?	?	advanced decomposition	01-Dec-94	Gwynedd	Harlech	SH554339	buried on beach. J. Neale.CCW
SW1994/176	Phocoena	phocoena	F	1.65	advanced decomposition	04-Dec-94	Gwynedd	Llwyngwriil	SH590102	teeth taken, council contacted
SW1994/179	Phocoena	phocoena	?	?	advanced decomposition	12-Dec-94	Swansea	Oxwich Bay	SS512874	partial animal, buried on beach
SW1994/179a	Delphinus	delphis	F	2.06	fresh	12-Dec-94	Anglesey	Aberffraw	SH338678	pregnant with twins.
SW1994/180	Delphinus	delphis	M	?	advanced decomposition	13-Dec-94	Carmarthenshire	RAF Pembrey	SN355050	left on beach
SW1994/181	Phocoena	phocoena	F	1.60	moderate decomposition	13-Dec-94	Pembrokeshire	Manorbier	SS060974	
SW1994/181a	Delphinus ?	delphis ?	?	1.45	fresh	13-Dec-94	Gwynedd	Hells Mouth	SH274267	
SW1994/183	Globicephala	melas	?	?	advanced decomposition	20-Dec-94	Pembrokeshire	Druidston Haven	SM862173	skull to NHM 24th Jan 1995.
SW1994/184	Phocoena	phocoena	F	1.28	moderate decomposition	28-Dec-94	Ceredigion	Cwmydydu	SN356576	

Appendix 2. Marine Environmental Monitoring 1994 Welsh Coast Strandings (Grey Seals)

SS No	species	Sex	Length	Condition	Date	County	Locality	Grid_ref	Comment
SS1994/14	Halichoerus grypus	F j	1.23	fresh	Monday, February 14, 1994	Gwynedd	Tywyn	SH563030	
SS1994/21a	Halichoerus grypus	?	?	fresh	Sunday, February 27, 1994	Gwynedd	Porth Neigl	SH250282	confirmed report
SS1994/22	Halichoerus grypus	? j	?	decomposed	Tuesday, March 01, 1994	Gwynedd	Tywyn	SH563030	headless
SS1994/23a	Halichoerus grypus	?	?	moderate dec.	Saturday, March 05, 1994	Gwynedd	Llanddona	SH587823	confirmed report
SS1994/32	Halichoerus grypus	?	?	decomposed	Wednesday, March 16, 1994	Ceredigion	Aberystwyth	SN583823	council informed for disposal
SS1994/33	Halichoerus grypus	? j	?	decomposed	Friday, March 18, 1994	Ceredigion	Borth	SN604937	headless
SS1994/34	Halichoerus grypus	?	?	decomposed	Monday, March 21, 1994	Gwynedd	Tywyn	SH563030	disposed of
SS1994/35	Halichoerus grypus	?	?	decomposed	Tuesday, March 29, 1994	Ceredigion	Aberarth	SN478640	council informed for disposal
SS1994/36	Halichoerus grypus	?	?	decomposed	Thursday, April 07, 1994	Pembrokeshire	Milford Haven	?	council informed for disposal
SS1994/37	Halichoerus grypus	?	?	decomposed	Sunday, April 10, 1994	Ceredigion	Ynyslas	SN603936	disposed of
SS1994/37a	Halichoerus grypus	?	?	decomposed	Friday, April 15, 1994	Ceredigion	Aberporth	SN258516	confirmed report
SS1994/39	Halichoerus grypus	?	?	decomposed	Friday, April 22, 1994	Ceredigion	Aberystwyth	SN583825	council informed for disposal
SS1994/40	Halichoerus grypus	M	1.16	live / died	Sunday, April 24, 1994	Pembrokeshire	Milford Haven	?	
SS1994/63	Halichoerus grypus	F	1.41	moderate dec.	Tuesday, May 24, 1994	Pembrokeshire	Poppit beach	SN157486	
SS1994/65	Halichoerus grypus	?	?	decomposed	Friday, July 01, 1994	Gwynedd	Fairbourne	SH611124	council informed for disposal
SS1994/96	Halichoerus grypus	?	?	decomposed	Friday, July 01, 1994	Glamorgan	Neath	?	buried on BP beach
SS1994/66	Halichoerus grypus	M	0.91	fresh	Wednesday, July 06, 1994	Pembrokeshire	Newgale beach	SN846224	
SS1994/97	Halichoerus grypus	?	?	?	Saturday, July 23, 1994	Pembrokeshire	Poppit beach	SN150488	removed by council
SS1994/98	Halichoerus grypus	?	1.58	decomposed	Wednesday, July 27, 1994	Carmarthenshire	MOD Pendine	SN285606	council informed for disposal
SS1994/100	Halichoerus grypus	?	?	decomposed	Friday, July 29, 1994	Pembrokeshire	West Dale Beach	SM780075	report from council
SS1994/104	Halichoerus grypus	?	?	decomposed	Friday, August 12, 1994	Gwynedd	Llandudno	SH760830	report from council
SS1994/106	Halichoerus grypus	M	1.58	moderate dec.	Wednesday, August 24, 1994	Glamorgan	Rhossili Beach	SS411881	
SS1994/107	Halichoerus grypus	?	?	?	Wednesday, August 24, 1994	Pembrokeshire	Porth yr Haw	SM784242	
SS1994/108	Halichoerus grypus	F	1.12	decomposed	Tuesday, September 06, 1994	Pembrokeshire	Nolton Haven	SM857185	pm abandoned, decomposed
SS1994/110a	Halichoerus grypus	?	?	?	Thursday, September 08, 1994	Pembrokeshire	Abereiddy	SM796312	Dead adult with pup
SS1994/110b	Halichoerus grypus	?	?	?	Thursday, September 08, 1994	Pembrokeshire	Abereiddy	SM796312	floating in surf with above
SS1994/215	Halichoerus grypus	?	?	?	Friday, September 09, 1994	Pembrokeshire	Coshaston	SM990044	Milford Haven
SS1994/216	Halichoerus grypus	?	Adult	fresh ?	Monday, September 12, 1994	Carmarthenshire	MOD Pendine	SN305074	unable to retrieve, firing.
SS1994/218	Halichoerus grypus	F	2.09	fresh	Thursday, September 15, 1994	Ceredigion	Cei Bach		
SS1994/219	Halichoerus grypus	F	96.5	live ?	Monday, September 19, 1994	Pembrokeshire	Whitesands ?		
SS1994/244a	Halichoerus grypus	?	?	?	Monday, September 26, 1994	Pembrokeshire	Little Haven	SM855129	not found
SS1994/244b	Halichoerus grypus	?	?	?	Monday, September 26, 1994	Pembrokeshire	Little Haven	SM855129	not found
SS1994/244c	Halichoerus grypus	?	?	?	Monday, September 26, 1994	Pembrokeshire	Little Haven	SM855129	not found
SS1994/245	Halichoerus grypus	?	2.17	fresh ?	Monday, September 26, 1994	Gwynedd	Bangor Harbour		
SS1994/274	Halichoerus grypus	?	1.23	fresh	Wednesday, October 05, 1994	Pembrokeshire	Porth Tre-wen	SM774302	
SS1994/275a	Halichoerus grypus	?	?	?	Thursday, October 06, 1994	Pembrokeshire	Ceibwr Bay	SN105456	not found
SS1994/275b	Halichoerus grypus	?	?	?	Thursday, October 06, 1994	Pembrokeshire	Ceibwr Bay	SN105456	not found
SS1994/276	Halichoerus grypus	?	1.03	fresh	Thursday, October 06, 1994	Pembrokeshire	Abermawr	SM882345	

Appendix 2. Marine Environmental Monitoring 1994 Welsh Coast Strandings (Grey Seals)

SS_No	species	Sex	Length	Condition	Date	County	Locality	Grid_ref	Comment
SS1994/277	Halichoerus grypus	F	1.99	fresh	Friday, October 07, 1994	Gwynedd	Tywyn	SN582995	
SS1994/278	Halichoerus grypus	F	Adult	decomposed	Friday, October 07, 1994	Swansea	3 Doors	SM762082	
SS1994/280	Halichoerus grypus	F	1.12	decomposed	Friday, October 21, 1994	Pembrokeshire	Porth Clais	SM741242	
SS1994/281	Halichoerus grypus	?	?	decomposed	Sunday, October 23, 1994	Pembrokeshire	Abereddy	SM797313	disposed of
SS1994/282	Halichoerus grypus	?	?	live / died	Saturday, October 22, 1994	Gwynedd	Aberdovey-Tywyn	?	RSPCA.disposed of
SS1994/283	Halichoerus grypus	?	?	decomposed	Wednesday, October 26, 1994	Gwynedd	Aberdaron	SH170263	disposed of by NT.
SS1994/284	Halichoerus grypus	?	?	?	Wednesday, October 26, 1994	Pembrokeshire	Newgale beach		not found
SS1994/285	Halichoerus grypus	?	1.01	fresh	Thursday, October 27, 1994	Pembrokeshire	Martins Haven	SM761092	
SS1994/286a	Halichoerus grypus	?	?	decomposed	Thursday, October 27, 1994	Pembrokeshire	Nolton Haven	SM857184	disposed of
SS1994/286b	Halichoerus grypus	?	?	decomposed	Thursday, October 27, 1994	Pembrokeshire	Nolton Haven	SM857184	disposed of
SS1994/287a	Halichoerus grypus	?	?	decomposed	Thursday, October 27, 1994	Pembrokeshire	Pwllgwaelod	SN004399	council informed for disposal
SS1994/287b	Halichoerus grypus	?	?	decomposed	Thursday, October 27, 1994	Pembrokeshire	Pwllgwaelod	SN004399	council informed for disposal
SS1994/288	Halichoerus grypus	?	?	decomposed	Thursday, October 27, 1994	Pembrokeshire	Abereddy	SM796314	council informed for disposal
SS1994/289	Halichoerus grypus	?	?	decomposed	Thursday, October 27, 1994	Pembrokeshire	Druidstone Haven	SM860163	council informed for disposal
SS1994/290	Halichoerus grypus	?	?	decomposed	Friday, October 28, 1994	Ceredigion	Gilfach Halen	SN436615	council informed for disposal
SS1994/291	Halichoerus grypus	?	?	decomposed	Friday, October 28, 1994	Ceredigion	Llanon	SN510677	
SS1994/292	Halichoerus grypus	?	1.23	fresh	Saturday, October 29, 1994	Anglesey	Church Bay, Ang.	SH301894	
SS1994/293	Halichoerus grypus	?	1.13	decomposed	Monday, October 31, 1994	Glamorgan	Rest Bay	SS798791	
SS1994/294	Halichoerus grypus	?	1.14	decomposed	Tuesday, November 01, 1994	Pembrokeshire	Newgale beach	SM855200	
SS1994/295a	Halichoerus grypus	?	?	decomposed	Tuesday, November 01, 1994	Glamorgan	Porthcawl	SS810768	council informed for disposal
SS1994/295b	Halichoerus grypus	?	?	decomposed	Tuesday, November 01, 1994	Glamorgan	Porthcawl	SS810768	council informed for disposal
SS1994/296	Halichoerus grypus	?	?	decomposed	Wednesday, November 02, 1994	Glamorgan	Porthcawl	SS783813	council informed for disposal
SS1994/297	Halichoerus grypus	?	1.12	fresh	Wednesday, November 02, 1994	Pembrokeshire	Newgale beach	SM852210	
SS1994/298	Halichoerus grypus	?	?	decomposed	Friday, November 04, 1994	Gwyedd	Tywyn	SH577005	council informed for disposal
SS1994/299	Halichoerus grypus	?	1.03	fresh	Monday, October 17, 1994	Pembrokeshire	F4-168-C	SM756291	dystocia
SS1994/300	Halichoerus grypus	?	1.08	moderate dec.	Thursday, November 03, 1994	Pembrokeshire	Strumble Head	SM888392	peritonitis
SS1994/301	Halichoerus grypus	?	0.93	fresh	Monday, November 07, 1994	Ceredigion	Newquay	SN391599	starvation
SS1994/303	Halichoerus grypus	?	Adult	decomposed	Monday, November 14, 1994	Anglesey	Trearddur bay,Ang.	SH788256	council informed for disposal
SS1994/305	Halichoerus grypus	?	1.11	fresh	Wednesday, November 16, 1994	Ceredigion	Borth	SN604913	extreme pulmonary congestion
SS1994/306	Halichoerus grypus	?	?	decomposed	Wednesday, November 16, 1994	Ceredigion	Borth	SN604913	council informed for disposal
SS1994/307	Halichoerus grypus	?	?	decomposed	Monday, November 21, 1994	Carmarthenshire	MOD Pendine	SN240078	council informed for disposal
SS1994/308	Halichoerus grypus	?	1.21	moderate dec.	Monday, November 21, 1994	Carmarthenshire	MOD Pendine	SN265078	pneumonia ?
SS1994/310	Halichoerus grypus	F	Adult	decomposed	Monday, November 21, 1994	Pembrokeshire	Newgale beach	SM848218	council informed for disposal
SS1994/342	Halichoerus grypus	?	?	decomposed	Friday, November 11, 1994	Gwynedd	Lleyn Pen.	?	
SS1994/343	Halichoerus grypus	? j	?	decomposed	Wednesday, November 30, 1994	Gwynedd	Harlech	SH564319	buried on beach. J.Neale.CCW
SS1994/344	Halichoerus grypus	?	Adult	decomposed	Wednesday, November 30, 1994	Gwynedd	Harlech	SH570311	council disposing of remains.