

**Report on Sightings from Bluefin of Hamble on voyage from
Southampton, UK to Santander, Spain
10-13 June 2006**



**Report prepared for SeaMark Trust and ORCA
by
Bart Donato**

Background

Between the 10th and 13th of June 2006 the SeaMark trust yacht, Bluefin of Hamble, was sailed from Swanick, Southampton, UK to Santander, Spain on a delivery run ahead of a months survey work off the north Spanish Coast. The delivery run was used as an opportunity to carry out an opportunistic survey of cetaceans and seabirds along a transect route that largely avoided the areas covered by the usual ferry surveys of Biscay

Crew

James Barnett (skipper)

Bart Donato

Duncan Hollobone

Oggie Issacs

Martin Muller

Nick Musgrave

General Account of Voyage

We departed Swanick marina, Southampton, at 1120 on 10th June in bright, breezy and sunny conditions and headed down the western Solent passing the needles at 1400. Before long we had settled into the journey and by the end of the first day, off the coast of Dorset and with the wind dying, we were already seeing the first true seabirds (manx shearwater and European storm petrels), but had yet to see a cetacean.

After a night time crossing of the Channel, day two found us paralleling the French coast on a mill pond-like sea - by now the wind had dropped away to the point where sails were useless and we were motoring along in perfect observing conditions. By 0900 we had already seen our first cetaceans in the form of three bottle-nosed dolphins, and a further three passed as the morning progressed. More in evidence were the birds, particularly gannets (100's - almost all of which were adults), but also manx shearwaters, fulmars, storm petrels and a single south-bound swallow. We had to wait until mid-afternoon before our first porpoise sightings, in the still waters off Ouessant Island at the north-west tip of France. Exiting the Channel proper the conditions changed rapidly with the sea state increasing and the fog descending limiting what we could see on the water. Gannets were still much in evidence, though by now most birds were immatures, and the occasional storm petrel would appear bounding between the waves before vanishing off moments later, migrant moths were also to be found seeking shelter around the boat with, at one point, silverY, rush veneer and a hummingbird hawkmoth all sheltering the boat's cockpit. As the sun set we were heading due south into Biscay.

Day three saw us reaching the northern continental shelf and the start of a planned detour along the shelf to survey a stretch of the shelf edge that falls off the main ferry routes. Conditions were still reasonable though, with the sea surface now being dominated by waves and occasional white caps, not perfect and ironically viewing was also hampered by the lack of wind preventing the sails stabilising the boat. We continued south on a transect across the shelf edge into deep water, but other than a distant school of dolphins (probably striped) things were quiet. By early afternoon we had reached deeper water so we turned south east on a dogleg that would bring us back up into shelf waters.

The all quiet theme continued until mid-afternoon with recording being hampered by occasional rain showers until 1530 when suddenly a small group of pilot whales appeared crossing our bow. These whales marked the start of forty minute run of sightings which included more pilot whales, bottle-nosed dolphins and most tantalising of all a possible Mesoplodon whale, which surfaced (very discretely) three times before vanishing into the waves. We continued along the shelf till dusk but by now we had been motoring for over two days, and the forecast was not looking good for any wind, so in the early evening the skipper made the decision to cut short the shelf survey and as the sun set we were heading due south again towards Spain.

That wasn't to be the end of the day, however, with one more treat in store on the 2300 to 0100 watch. At one minute to midnight a familiar plop in the darkness to starboard marked the arrival at our side of our first bow-riding dolphins. For the next ten minutes or more six common dolphins cruised at the bow, chased each other and played around us as we motored along at eight knots. Every so often one of the group would disturb a group of somethings (small squid?) which would then scatter bioluminescing into the darkness like a small firework - a wonderful sight to watch.

Day four, our final day at sea, was spent heading into Santander from the North. The first sighting of the day was neither a seabird nor a cetacean but instead a somewhat lost skylark which circled the boat before heading away across the still calm bay. Once it had gone the generally quiet theme resumed with the highlights of the morning including a couple of bow-riding striped dolphins and our first, and only, Balearic shearwaters while a brief glimpse of a turtle by the skipper was unfortunately 'the one that got away'. By lunchtime Spain was in sight and before long we were entering Santander harbour and were surrounded again by the sights and smells of land, always so distinctive after a few days at sea.

Voyage

Route

The route taken is shown on the accompanying map and tabulated at Appendix 1. Of the daylight portions of the voyage day one was spent exiting the Solent and heading west along the Hampshire and Dorset Coast, day two was spent rounding Brittany, day three spent on the northern shelf-edge in Biscay and day four in the southern bay running into Santander.

Recording Conditions

Two crew members were on watch at all times and any marine mammals or sightings of note were recorded. However as principle observer most recording was carried out by B. Donato during watches where marine wildlife recording was prioritised. In the route map and Appendix 1 route table on watch periods donates times when wildlife observation was being prioritised.

Almost all sightings were made from the 'cock pit' and aft desk of the Bluefin, giving an observer position of two-three meters above sea-level. At this height the observable field of view is about 1.5km at sea surface under optimal conditions. For portions of the voyage sea surface conditions were not optimal and under these conditions the effective field of view was reduced to about 400m.

Sightings



Cetaceans

Cetacean sighting locations are plotted on the map of the journey.

Harbour Porpoise *Phocoena phocoena*

Only seen on the afternoon of the 11th June in the waters north of Ouessant Island where three or four adults were seen in two groups, moving past the boat. Conditions at this point were perfect for spotting the typically undemonstrative porpoises, which can be easily overlooked if the sea is anything short of glassy calm.

Common Dolphin *Delphinus delphis*

Given the species' status as one of the commonest cetaceans in the Bay of Biscay this species was almost conspicuous by its absence. As it was, the only sighting was of a small pod that appeared with a plop out of the dark at one minute to midnight on the 12th June at 45°02.2'N 003°34.3'W and stayed with the boat bow riding for ten minutes or more. Watching them from the bow as they manoeuvred in the water setting off the phosphorescent plankton and periodically accelerating away towards, and scattering, schools of equally phosphorescent fish or squid was magical.

Striped Dolphin *Stenella coeruleoalba*

Two encounters, one confirmed on the morning of the 13th June at 43°59.0'N 003°44.3'W, and one with some unidentified dolphins most likely to be this species on the 12th June at 46°06.6'N 004°30.4'W. Both pods were first seen at a distance being very acrobatic (one of the 13th June pod was first seen silhouetted upside down against the horizon) but whereas the 12th June pod was subsequently lost in the swell, the 13th June pod approached the boat to investigate it and briefly indulge in some bow riding.

Bottle-nosed Dolphin *Tursiops truncatus*

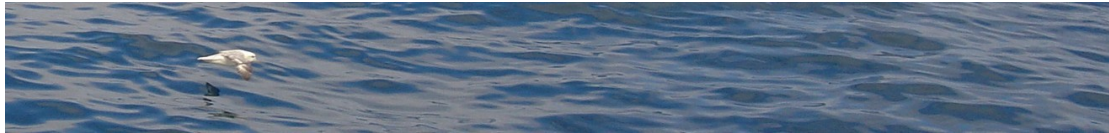
Four sightings of 1-2 individuals, including a mother-calf pair, on the 11th June in the channel south west of the Hurd Deep between 49°12.04'N 004°03.70'W and 49°03.5'N 004°20.4'W and one sighting of a pod at 45°49.5'N 004°01.8'W in mid-Biscay in the same general area as a pod of Pilot whales and the unidentified whale sp. In all instances the dolphins showed little interest in the boat.

Pilot Whale sp *Globicephala* sp

A number of sightings of small pods on the afternoon of the 12th June made this the most numerous cetacean recorded on the survey. All sightings were between 45°50.7'N 004°04.2'W and 45°43.2'N 003°44.3'W over the continental shelf edge and were of animals travelling and showing little interest in the boat. Of the two very similar pilot whale species it was presumably the more northern long-finned pilot whale *Globicephala melas* that was encountered.

Whale sp

A single, tantalising, sighting at 45°48.9'N 003°59.2'W of an unidentified whale. Some of the observed features and behaviour suggested a possible *Mesoplodon* Beaked-whale but the views were too inconclusive to attempt an accurate identification. In total the whale was seen to surface three times, each very discrete, and overall appeared long bodied, flat backed (seen from behind) and uniform grey. Despite being seen at only c40m there was no evidence of a blow and the head was not seen to break the surface.



Sea Birds

Gannet *Sula bassana*

By a considerable margin the most frequent sea bird recorded during the journey, first seen on the 10th June mid-Solent and last seen on the 13th on the approach to Santander. Peak numbers were seen on the afternoon of the 11th June in the waters around Ouessant Island with a high count of 59 birds/hour. The ratio of birds in the channel was around 50ads:1imm but this rapidly reversed rounding Ouessant so that the vast majority of 'Biscay birds' were immatures. Most in channel birds seen on the 11th June off the coast of Brittany were moving purposefully North-South or vice-versa implying a movement between nesting colonies and feeding grounds.

European Storm-petrel *Hydrobates pelagicus*

Seen occasionally throughout the voyage. The first sighting was at 50°25.4'N 002°18.5'W on the evening of the 10th June and the last on the evening of the 12th June. Most sightings were of single birds and were in the Channel or the waters around Ouessant, however, a feeding group of 7 birds was seen on the 11th June at 49°06.91'N 004°15.27'W.

Fulmar *Fulmarus glacialis*

Seen occasionally in the waters of the Channel and Northern Bay. The first sighting was on the evening of the 10th June off the Dorset coast and the last before 0800hrs on the morning of the 12th June over the shelf edge of the Northern Bay. Most sightings were of single birds, occasionally circling the boat, but generally taking little interest.

Manx Shearwater *Puffinus puffinus*

Singles seen occasionally throughout the voyage in coastal waters. The most northern bird was seen off the Dorset coast on the evening of the 10th June and the most southern at 43°45.7'N 003°43.0'W on the 13th June on the approach to Santander

Balearic Shearwater *Puffanus mauretanicus*

The only sighting was of two moving west along the North Spanish coast on 13th June.

Great Black-backed Gull *Larus marinus*

For a brief period rounding Ouessant, Brittany this became the most frequently encountered gull, but it wasn't seen away from this area. This distribution probably reflects the species strictly coastal habits and its preference for rocky coasts.

Lesser Black-backed Gull *Larus fuscus*

By far the commonest gull in both inshore and offshore waters and recorded regularly through out the voyage including one young bird which landed on the spray hood at 0610 hrs on the morning of the 12th June at approximately 46°52.6'N 4°54'W well out into the Bay of Biscay.

Black-headed gull *Larus ridibundus*

Only seen within the Solent.

Kittywake *Rissa tridactyla*

Apart from two birds seen early on the morning of the 12th June in the Bay of Biscay the only sightings were along the Dorset coast where there a few breeding colonies.

Sandwich Tern *Sterna sandvicensis*

Only seen on the 10th June in the Solent, and off the south coast of Hampshire and Dorset.

Common Tern *Sterna hirundo*

The only tern seen away from the English Coast. All sightings were in coastal waters but included numerous birds in the Solent and along the south English coast, a few birds off Ouessant, Brittany and a few pairs within the Santander Harbour and river mouth.

Little Tern *Sterna albifrons*

A few birds seen in the Western Solent on the 10th June were presumably from the nearby Hurst spit colony.

Guillemot *Uria aalge*

The only auk species encountered with occasional birds seen in the outer Solent and off the south Dorset coast (where it breeds) on the evening of the 10th June, a single bird in the Western Channel, and then a few further birds in the waters around Ouessant.

Land Birds

Swift *Apus apus*

Five birds were seen heading south across the Solent (2) and Channel (3) during the afternoon and evening of the 10th June.

Skylark *Aluda arvensis*

One of the surprises of the trip was a single bird which circled the boat on 13th June at 44°05.7'N 003°44.5'W in southern Biscay before heading off.

Swallow *Hirundo rustica*

Only a single bird was seen, on the 11th June, heading SW at 1108 at 48°58.2'N 004°30.21'W off the north coast of Brittany

Insects

An assortment of migrant insects were seen during the voyage including a number of hoverflies and moths. Identified moths included a couple of silver Ys, and single rush veneer (off Ouessant), turnip moth (north Biscay), Hummingbird Hawkmoth (off Ouessant with a second Hummingbird Hawkmoth seen at the marina in Santander) and four-spotted footman (pictured, at 45°42.7'N 3°43.0'W in mid-Biscay). The latter was the most unexpected moth, being only a scarce immigrant to the south coast of the UK. 2006 proved to be a good year for migrant moths in general in the UK.

Discussion

In total the four day journey from Southampton to Santander produced 16 sightings of at least 6 different cetacean species. This equates a reasonable sighting rate, however, given the good viewing conditions for much of the voyage this is perhaps fewer than might have been expected given the route taken. The general lack of interest in the boat with only two instances of bowriding (one of them very brief) was unexpected given the frequency of bow riding during the reciprocal journey in 2005.



Notable by their absence were the baleen whales, which by early June are normally starting to build their numbers in the Bay of Biscay. However, the survey work carried out in July off Santander also recorded very few baleen whales (G. Cresswell pers comm.) so it may be that the oceanographic conditions most favoured by these species were not present in the area this summer. Over the course of the journey it was noted that sea surface temperatures declined gradually from Southampton to the mixing zone off Ouessant (where they reached a low of c11.5°C) before gradually increasing until our arrival in Santander (where they reached a peak of c15.5°C). This smooth gradation suggests that no discrete areas of the type of upwelling, known to concentrate cetacean (and seabird) food resources, were crossed during this journey. In fact, with the possible exception of the bow riding common dolphins, no obvious feeding behaviour was seen in any of the cetacean encounters, and most sightings were of apparently travelling animals. Similarly there were no flocks of feeding seabirds noted. Unfortunately no detailed records of sea surface temperature were kept. It is recommended that in future sea surface temperature records are kept as a routine part of any dedicated watch records, as this data is displayed on the ship's cockpit GPS.

The only area to produce an aggregation of sightings was between 45°50.7'N 004°04.2'W and 45°48.9'N 003°59.2'W where in the space of forty minutes there were four encounters with three cetacean species. This 'aggregation' may have been coincidental, not least because none of the encounters was with animals apparently

feeding and three encounters (two with pilot whales and one with bottle-nosed dolphins) involved travelling pods. However, the local conditions may warrant further investigation to see if there was a likely cause for the increased frequency of encounter in this area.

Compared to the reciprocal journey in May 2005, sea birds and migrant birds were less in evidence reflecting the change to summer distribution patterns. The dominance of adult gannets in the Channel, and immature birds in Biscay, suggests a segregation of breeding and non-breeding feeding areas, while the relative frequency of European storm petrel sightings in Channel waters was slightly unexpected given the species more western than southern breeding distribution.

Where migrant birds were less in evidence compared to 2005, migrant insects showed the opposite pattern. This will partly reflect the latter immigration time to northerly latitudes of these species but may also reflect the exceptional levels of immigration of a number of species in 2006, linked to the series of heat waves experienced in the early summer. Hummingbird hawkmoths were a headline grabbing feature of these influxes with 2006 being one of the best years on record for this species in the UK.

Acknowledgements

I owe a huge debt of thanks to both ORCA and the Seamark Trust for allowing me the opportunity to join BlueFin and the support they provided and particularly to James, Oggie, Duncan, Nick and Martin for being such good company - Thank you.

Appendix 1 - Course taken

Date	Time	Latitude	Longitude	Watch
10-Jun-06	1120	Depart Hamble		Y
10-Jun-06	1200	50°49.2'N	1°17.8'W	Y
10-Jun-06	1300	50°45.2'N	1°25.7'W	Y
10-Jun-06	1400	50°39'N	1°37.7'W	Y
10-Jun-06	1500	50°34.5'N	1°51.7'W	Y
10-Jun-06	1600	50°31.1'N	2°4'W	Y
10-Jun-06	1700	50°27.6'N	2°13.7'W	Y
10-Jun-06	1800	50°23.7'N	2°22'W	N
10-Jun-06	1900	50°19.5'N	2°30.1'W	N
10-Jun-06	2000	50°16.1'N	2°37.5'W	N
10-Jun-06	2100	50°13'N	2°49.9'W	N
10-Jun-06	2200	50°9.7'N	2°53.2'W	N
10-Jun-06	2300	50°6'N	3°3.2'W	N
11-Jun-06	0000	50°1.9'N	3°15'W	N
11-Jun-06	0100	49°56.3'N	3°24'W	N
11-Jun-06	0200	49°48.4'N	3°30.7'W	N
11-Jun-06	0300	49°41'N	3°36.3'W	N
11-Jun-06	0400	49°34'N	3°40.27'W	N
11-Jun-06	0500	49°27.5'N	3°43'W	N
11-Jun-06	0600	49°22.1'N	3°47.2'W	N
11-Jun-06	0700	49°18.6'N	3°51.7'W	N
11-Jun-06	0800	49°14.8'N	3°58.7'W	Y
11-Jun-06	0900	49°10.2'N	4°7.2'W	Y
11-Jun-06	1000	49°5.1'N	4°17.2'W	Y
11-Jun-06	1100	48°59.1'N	4°28.6'W	Y
11-Jun-06	1200	48°52.7'N	4°38.5'W	Y
11-Jun-06	1300	48°45.9'N	4°47.1'W	N
11-Jun-06	1400	48°40.1'N	4°54'W	N
11-Jun-06	1500	48°35.9'N	5°59.1'W	N
11-Jun-06	1600	48°32.6'N	5°5.3'W	Y
11-Jun-06	1700	48°29.7'N	5°10.1'W	Y
11-Jun-06	1800	48°24.7'N	5°10.9'W	Y
11-Jun-06	1900	48°16.3'N	5°12.3'W	Y
11-Jun-06	2000	48°6.5'N	5°12.7'W	Y
11-Jun-06	2100	47°57.9'N	5°11.6'W	Y
11-Jun-06	2200	47°49.4'N	5°9.1'W	N
11-Jun-06	2300	47°42.3'N	5°11.7'W	N
12-Jun-06	0000	47°35.3'N	5°8.9'W	N
12-Jun-06	0100	47°28.2'N	5°6.2'W	N
12-Jun-06	0200	47°22.7'N	5°0'W	N
12-Jun-06	0300	47°17.5'N	4°58.2'W	N
12-Jun-06	0400	47°9.9'N	4°56.7'W	N
12-Jun-06	0500	47°0.9'N	4°55.6'W	N
12-Jun-06	0600	46°52.6'N	4°54'W	Y
12-Jun-06	0700	46°43.7'N	4°53.4'W	Y
12-Jun-06	0800	46°35.3'N	4°50.3'W	Y
12-Jun-06	0900	46°27.8'N	4°46.3'W	N
12-Jun-06	1000	46°21.1'N	4°41.1'W	N
12-Jun-06	1100	46°13.7'N	4°34.6'W	N
12-Jun-06	1200	46°6.2'N	4°30.1'W	Y
12-Jun-06	1230	46°3.5'N	4°27.5'W	Y
12-Jun-06	1300	46°1.5'N	4°33.1'W	Y
12-Jun-06	1400	45°57.2'N	4°14.9'W	Y
12-Jun-06	1500	45°52.3'N	4°6.7'W	N

12-Jun-06	1600	45°49.1'N	4°0.3'W	Y
12-Jun-06	1700	45°46.3'N	3°52.4'W	Y
12-Jun-06	1800	45°42.7'N	3°43'W	Y
12-Jun-06	1830	45°40.5'N	3°37.9'W	Y
12-Jun-06	1900	45°38.5'N	3°34.9'W	N
12-Jun-06	1945	45°34.5'N	3°29.6'W	N
12-Jun-06	2000	45°32.7'N	3°29.9'W	N
12-Jun-06	2100	45°24.9'N	3°31.5'W	N
12-Jun-06	2200	45°17.4'N	3°32.1'W	N
12-Jun-06	2300	45°10.4'N	3°33.2'W	N
13-Jun-06	0000	45°3.6'N	3°34.1'W	N
13-Jun-06	0100	44°55.9'N	3°34.5'W	N
13-Jun-06	0200	44°48.1'N	3°34.8'W	N
13-Jun-06	0300	44°40.5'N	3°34.7'W	N
13-Jun-06	0400	44°32.2'N	3°34.8'W	N
13-Jun-06	0500	44°24.9'N	3°37.2'W	N
13-Jun-06	0600	44°17.6'N	3°41.6'W	N
13-Jun-06	0700	44°10.8'N	3°44.1'W	Y
13-Jun-06	0800	44°4.3'N	3°44.7'W	Y
13-Jun-06	0900	43°56.8'N	3°44.1'W	Y
13-Jun-06	1000	43°50.5'N	3°43.1'W	Y
13-Jun-06	1100	43°43.6'N	3°43.1'W	Y
13-Jun-06	1200	43°37'N	3°43.1'W	Y
13-Jun-06	1300	43°30.1'N	3°43.1'W	Y
13-Jun-06	1430	Moored Santander		

Appendix 2 - Cetacean Records

Date	Time BST	GPS Reading Latitude (N) Longitude (W)	Wind direction/ force	Visibility	Sea state	Precipitn.	Species (ID confidence: def, prob, pos)	No. of adults	No of young	Distance to sighting	Animal heading direction (eg. N/S)	On Watch Y/N	Notes
11/06/06	0836	49°12.04'N 004°03.70'W	WSW 1	20+	1/swell	0	BN Dolphin	1 ?imm	-	150m	N then W	Y	3 surfaces slow swimming across the bow then turned to the boat's line of travel and vanished.
11/06/06	0905	49°9.57'N 004°08.57'W	WSW 1	20+	1/swell	0	BN Dolphin	2		200m	NE	Y	2 slow swimming c200m to stbrd, parallel to boat but heading in opposite direction. No interest in boat. Sleeping?
11/06/06	0946	49°06.6'N 004°14.4'W	WSW 1	20+	0/swell	0	BN Dolphin	1	1	350m	NE	Y	Mother and Calf. Heading NE slow swimming then brief turn before resuming original course
11/06/06	1018	49°03.5'N 004°20.4'W	WSW 1	20+	0/swell	0	BN Dolphin	1		300m	NE	Y	slow swimming
11/06/06	1540	48°33.8'N 005°03.0'W	Calm	10+	0	0	Porpoise	1-2		100m	E	N	1 or more prob. 2 animals slow swimming E in glassy conditions
11/06/06	1618	48°32.0'N 005°06.6'W	Calm	10+	0	0	Porpoise	2		80m	E	Y	2 animals slow swimming East between boat and land. Both adults

Date	Time BST	GPS Reading Latitude (N) Longitude (W)		Wind direction/ force	Visibility	Sea state	Precipitn.	Species (ID confidence: def, prob, pos)	No. of adults	No of young	Distance to sighting	Animal heading direction (eg.N/S)	On Watch Y/N	Notes
12/06/06	1155	46°06.6'N	004°30.4'W	NNW 3	20+	3	0	Small Dolphin sp	3+	-	c 1km	N	Y	3+ dolphins seen at distance but being v. acrobatic and leaping clear of the horizon. Not seen again but a couple of puffy splashes. Striped Dolphin?
12/06/06	1310	46°00.6'N	004°21.4'W	N 3	20+	2	0	Dolphin sp	3	-	c 350m	NE	Y	3+ Dolphins, prob BN dolphin, moving NE across bow at a steady medium pace. No interest in boat. Most views of tail stock or dorsal fin only.
12/06/06	1530	45°50.7'N	004°04.2'W	E (8kn)	20+	1	0	Pilot Whale	3-4	-	80m	N then NW	Y	N across bow c100m ahead of boat then turned to NW. 1 close to boat at c80m others further away.
12/06/06	1545	45°49.9'N	004°02.5'W	E (8kn)	20+	1	0	Pilot Whale	9+	2+	80-100m	N	Y	Moving steadily NE across bow and away. 2+ smaller animals in loose pod.
12/06/06	1548	45°49.5'N	004°01.8'W	E (8kn)	20+	1	0	BN Dolphin	8+	-	80m	Milling	Y	A tight pod to port of bow. Came towards bow then dived only to reappear c200m to stern. Avoidance behaviour? Looking for nets?
12/06/06	1610	45°48.9'N	003°59.2'W	E (8kn)	20+	1	0	Whale sp	1	-	80m	NE	Y	Mesoplodont? 3 discrete surfacings off bow with no blow, then 2 'foot prints' seen on surface and gone. Initial impression from 1 st surface orientated across and facing boat of largeish BN Dolphin with BN dolphin-style dorsal fin and grey colouration. 2 nd surface orientated diagonally away from bow showed long body before and after dorsal fin. 3 rd surface orientated directly away from boat suggested wider bodied than dolphin.
12/06/06	1720	45°45.2'N	003°49.6'W	S (10kn)	20+	2	0	Dolphin sp	1	-	150m	SE	Y	Surfaced once parallel and c150m S of boat. Then vanished.
12/06/06	1752	45°43.2'N	003°44.3'W	S (10kn)	20+	1	0	Pilot Whale	4+	-	250m	SW	Y	4+ animals paralleling the boat's course 250m to port travelling SW.
12/06/06	2359	45°02.2'N	003°34.3'W	NW (6kn)	Night	0-1	0	Common Dolphin	6+	-	2m	Bowriding	N	Appeared out of nowhere at midnight to spend 10+ mins at the bow periodically dispersing to chase phosphorescent fish/squid but quickly returning to bow ride. Boat speed c8kn.

Date	Time BST	GPS Reading Latitude (N) Longitude (W)		Wind direction/ force	Visibility	Sea state	Precipitn.	Species (<i>ID confidence: def, prob, pos</i>)	No. of adults	No of young	Distanc e to sighting	Animal heading direction (<i>eg.N/S</i>)	On Watch Y/N	Notes
13/06/06	0850	43°59.0'N	003°44.3'W	SE	20+	2	0	Striped Dolphin	4+	-	4m	In to Bow from S	Y	1st seen c 1mi off the port bow being v. acrobatic, including upside down leaps. Then came into the bow for c1min of bow riding before vanishing.

Appendix 3 - Species recorded on dedicated watches

Note: All times are BST. All sightings recorded by BD.

10th June

Watch start time	Watch start location	Watch end time	Watch end location	Sea State	Visibility	Precipitation	Species	Number	Notes
1100	Swanick Marina	1215	Off Fowley spit	2	20+	-	Little Egret Oystercatcher Sandwich Tern Black-headed gull Herring Gull	2 3 6 c15 5	
1215	Off Fowley spit	1400	Needles	2	20+	-	Sandwich Tern Black-headed Gull Herring Gull Lesser BB Gull Swift Tern sp Common Tern Gannet Little Tern Guillemot Cormorant	1 c27 8 1 2 1 10+ 1 4 1 1	2 SE 1 ad
1400	Needles	1500	Off Swanage Bay	2	20+	-	Gannet Guillemot Herring Gull Sandwich Tern Common Tern	15 3 3 1 4	All ad
1500	Off Swanage Bay	1600	Off St Aldheims Head	2	20+	-	Gannet Herring Gull Sandwich Tern Cormorant Fulmar Manx Shearwater Kittiwake Swift Lesser BB Gull	4 9 1 2 1 1 2 3 1	1 juv at 1505 rest ad
1600	Off St Aldheims	1700	50°27.6'N 002°13.7'W	1	20+	v	Gannet Herring Gull	10 1	All ad

11th June

Watch start time	Watch start location	Watch end time	Watch end location	Sea State	Visibility	Precipitation	Species	Number	Notes
0800	49°14.8'N 003°58.7'W	0900	49°10.2'N 004°7.2'W	0-1 /swell	10 mi	-	B-n Dolphin Gannet Fulmar Lesser BB Gull	3 30 1 2	See Notes 1 imm @ 0855 with deformed (decurved) bill
0900	49°10.2'N 004°7.2'W	1000	49°5.1'N 004°17.2'W	0 / Swell	10 mi	-	B-n Dolphin Gannet Euro. Storm Petrel	2 30 9	See Notes 2 S @ 0921 @ 49°08.3'N 004°11.0'W 6 feeding @ 0940 @ 49°06.91'N 004°15.27'W 1 SE @ 0946 @ 49 06°21'N 004°15.27'W
1000	49°5.1'N 004°17.2'W	1100	48°59.1'N 004°28.6'W	0 / Swell	10 mi	-	Gannet Fulmar ?Arctic Skua B-n Dolphin	21 2 1 1	All ad See notes
1100	48°59.1'N 004°28.6'W	1200	48°52.7'N 004°38.5'W	0 / Swell	10 mi	-	Gannet Fulmar Swallow Manx Shearwater Lesser BB Gull Guillemot Euro. Storm Petrel	12 2 1 1 1 1 1	4 imm - singles at 1207, 1208, 1224 & 1226 1 SW @ 1108 @ 48°58.2'N 004°30.21'W 1 SW @ 1122 @ 48°56.7'N 004°32.7'W 1 SW @ 1156 @ 48°52.9'N 004°38.2'W
1200	48°52.7'N 004°38.5'W	1300	48°45.9'N 004°47.1'W	0 / Swell	10 mi	-	Gannet Fulmar Lesser BB Gull Herring Gull	10 1 10 1	
1515	nr. 48°35.9'N 005°59.1'W	1600	48°32.6'N 005°5.3'W	0 / Swell	10 mi	-	Silver- Y Euro. Storm Petrel Porpoise	1 2 2	On to boat See Notes
1600	48°32.6'N 005°5.3'W	1700	48°29.7'N 005°10.1'W	0	10 mi	-	Porpoise Manx Shearwater Euro. Storm Petrel Gannet Great BB Gull Lesser BB Gull Fulmar	2 1 2 27 9 1 1	See Notes @1600 @1600, 1659 5 imm rest ad

11th June cont.

1700	48°29.7'N 005°10.1'W	1800	48°24.7'N 005°10.9'W	1	5 mi, / patchy fog	Patchy drizzle	Euro. Storm petrel Great BB Gull Lesser BB Gull Gannet Guillemot Common Tern H'bird Hawkmoth	2 2 1 59 1 1 1	@ 1710, 1715 Most imm, all N Winter plumage N @1721 @1735
1800	48°24.7'N 005°10.9'W	1900	48°16.3'N 005°12.3'W	0 / Swell	5 mi, / patchy fog	Patchy drizzle	Manx Shearwater Euro. Storm Petrel Fulmar Gannet Guillemot Common Tern Storm petrel sp	1 2 2 8 2 1 1	
1900	48°16.3'N 005°12.3'W	2000	48°6.5'N 005°12.7'W	0 / Swell	5 mi, / patchy fog	Patchy drizzle	Euro. Storm Petrel Gannet	1 5	
2000	48°6.5'N 005°12.7'W	2100	47°57.9'N 005°11.6'W	0	5 mi, / patchy fog		Manx Shearwater Fulmar Gannet Rush Veneer moth	2 2 6 1	

12th June

Watch start time	Watch start location	Watch end time	Watch end location	Sea State	Visibility	Precipitation	Species	Number	Notes
0600	46°52.6'N 004°54'W	0700	46°43.7'N 004°53.4'W	2	300m	Fog	Kittiwake Lesser BB Gull Fulmar	2 1 1	1 ad 1 imm landed on boat at 0610
0700	46°43.7'N 004°53.4'W	0800	46°35.3'N 004°50.3'W	2	20 mi	-	Gannet Fulmar Euro. Storm Petrel	3 2 1	
1145	nr. 46°06.6'N 004°30.4'W	1230	46°03.5' N 004°27.5'W	3	20 mi	-	Dolphin sp. Lesser BB Gull Gannet	3 1 3	Prob. Striped. See Notes
1230	46 03.5' N 004 27.5'W	1300	46°1.5'N 004°33.1'W	3	20 mi	-	Nothing		
1300	46°1.5'N 004°33.1'W	1400	45°57.2'N 004°14.9'W	3	20 mi	-	Dolphin sp Gannet	3 3	See Notes

1400	45°57.2'N 004°14.9'W	1425	-	3	20 mi declining	Watch ended due to rain	Lesser BB Gull Nothing	1	
1530	45°50.7'N 004°04.2'W	1600	45°49.1'N 004°0.3'W	2	20 mi	-	Pilot whale BN Dolphin Whale sp. Euro. Storm Petrel Gannet	14 8 1 3 2	See Notes See Notes See Notes
1600	45°49.1'N 004°0.3'W	1700	45°46.3'N 003°52.4'W	2	20 mi	-	Storm Petrel Gannet Lesser BB Gull	1 3 1	
1700	45°46.3'N 003°52.4'W	1800	45°42.7'N 003°43'W	2	20 mi	-	Pilot Whale Dolphin sp Gannet	4 1 1	See Notes See Notes
1800	45°42.7'N 003°43'W	1830	45°34.5'N 003°29.6' W	2	20 mi	-	4- spotted Footman	1	

13th June

Watch start time	Watch start location	Watch end time	Watch end location	Sea State	Visibility	Precipitation	Species	Number	Notes
0700	44°10.8'N 003°44.1'W	0800	44°4.3'N 003°44.7'W	1	Good	-	Skylark	1	@ 44°05.7'N 003°44.5'W
0800	44°4.3'N 003°44.7'W	0900	43°56.8'N 003°44.1'W	1	Good	-	Gannet Shearwater sp Striped Dolphin	1 1 4+	prob. Manx See Notes
0900	43°56.8'N 003°44.1'W	1000	43°50.5'N 003°43.1'W	1	Good	-	Gannet Lesser BB Gull	1 1	
1000	43°50.5'N 003°43.1'W	1100	43°43.6'N 003°43.1'W	1	Good	-	Lesser BB Gull Manx Shearwater Gannet	6 1 1	1044 @ 43°45.7'N 003°43.0'W
1100	43°43.6'N 003°43.1'W	1200	43°37'N 003°43.1'W	1	Good	-	Gannet	3	
1200	43°37'N 003°43.1'W	1300	43°30.1'N 003°43.1'W	1	Good	-	Gannet Lesser BB Gull Balearic Shearwater	3 2 2	2 E @ 1255 @ 43°31.0'N 003°42.8'W
1300	43°30.1'N 003°43.1'W	c1400	Santander Harbour mouth	1	Good	-	Gannet Lesser BB Gull Herring Gull	1 1 1	

