



Splash!

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The official newsletter of the **Biscay Dolphin Research Programme Supporters Group**
www.biscay-dolphin.org.uk
ISSUE NUMBER 4 (Summer 2004)

Dear Friends,

Spring proved to be an exciting time onboard the Pride of Bilbao as the following reports will show. March had some exciting weather but April had some exciting animal encounters. However, as the April report shows you don't have to be on a ship to be in with a chance of encountering whales or dolphins in British waters.

Find yourself a headland with a safe vantage point and settle down for a few hours with a good pair of binoculars. The South West Coast of England and the West of Scotland often provide the most regular sightings in the UK. Sightings are not guaranteed but dedicated sea watching can often pay off. By taking a chance and putting the hours in on one of my local headlands in Cumbria I have located a group of harbour porpoise who have been a joy to watch. No one else knows they are there!

Red tides have been encountered on a number of occasions of late in the Bay. This is a phenomena caused by an excessive Phytoplankton or algae bloom – often triggered by enrichment of the water. Whilst some are no doubt the result of natural nutrient enrichment it is evident that mans activities both on land and at sea are to blame for the increase in red tides around the globe. Having just witnessed one today and taken some samples it really does look like a rich soup of tiny organisms. Algae blooms are toxic so please don't touch them yourself!

Some of you have asked where you can buy BDRP merchandise. We have highlighted a selection of BDRP merchandise in this newsletter but even more can be found on our website at the above address. This is a great way to raise much needed funds for the Programme and to spread the 'word' by adorning a t-shirt, mouse mat or photograph.

Once again, thanks for your support.



News from the Bay

March

Some truly dire weather was experienced by the March survey team. Conditions were a consistent force 8 or 9 and insisted on being "bang on the nose" for the whole trip. However, the team lead by Jeff Picksley hung on in and managed to pick up some sightings, which in the circumstances, proved their commitment to the task. Southbound they had to wait until 15.30 for any activity when common dolphins came into Bow Ride followed shortly by another brief sighting of another 2 animals. The bridge windows were regularly drenched in spray throughout the day. Northbound, a few small groups of common dolphin were glimpsed through the spray covered windows along with an beaked whale species and handful of bird sightings.

Tom Bereton and Clive Martin travelled to Belgium at the end of the month to give a presentation to government ministers about the use of ships in cetacean research. They were able to elucidate to ministers on the science that comes from such surveys and the important work of the BDRP and its partners in the Atlantic Research Coalition (ARC).

MARCH – survey results

Cetaceans Recorded:

Common Dolphin -	22
Bottlenose Dolphin	2
Dolphin sp.	1
Beaked whale sp.	1

Birds Recorded:

Manx Shearwater	5
Gannet	324
Northern Fulmar -	258
Great Skua	18
Great Black-backed Gull -	4
Lesser Black Backed Gull	20
Large Gull sp.	3
Kittiwake -	29
Guillemot	97
Razorbill	5
Puffin	9
Auk species	94
Unidentified waders	9

Research Team:
Jeff Picksley, John Day, David Spratt

April

During April a remarkable number of cetaceans were again seen in the Bay. Sightings made by Clive Martin BDRP full time wildlife officer on board the Pride of Bilbao between 14th and 16th April, were most exciting. Whilst these sightings were made outside of the conventional offshore survey periods, they demonstrate the value of year round recording. Highlights included very large numbers of Bottlenose Dolphin (almost as many as the whole UK population), the largest ever count of Pilot Whale on a single trip and unseasonal numbers of Fin Whales. Please note that the sightings list that follows for 14-16th April is not the same as the monthly effort based surveys that are presented in grey boxes on this newsletter.

Minke whale - 4
Fin Whale - 10
Sperm Whale - 1
Cuvier's Beaked - 2
Bottlenose Dolphin - 251
Striped Dolphin - 320
Common Dolphin - 85
False Killer Whale - 6
Long-finned Pilot Whale - 687 (possibly more than 1000 may have been present)
Harbour Porpoise – 2

Elsewhere in the Channel, most notably off the Dorset coast, several sightings of bottlenose dolphin were recorded. The dolphins were seen on Good Friday, 16th April and again on Sunday 18th April for about 50 minutes by BDRP Director Tom Bereton as they moved slowly west past the seafront, feeding at times. The dolphins are probably part of the same group, that have been semi-resident in Lyme Bay since the beginning of the year. In recent years Durlston Country park (where there is a dolphin watch programme) has been the place to see dolphins in Dorset. The arrival and residency of a larger group of Bottlenose Dolphins into Lyme Bay is great news because Bottlenose Dolphins are uncommon in Britain and Europe, with the total British population being no more than 300-500 individuals. This makes Clive Martin's sightings above all the more exciting. For further details about Durlston see:

www.durlston.co.uk



Bottlenose dolphin

APRIL survey results

Cetaceans

Bottlenose Dolphin	28
Common Dolphin	207
Cuvier's Beaked Whale	4
Fin Whale	7
Minke Whale	1
Pilot Whale	33
Sperm Whale	1
Striped Dolphin	60
Dolphin Spp.	15-20
Small Whale Spp.	1
Large Whale Spp.	2
Tuna Spp.	2

Total Animals 362

Birds

Fulmar	70
Manx Shearwater	333
Gannet	480
Grey Plover	4
Dunlin	24
Redshank	1
Bar-tailed Godwit	35
Whimbrel	13
Small Wader Spp.	39
Great Skua	12
Pomarine Sauk	1
Arctic Sauk	1
Yellow-legged Gull	2
Lesser Black-Backed Gull	251
Little Gull	666
Kittiwake	2
Little tern	2
Sandwich Tern	7
Arctic Tern	93
'Commic' Tern	15
Guillemot	69
Swift	2
Kestrel	1
Collared Dove	2
Barn Swallow	16
Sand Martin	1
House Martin	3
Pipit Spp.	

Research Team:

James Phillips, Russell Neave, Jo Wharam

May

May was a month that illustrated just how unpredictable the Bay can be for sightings. As with all wildlife watching you never know what to expect, when or where to expect it. This is part of the excitement of wildlife watching. Clive Martin's special report opposite illustrates this point rather well. The May survey team had a relatively quiet survey. Although it was almost continually sunny throughout, with a strong nor-easterly breeze the sea state didn't drop below 4 until the afternoon of the last leg. White caps made finding cetaceans difficult. No cetaceans were seen going around the tip of Brittany, and the team had to wait until 12:30 for the first two Common Dolphin, which milled lethargically sub-surface before turning into the bow. It looked as if sightings of ocean sunfish were going to outnumber those of cetaceans until an hour into deep water when a single group of 15 Bottlenose Dolphin came into the bow, and following another mixed sex group of 8 adult Pilot Whales. North bound sperm whales were seen just north of the Canyon but the team had to wait until 6pm before there was anymore action; for over an hour there was a near continuous arrival of Common Dolphin into the bow, and then nothing for the rest of the day.

May

Cetaceans Recorded:

Common Dolphin -	185
Striped Dolphin -	1
Bottlenose Dolphin	22
Pilot Whale	8
Sperm Whale	2

Birds Recorded:

Great Northern Diver	1
Fulmar	148
Manx Shearwater	13
Storm Petrel	3
Gannet	238
Knot	10
Sanderling	3
Dunlin	3
Little Stint	1
Great Skua	3
Herring Gull	7
Yellow-legged Gull	5
Lesser Black-backed Gull	59
Greater Black-backed Gull	1
Kittiwake	9
Arctic Tern	6
Guillemot	6
Turtle Dove	3
Collared Dove	8
Racing Pigeon	1
Swift	9
Swallow	6
House Martin	30
Chiffchaff	1

Plus:

8 Ocean Sunfish

Research Team:

Nigel Symes, Duncan Fyfe, John Day

Wildlife Officer Special Report 26th May 2004, by Clive Martin.

Sea state 0/1 cloud 0/8.

First sighting of day was 100 energetic Common Dolphin coming into bowride just Southwest of Ushant. Some distant harbour porpoise were also visible due to the sea conditions but were mainly distant. Red plankton was again seen in long streaks...but very red!

Bottlenose dolphin and associated Gannet action at 1605. I then spotted distant Pilot whale on the nose so got everyone ready for the impending encounter...took the data and went onto the decks to help passengers get onto to them. They came pretty close down port side and everyone got good views.

From deck 11 (the helicopter deck) I looked under the port bridge wing and saw that we had been joined by a group of fast swimming Dolphin about 400mts off us aft the bridge wing. Something was very different about them!. They approached line abreast x 4 and one behind them... surface surging with a lot of splashing and always synchronised. These went subsurface as they neared the ship followed by another group displaying similar actions. The two groups came together aft of midships port side and the 9 animals travelled away from the ship once again in complete synchrony with surface surging. I just knew there was something very different...too small for BND but bigger than Common, pointed dorsal and relatively prominent.. Struggled to get definitive markings and as one animal dived I saw distinct "light" marking and thought to myself "that is well to the rear of the animal".... For most of the encounter these animals were head or fluke onto me. I was dealing with a lot of passengers on the deck (over 200) and trying to concentrate and because of the light marking ruled out Bottlenose Dolphin and thought "they must be common dolphin" ??.... Wrong !!

I had a good view of their flanks and clearly saw the yellow caudal flash and gave an excellent call...ATLANTIC WHITE SIDED DOLPHIN....I still had the bins on them and once again picked up the light markings on the caudal area. Verified. No doubt.

A personal first for me. The consolation for all those who think "why doesn't it happen when I am on a research trip"...well, I can tell you that almost definitely you would not have seen these dolphin as they were aft the beam for most, if not all, of the encounter....I was lucky that I had gone out onto the decks and was the right side !

More good sightings followed until sunset but surpassed by the previous sighting. We still have Northbound to go...may be a Blue Whale !!

Atlantic White Sided Dolphin



Atlantic
White Sided
Dolphin

Creature Feature

Sperm whale. *Physeter macrocephalus*



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The sperm whale is known and recognised by everyone as the 'Moby Dick' whale. When Herman Melville wrote the tail of the leviathan he was reflecting the situation from the whalers perspective. More than any other species the sperm whale has come to reflect the changing face of mans relationship with cetaceans. Once threatened globally sperm whales and now being seen in increasing numbers on their old calving and feeding grounds. The Bay of Biscay has seen sperm whales on migration over the years and more recently increasing summer residency by what are thought to be juvenile coalitions.

Sperm whales may be found in groups of between one and one hundred and fifty animals. Mixed groups (adult female and young of both sexes) tend to be the larger groups. When feeding groups may be spread out over tens of square miles. Sperm whales feed on deep water squid and may dive for up to 2 hours and to depths greater than 3,000 on feeding dives. After a long feeding dive sperm whales may spend 20 minutes resting at, or near, the surface breathing every 10-40 seconds. The blow of a sperm whale is very distinctive. The blowhole is a single hole offset to the left side of the head. This causes the low bushy blow to be projected forward and to the left. This helps identification at great distances.

Copyright: Martin Camm

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Sperm whales are between 3.5 and 4.5 metres at birth and grow to between 11 and 18 metres in adulthood. Females are usually between 4 and 6 metres smaller than the adult males or 'bulls'. Sperm whales have a huge square head that accounts for around one third of the total body length with a small series of humps running from a hump-like dorsal fin that is the first of the series of humps to the tail fluke. The fluke itself is broad and

triangular. There is a distinct notch in the middle of the fluke and the trailing edges may have notches. When a sperm whale sounds it raises its tail fluke clear of the water. There is no white colouring on the bottom on the flukes as there is with some humpback whales.

Sperm whales breach with a high exit from the water and then falls with a belly flops creating a huge explosion of spray.

Sperm whales are usually slow swimming and often 'log' motionless or near motionless. During a dive sequence sperm whales will often surface close to the original position at which they sounded. Work in the Mediterranean recently showed that it is possible to predict the surfacing position of a sperm whale based on it's diving position and length of time underwater. When alarmed sperm whales are able to make a startling transition from near stillness to very high speed swimming. This fast swimming appears to last for short periods of 5 minutes or less but the animal may achieve over 20 knots during that time.

Sperm whales are readily identifiable at sea but at distance it is possible to confuse the blow with humpback and sei whales. If only the flukes are seen then it is possible to confuse with humpback whales. Once seen close up it is unlikely that even an inexperienced observer would mistake them. (My 6 year old son was able to identify a groups at 1 mile distance the first time he saw them).

Andy Williams

Red Alert

On 25th April a Red Tide was observed in the Bay by the survey team -the sea had turned red. This is a phenomenon known as a red tide.

A red tide is a result of a Phytoplankton or algal bloom. Though very colourful in appearance it can be dangerous because it can kill aquatic life. A recent red tide in China blanketed an area of ocean the size of 1.3 million football fields. The Chinese State Environmental Protection Administration advised people not to eat fish in the area of the bloom because "It might cause damage to people because the red tide contains paralysing toxins."

Dinoflagellates and related algae are found all around the world's oceans. Occasionally, they multiply to such large numbers that the water turns brown or red, triggering mass die-offs of fish. In many cases, the killing power of these often harmful algal blooms has been traced to toxins the algae secrete. These poisons can also concentrate in shellfish and other marine life and many countries monitor seafood to safeguard human health

Red tides are the result of process known as Eutrophication i.e "the enrichment of water by nutrients especially compounds of nitrogen and phosphorus, causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms and the quality of the water concerned." (European Commission, Urban Waste Water Treatment Directive, 1991).

Eutrophication in the sea disturbs the natural balance providing algae with a glut of food, and causing them to multiply. Some red tides are undoubtedly caused by natural process – currents may bring deep water nutrients towards the surface. However, more often than not their origins are man made. Whatever the cause the results of which have the potential to suffocate all life in the vicinity turning parts of the oceans into what the United Nations Environment Programme (UNEP) calls 'dead zones'. UNEP says that the growth of these dead zones is becoming an even greater menace to the life of the sea than the over exploitation which is affecting three-quarters of the world's fisheries. A recent report by UNEP alarmingly revealed the number of such zones in the world's seas has been doubling every 10 years, as pollution has increased.

Nearly 150 dead zones have now been identified - ranging from a third of a square mile to nearly 50,000 square miles. One of the biggest in the Gulf of Mexico is the size of Scotland and is believed to be largely caused by pollution washing down the Mississippi river. Others dead zones are in the Black Sea, the Baltic and the northern Adriatic.

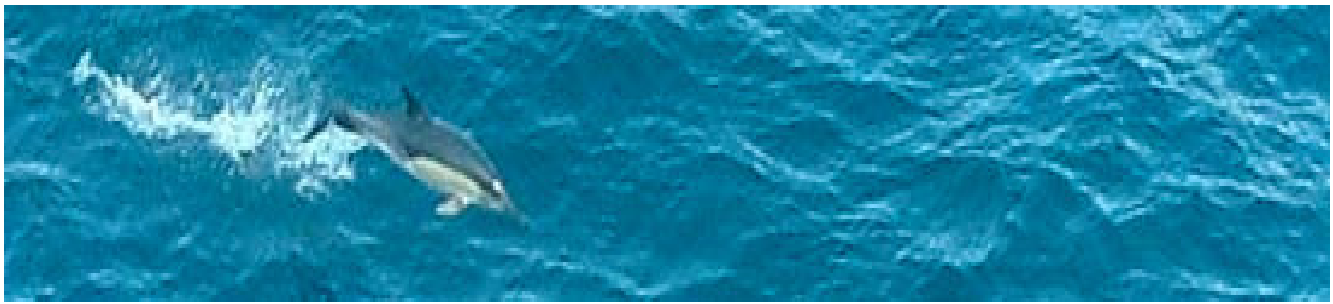
Dr Klaus Toepfer, UNEP's executive director, says: "Humankind is engaged in a gigantic global experiment as a result of the inefficient and often overuse of fertilisers, the discharge of untreated sewage and the ever-rising emissions from vehicles and factories. Unless urgent action is taken to tackle the sources of the problem, it is likely to escalate rapidly."

In 1996 a red tide along the southwest Florida coast killed 149 endangered manatees in a six week period between March and April. In 2003 a red tide of algae killed a further 60 manatees. The algae responsible are one-celled organisms that release a toxin into the water when it dies. Manatees ingest the toxins when they eat or inhale them when they come to the surface to breathe. The toxin then affects the animals' co-ordination and causes a paralysis and ultimately death.

Eutrophication is a problem for both marine and freshwater environments. In the UK the Environment Agency and the Scottish Environmental Protection Agency monitor rivers, lakes and all discharges in to the freshwater environment to help prevent problems of eutrophication and other problems arising from land based pollution. Releases into the freshwater environment ultimately end up in the sea and this is one way that everyone can help reduce the likelihood of a red tide occurring. Instead of flushing old fertilisers down a surface water drain or tipping your garden waste into the river make sure you dispose of your waste correctly at the nearest suitably licensed facility. Both domestic and industrial properties should make sure they are connected properly to the foul sewer and not to surface water drains. We can all play our part. However, it is far more difficult to regulate and police activities at sea and present controls to do so are woefully inadequate. The sea has long been thought of as a dumping ground for all sorts of waste, chemicals, sewage and unwanted items. A red tide is nature's way of sending out a warning that it can't take anymore.

To find out more:

- For those of you who can read Spanish the 'red tide' noted during the 25th April survey appeared in Spanish news along with a satellite photo. <http://servicios.elcorreodigital.com/vizcaya/pg040505/prensa/noticias/Gente/200405/05/VIZ-GEN-027.html>
- United Nations Environment Programme <http://www.unep.org>



Merchandise - a selection

A range of BDRP merchandise is available and can be ordered from our website (www.biscay-dolphin.org.uk). Only a small selection is illustrated here to whet your appetite.

Clothing:

Polo Shirts - As worn by the team onboard the ship! £13.99 plus £2p&p

Small, Medium, Large, XLarge, XXXLarge

Sweat Shirts. £16.99 plus £2 p&p

Reports:

Ecological Studies in the Bay of Biscay and English Channel, Volumes 1-3 - Published by BDRP.

All reports are sold during Wildlife Officer presentations aboard the "Pride of Bilbao". Individual volumes may be subject to availability.

Volume 1: £3

Volume 2: £3.50

Volume 3: £3.50

Videos:

Ziphius 2002

A half hour VHS video, which compiles video footage from a week of cetacean watching in the southern Bay of Biscay in August 2002. This BDRP video contains excellent footage of nine species: Common, Striped and Bottlenose Dolphins and Fin, Cuvier's Beaked, Sowerby's Beaked (the best video footage currently available) and Minke Whales. Definitely one for the ID buffs! Available onboard the Pride of Bilbao during BDRP Wildlife Officer presentations.

Video Price £12.99 plus £1.50 p&p (UK)

If you would like to receive **further copies** of **SPLASH!** - emailed to our supporters **free of charge** - then please send details of your email address to myself, Duncan Fyfe at:

Duncan@fyfe2003.fsnet.co.uk

The BDRP will hold your details in confidence and they will not be passed onto any third party.

DON'T FORGET Whale and Dolphin Mini Cruise Specials

As reported in the previous issue themed Whale and Dolphin Specials are confirmed as **July 13th and September 25th 2004** with the possibility of other dates available subject to demand. If you are interested in participating as a passenger then please phone 08705 20 20 20 quoting Whale and Dolphin Specials ref 83680 for details. Availability may now be limited.

HOW TO MAKE A DONATION to the BDRP

The BDRP is a non-profit making organisation run entirely by volunteers and funded largely by donations from the public. If you would like to make a further donation then please send a cheque or postal orders made payable to:

"BDRP"
6 Manor Way,
Lee on Solent,
Hampshire. PO13 9JH

All proceeds will go straight to the BDRP to enable us to continue our work conserving the whales and dolphins of the Bay of Biscay scientific investigation and educational activities.

Once again we THANK YOU for your support.

With thanks for your support

And thanks to our Splash contributors: Andy Williams, Clive Martin, Tom Bereton and the BDRP teamleaders for their reports.

Duncan Fyfe