

# **EXPEDITION DIARY Azores 2007**

# By Clare Fothergill

#### 3 April

This is just a quick email to introduce myself as your expedition leader for this year's Biosphere Expedition in the Azores. I am currently in Germany with Matthias (Biosphere's Director) packing up some of the expedition cameras and laptops and other equipment that we will be using during our research. I will be arriving in the Azores tomorrow and meeting up with Lisa and Chris (the scientist and skipper) to get everything ready for the first team members arriving next Monday. Chris emailed me after taking out Physeter (the boat we will be using) the other day saying that they had spotted three blue whales! Let's hope this is a good omen for the next few weeks! Looking forward to meeting you all soon.

Safe travels

Clare Fothergill Expedition Leader

# 7 April

I am sitting in Horta marina in the sunshine watching a yacht race in the bay. It is a beautiful sunny day and although the sea looks calm close to the land, apparently the wind speeds are up to 20 knots and waves are above 2 metres high outside of the protection of the islands! However the weather forecast for Tuesday and Wednesday next week, when we will be starting our data collection looks good. But don't forget your sea sickness tablets just in case! Chris has been making a few last minute preparations on Physeter and Lisa and I have been photocopying data sheets and making sure all the other kit is ready for the arrival of the first slot on Monday. We've also worked on our day-to-day plan and a copy of it is attached. Whilst this is a general plan in writing, please remember to stay flexible as things are very likely to change due to weather conditions and God-knows-what.

Everybody is excited about the start of this year's Biosphere Expedition in the Azores and all we need now are the team members!

Happy Easter & see you all soon.

#### 10 April

It was a beautiful bright and sunny morning on Faial today for the team members to start their data collection. After a morning of safety talks and explanations of the data sheets, we set off in Physeter, our trusty motorised catamaran. t was a perfect morning to start this year's research, with calm seas and little wind. There is always a lot of information to process in the first few days of a Biosphere Expedition but the team members were well rewarded for their concentration when the very first sighting of the day was a..... blue whale! Unbelievable...and in fact there was two of the gigantic beasts!

The spotters based on land had radioed in to say they had seen some 'blows' and Chris skillfully navigated the boat to where they were. It is difficult to get a true appreciation of just how large they are as we could only see the length of the animal from its blow hole to the tail. Even so this distance seemed pretty huge and we were able to stay with them for over half an hour. It was estimated that the largest animal was approx. 24 metres long! As they were feeding on krill it meant they would dive for 8-12 minutes before resurfacing and spending some time swimming and blowing spray where we could see them.

If this wasn't enough of an experience on our first day out on the boat we were then spoilt by a number of different schools of common dolphins which varied in number from about 30 individuals to over 100. At one point we had at least ten dolphins bow-riding in the clear blue waters and it was incredible to be able to hear their whistles and clicks just centimetres above them on the boat. There is something truly mesmerising about dolphins swimming so close, making such graceful and seemingly effortless twists, turns and leaps in and out of the water.

To top the day off we heard that a sperm whale had been spotted from the lookout on Faial. Lisa decided we should lower the hydrophone to see if we could pinpoint its location by listening to a series of clicking noises that a sperm whale makes when it is feeding. Sperm whales can stay underwater for up to 45 minutes so we really needed to have some idea of where it was going to surface. Chris managed to interpret the sounds well enough to position the boat just 90 metres away from where it came in. After following from what is considered to be a non stressful distance (50 metres) for the whale we were treated to a beautiful fluke as he went down to dive and feed again. The outline of the tail could be seen perfectly as it slipped into the water and enabled Sam and Lisa to be able to get some great shots which will be used to try to identify this whale against those in the database. So we had three successful photo identifications opportunities from the whales and two species of dolphins sighted all on the first day.

Well - I'm impressed!

#### 13 April

Yesterday the team remained on shore as a weather front came in and drenched the island in torrential rain. Visibility out at sea was poor and in these conditions there is not much point venturing out in the boat. Everyone was busy, however, with preparing digital photographs of bottlenose & Risso's dolphins and pilot & fin whales so they can be entered into the database.

The dorsal fins of these species are so unique to each individual that it is possible to recognise specific animals and over time build up information on the areas these cetaceans visit year on year. The Risso's dolphins are particularly interesting to identify. They start off life dark grey in colour but as they get older gain numerous scratches and scars through social interaction. These scars leave large white lines all over the fins, back and sides of the adult animals and over time the skin generally becomes much lighter. The scars are so distinctive that some animals can literally be identified from the boat. On Tuesday we were lucky enough to spot approximately 30 Risso's which swam close to the boat and slowly enough for Lisa and Janine to take loads of photos for identification. Underwater these dolphins look quite ghostly as their pale bodies are such a contrast to the surrounding water.

This morning we set out in the rain into a choppy sea with waves of up to 3.5 metres high. Needless to say there were a few green faces and a general queasiness about the boat! We had an amazing sighting, however, of two blue whales. Directed by the lookouts on land we came across the animals in high waves which only enhanced the sighting. The whales were moving at approx 12 knots parallel to the boat and came as close as 30 metres to us. Moving along together only a few metres apart the whales seemed to surge to the surface of the sea exposing their heads and mouths as the waves crashed around them. Arching through the water we were able to see the entire length of the body a couple of metres at a time, until the dorsal fin was visible and in a couple of instances their tails before they disappeared in a dive. Lisa estimated that they were about 22 metres long. It is difficult to explain how exhilarating it was to be out at sea, in the wind and rain with two of the largest animals ever to have lived on the planet cruising along beside us. Totally brilliant!

# 16 April

The summit of Pico (the volcanic island opposite Faial and Portugal's highest mountain at 2,352 m) glistened with snow yesterday morning as we set out on a calm and almost windless day. Our first sighting was a feeding frenzy of common dolphins and Cory's shearwater. Anyone who has seen the series 'blue planet' will remember the bait ball sequence where the dolphins chased the mackerel to the surface whilst the birds dived down from the surface to take their fill. With over 250 dolphins spread out over a 500 m radius from the boat we watched the chaos of dolphins and birds consume as much fish as they could, leaving the surface of the water shining with fish oil. Then followed five hours of what Sam decided should be known as, the 'baleen bonanza'. We spent most of that day on the south side of Faial in extremely calm waters and had nine Sei whales (one calf), one blue whale, and four fin whales (one calf)! On our return journey we spotted two loggerhead turtles, one of which Chris netted and brought on board. Unfortunately it was too small to be tagged but at least we now know that they exist in these waters! The other turtle unfortunately took a deep dive before we could net it.

Everyone was feeling extremely satisfied with the day with a record number of data sheets filled in when we spotted a small group of common dolphins. The surface of the sea was so flat and glassy that we could clearly see into the turquoise waters and watch as seven calves only half a metre in length swam closely to their mothers. We could even see the stripes known as foetal folds, on their skin which show how they have been curled up inside the womb and indicated than they were less than a month old. This was the icing on the cake for a beautiful day out on Physeter.

# 17 April

Today has been named the 'sperm whale strike back'! With wind speeds up to force 6 we had a bouncy morning on the boat. We headed out to the northeast of Faial where the lookouts had spotted some blows. In choppy waters we put out the hydrophone to listen for the 'clicks' of any sperm whales and could hear many! It wasn't long before several surfaced from feeding and we were able to start monitoring blow rates and take photos of flukes. Mind you taking photos when the boat is lurching about on the waves is pretty difficult but Lisa and Janine were able to capture six different animals.

There were at least two calves in the group and one was only about 2.5 metres long – so pretty small in comparison to its mother which was approx 10 metres. The return journey to the harbour was exciting as the catamaran crashed through the waves coming at us from all directions. Kevin, Sam and Janine had a cool saltwater shower seated at the front of the boat and we all piled into Peter's Café Sport for hot coffee and chocolate when we got back to Horta!

# 19 April

A beautiful sunny morning greeted us today as we walked along the harbour to board Physeter where our skipper awaited with more amusing tales of life! It was to be a somewhat frustrating yet incredible day dominated by sperm whales and although many titles for today's activities have been suggested the only one printable is 'low sperm count'! This is, however, somewhat misleading as we actually had loads of sperm whales encounters, but very few flukes which are what we need to make identification of individual animals possible. When the sperm whales are feeding they surface for approximately 10 minutes breathing and therefore 'blowing' regularly before taking a deep dive which is usually marked by a fluke.

Today, however, the sperm whales were socialising and the normal pattern of breathing, fluking and diving was totally disrupted. Instead the whales, of which there were approximately 15, were just cruising around at the surface, sticking their heads up out of the water, shallow diving, side fluking and lob tailing (smacking the tail against the surface of the water). Janine was even lucky enough to see one whale breach when it propelled itself right out of the water! Without the usual predictability of their actions it was extremely difficult to position the boat close to a whale that was going to fluke and there seemed to be whales popping up everywhere. It was amazing to watch and quite mesmerising with the afternoon sun beating down on the calm waters. Despite the difficulties, Lisa and Kevin did manage to photograph a number of flukes and it was by no means a lazy day with a total of 29 different sightings recorded by the time we returned to the marina.

There is a tradition in Horta for sailors to paint murals on the harbour walls and Biosphere Expeditions is well represented with three murals from past years already in place. So this years' artwork was started today with the help of a few well earned beers which the team members and expedition leader drank whilst sitting in the early evening sunshine!

# 20 April

The last two weeks have flown by and no one could believe that today was the last day for the first slot. We had more awesome experiences, however, with seven different species sightings. Considering we have had a total of eight species over this slot that was extremely impressive for one day's data collection. The team members were really hoping for an encounter with bottle nose dolphins and they were not disappointed. We came across approximately 35 of them first thing in the morning and we saw the same group as we travelled back to the harbour this evening. Being between 2.5 - 4 metres long these dolphins seem to have even more presence about them than the common dolphins. We were treated to a fantastic show of acrobatics as they leapt clear of the water just metres from the boat. It was a stunning choreography of dolphins darting around the boat in synchronised jumps, leaps, somersaults and bow riding.

It was the calmest day of the expedition so far and we motored out more than 15 miles from shore. For part of the day the sea was like a mirror with hardly a ripple on the surface. We had sightings of blue, fin and sei whales as well as Risso's and striped dolphins in the afternoon. At one point saw the blow of a blue whale and then saw it dive, so we decided to wait until it resurfaced to photograph it for identification. Normally blue whales only dive for about 12 minutes so we thought we would get this one quite easily in the calm waters. We were hanging around for more than half an hour to get the photos as it was covering large distances whilst diving, which meant we were never quite close enough when it resurfaced. By the time we motored over to the whale it would dive again.

Eventually we were in the right place at the right time and could not believe that it was 'patch' (which refers to the white mark on his fin). Patch was the blue whale we saw on the first day and have photographed him frequently over the two weeks!

#### 21 April

So this morning the team members packed up and we all said our farewells. Thank you to everyone for all your hard work and enthusiasm over the past two weeks. You have been great to work with and always entertaining! It has been a great start to this year's expedition and we hope we have as much success with the data collection in the other slots. During our time at sea we have had the following sightings of cetaceans.

48 sperm whales 24 sei whales 14 blue whales 2,297 common dolphins 39 Risso's dolphins 290 striped dolphins 56 bottlenose dolphins

We now have a lot of work to do to establish exactly how many different individuals have actually seen!

I look forward to meeting the team members for slot 2 on Monday and hope we have the same good fortune of the past two weeks.

#### 24 April

Yesterday TAP (Air Portugal) delivered all the team members for the second slot roughly on time and with all their luggage - which was a great bonus!

Today after a morning spent in the harbour going through safety procedures and explaining the data sheets, we headed out to sea.

We had fairly rough conditions especially for the first day of data collection with three metre waves at some points. Despite the fact we headed to the south side of Pico hoping for shelter we still found ourselves in 'confused and sloppy' waters according to our skipper! Nevertheless the team members threw themselves into data collection when we came across a number of sperm whales which the lookouts on land had directed us to. The high waves and wind made it difficult to spot the blows, but we were able to take photo identifications of six animals, two of which were calves. When we got back to base Lisa was able to match up three of the whales to a pod that had been seen in these waters in 2002 - so despite the difficult weather conditions it was a very successful first day.

We also had two encounters with common dolphins with over 200 individuals spotted, but again this was more tricky than usual because the sea was so choppy. A few of the team members were still finding their sea legs and the aft deck was relatively busy this afternoon with folks trying to throw off that desperate feeling of sea sickness! Hopefully the conditions will be better tomorrow and I am glad to say that none of the teams' enthusiasm has been lost.

# 25 April

The second day out at sea was given the title 'no puking but lots of fluking' by Julie! So as you can gather we did have a lot of sperm whale encounters - in fact we think we saw eight females and two calves, in a pod that were feeding in an area south of Pico. The ocean was calmer and everyone was able to get on with their tasks on board. The day was also great for dolphins with common, bottle and Risso's dolphins sighted in the morning.

There was a lot more boat activity around the island today than we have seen before, probably due to the fact it was a public holiday in Portugal. We were alone, however, when Chris spotted what he is sure was a humpback fluking! Sven, in jest had announced we were going to see a humpback today and apparently we did. Unfortunately we were unable to find him (the humpback that is) again to make a positive identification but one of the vigias (lookouts on land) also radioed in and said he had seen one humpback in the area we had been in. Apart from this sighting the baleen whales have been exceedingly quiet this week with only one blue whale blow seen in the distance. The giant must have been photo shy, however, as we never saw him again.

#### 26 April

Today was another sperm whale success. We managed to find a bachelor group of whales, which is more unusual to see than a pod of females. When the males are approximately six years old they leave the matriarchy they have been born into and swim off to meet up with the 'boys'. Once the males are in their breeding prime and are more mature they tend to explore the oceans alone searching for females to mate with. The bachelor group we were trying to identify was made up of six quite large whales up to 16 metres in length.

We spent more than three hours with them taking photos of the tail flukes as they began their deep dives in an area where the sea floor was at least 1000 m deep. We monitored one whale that we named 'Bendy Boy' (because of his extremely floppy tail) who was diving for a fairly accurate 50 minutes each time and then spending roughly 10 minutes on the surface catching his breath before diving again. On checking the database of flukes Lisa found that this pod was 'new' and had not been identified before in the Azores, Norway, the Canaries or in the Caribbean.

With the wind blowing from the south we decided to come back to Horta a little bit earlier as the boat was getting bounced about all over the place in the 2-3 metre waves and so were we! The boat began to surf a little as the waves kept catching us from behind but Chris expertly drove us back to the safety of the harbour. It's all in a days work for super heros!!

#### 30 April

At last we have had a day of baleen whales! Having been a little spoilt with all the sperm whale sightings it was great to see some new baleen whales. The rough seas, however, have continued and the team members from this slot are beginning to think they are tougher than the previous slot who had much calmer days at sea!! We set out this morning towards a baleen whale that one of the vigias had spotted from the lookout. As we headed out from the harbour in the bright sunshine we had the magnificent sight of a 45 m long super yacht cruising through the channel between Pico and Faial with all of its three, 30 m high sails raised. These boats are highly automated and theoretically only require a crew of two to sail across the Atlantic! The marina often has a number of stunning square rigger tall ships moored along the walls and for me it is even more inspiring to see these boats rather than the new high tech computerised vessels.

Our first sighting of the day was a group of 25 common dolphins which bow rode with us for a short distance. Then, after a bit of searching, we found our baleen whales. Initially four fin whales, which seemed to be oblivious to our presence or were intrigued by us, swam within a couple of metres of the boat and underneath it. Despite the rough conditions we were still able to see the turquoise bodies of the animals in the water and one fin whale even swam upside down to reveal its white underbelly just a metre from the boat. As the 2-3 m waves sloshed about we had some great views of these creatures and unfortunately the wind direction allowed us to experience their bad baleen breath - which after years of chomping on krill you can imagine is pretty rancid! After some difficult but successful 'fin photography' we left these animals to try to identify two blows further west of us. As we came up close to the new blows we were pleasantly surprised to see that one of them was... a blue whale. Yes, the first proper sighting of one this slot!

He didn't hang around, however, and went into a dive almost as soon as we had found him. With the waves at Beaufort scale 4, it was difficult to spot him again and we thought we had lost him. Luckily he did reappear later and although the conditions were rough everyone did get a fairly good view and we were able to take some good identification photos. This whale was a new one for this year's expedition.

Everyone has been hassling me to include some of Chris' obscure jokes and stories in the diary, but I keep telling them that they just won't make any sense a second time round. How do you begin to retell a story about his mum holding the world record for 'keepie uppies' or how the local mayor dresses in a jelly fish outfit and eats grass? Exactly - best kept for the boat I think!

#### May 1

May Day was an on-shore day for the team and most people took the opportunity to relax. The local people of Horta celebrated Labour Day by organising a fiesta in the park, which included traditional dancing and singing, a brass band, poetry and free barbecued sardines. It was a beautiful hot afternoon and it was extremely relaxing sitting in the sunshine with a pint of lager or two watching the activities!

#### May 3

Who said it could never happen? A turtle sighted during turtle time? Impossible you said. Well, today it did happen. Thomas made a prediction this morning that today was the day for a turtle and although he believed it would appear at 10.55 it actually turned up bang on cue in turtle time at 11.10. For those of you who are confused, I will explain. Part of our research is conducted on behalf of the Azorean Fisheries to assist with conservation strategies in the area. Every two hours during the day we have to look for turtles for a specific 15 minutes. As you can imagine actually seeing a turtle is tricky enough (we have seen seven on the expedition so far) and seeing any at turtle time is rare, but not impossible. Lisa said she would buy everyone a beer on Friday as a reward – mine's a sagres please! In addition to the turtle surprise we had a brilliant day with sperm whales with 16 different encounters of nine different animals. We even had one whale lob-tailing right in front of the boat. His tail and three metres of his body was visible out of the water as if he was doing a headstand. It's not totally understood whether they do this for communication or social interaction, but it was an extra treat for us amidst all the incredible fluking that was going on.

# May 4

It was the last day of data collection for slot 2 today and it was the calmest day so far. We headed out north of Faial and came across a pod of 10 sperm whales who were socialising. It was quite strange to watch as they all lined up in a row and slowly swam north before shallow diving without so much as a fluke amongst them. They would disappear for 15 minutes or so and then reappear on the surface, line up again and follow the same procedure. We put the hydrophone in the water but as the whales were silent there were no codas (sperm whale communications) to record. We were treated to a couple of brilliant breaches by a juvenile sperm whale, however, which made everyone's day.

The next few hours were strangely cetacean free. We motored out to the western point of São Jorge approx. 16 km from Faial accompanied only by flocks of Cory's shearwaters. Whilst heading back towards Pico in glorious sunshine another incredible thing occurred. Another turtle spotted in turtle time! In the commotion of the sighting and trying to manoeuvre the boat alongside it the loggerhead decided he did not want to be caught and swam off! But in the style of the day we were lucky enough to have the opportunity to catch another turtle half an hour later when Dan spotted one floating by the boat! This time we got him safely on board. Carrying a couple of crabs to assist with his general personal hygiene the turtle was too small to tag and after measuring his shell - 14 cm - Lisa returned him to the sea.

# May 5

The last two weeks have been pretty spectacular in terms of sperm whale sightings. We had 65 encounters of 106 individuals! Just amazing. We were overwhelmed by common dolphins again with 19 encounters and over 1,600 individuals; two encounters of bottlenose dolphins with 60 animals; 25 Risso's dolphins seen in one encounter; three blue whale encounters and three individuals; one humpback whale; 20 fin whales divided over four different encounters; and 200 striped dolphins seen on one day. Again another incredible two weeks with so many cetaceans seen and recorded.

The team have now departed and I would like to say a massive thank you for all your hard work and good humour. A few reminders of this slot will be the close encounters with fin whales, breaching sperm whales, Dan's birthday cake, coffees in Peters' cafe, Chris' lost keys, lover boy, barbequed sardinhas, Thomas swimming in the sea and of course Sven and his amusing yet annoying ....'da dum da dum, santa baby'!

I look forward to meeting the last slot team members on Monday. Who knows what will be in store for us all!

#### 9 May

The predominantly female team of this last slot is already turning heads in Horta! Some of the whale watching operators have been complaining that Chris is too lucky to have a boat full of women (apart from Mario of course)! Introductory briefings were completed yesterday and our first afternoon at sea enabled Sigi to test out her 'I think I might be scared of whales' theory. We headed out north to the more sheltered side of the island as the winds were blowing fairly hard from the south. As everyone was getting used to the motion of the boat and completing their individual tasks we spotted a fin whale that the vigias were directing us to. Pavan took some good photos and we were able to see the white chevron markings required for identification extremely clearly. We also had two encounters with small groups of common dolphins and their calves. The waves began to increase in size and outside of the shelter of Faial the sea was choppy giving everyone an idea of how hard it can be to fill in data sheets whilst the boat is lurching from side to side! Chris decided that we should stick close to the island to get as much shelter as possible on our return to the harbour.

Back on land the traditional introduction to Peter's café was made before we strolled back to the house in the hot afternoon sun. Today unfortunately the wind has increased to Beaufort 5, so the team members are working through the photos – cropping and matching dolphins and whales to be entered into the database. The weather forecast looks to improve in the next few days, so we hope for some quality time at sea tomorrow.

# 11 May

The first few days for the third slot were windy with choppy seas, which was a hard introduction to data collection for the team. Today however, was superb and it was the longest time spent at sea so far on the expedition. Most of the day was dominated by sperm whales with 22 encounters. We seemed to just travel from fluke to fluke - as soon as one whale dived another popped up. You could tell we were a boat full of 'ladies' (obviously excluding our very male Mario and skipper!) when we saw a mother and calf fluke together and a resounding 'aahhh' could be heard across the water!

We had spent most of the day south of Pico and on our return journey to Faial we came across Risso's, common and bottlenose dolphins. The Risso's encounter was brilliant as we spotted 'naked lady', a female dolphin with the markings on her fin that look like a drawing of a woman. (Named by a previous Biosphere team during fin identification - I'm not quite sure where the naked bit comes in??). Anyway (!) she had a calf with her and it was great to be able to identify an animal in the water that we know is already on the database. Another member of the Risso's group decided to give us an extra treat and breached 5 times - quite a rare thing to see with Risso's. Just as this encounter finished we virtually bumped into a feeding frenzy of common dolphins and Cory shearwaters! It was a non stop day of cetacean encounters which more than made up for earlier on in the week!

#### 13 May

Yesterday was spent on shore due to high winds and waves up to three metres. Fortunately it was a gorgeous day on land and gave everyone an opportunity to appreciate just what a beautiful island Faial is. Flowers are really starting to bloom now and the contrast of green fields and blue skies just makes the island stunning! We were also treated to some great home cooking with pancakes and fresh bread served by Brigitte, Baerbel and Adriana.

Today has been another outstanding day - and dare I say it the best of the expedition so far! We had 14 sperm whale encounters, which turned out to be nine different individuals, three of which have been seen once before and the rest are all brand new to the database. There were sightings of four calves, another mother and calf fluke and one fantastic lob-tailing performance. Travelling to and from the sperm whales feeding ground we encountered all of the dolphin species seen on the expedition so far; common, Risso's, striped and bottlenose. If all this wasn't enough we had a new species sighting of pilot whales! Approximately 60 in number they could be distinguished by the broad base of the rounded dorsal fins and dark colouration of the skin. They can grow up to six metres in length but the calves, of which there were many, start life at just 1.5 metres long. The group were just 'milling' (that is a technical term!) around and being relatively slow in the water in comparison to the dolphins they were quite easy to photograph for identification. The pilot whales are only sighted around Faial and Pico about three times a year, so this sighting was pretty special.

With the wind so light and the sea calm (even down to Beaufort 0 at one point, totally flat calm water!) it was the perfect ending to the day when we saw a small group of Risso's near the entrance of the harbour. In such conditions the ghostly figures of the near white bodies looked incredible under the water and we saw 'naked lady' again! This time the group seemed extremely calm and inquisitive of the boat and one calf came right underneath the bow.

Sigi and Lisa were able to get some great shots of the fins as the animals were only a couple of metres from the boat. It really was an amazing day and I haven't even mentioned the fin whale, leaping striped dolphins, the hundreds of common dolphins swimming alongside the boat, the flying fish or the thousands of Portuguese man-of-war jelly fish that we have seen today! I guess we have just been spoilt!

# 15 May

The days are flying by here in the Azores and some more fantastic sightings have been made. Today was a day of socialising behaviour from the sperm whales which meant that the all precious fluke photos were a little bit thin on the ground. There were plenty of whales around the boat, but they were more interested in each other than diving for squid. At one point a pod of Risso's dolphins turned up and began 'hassling' the sperm whales. You would think that 12 m and 24,000 kg of sperm whale would be enough of a deterrent for bullying dolphins, but apparently not. It was amazing to see the adult sperm whales gather around a calf to protect it from the bullies and at one point we had four 'head ups' where the whales are floating vertically with their heads sticking up out of the water. When the sperm whales did start to feed we were treated to some serious water splashing with a number of lob-tails performed by one whale in particular.

# 16 May

With the wind blowing from the south Chris decided we would be better off seeking shelter at the north of Faial today. In fairly choppy seas we began the morning with a group of sperm whales. Although we had a number of flukes, these whales (a different group to Tuesday's) were also acting strangely and did not follow the normal pattern of rafting at the surface and then diving. Instead we had one juvenile breaching and lob-tailing and a lot of shallow diving without any flukes. Great to watch but not so useful for data collection! In the middle of following the sperm whales we saw three fin whales. Two of which were feeding together and in between dives came close to the boat. They almost looked like they were posing as they surfaced for a few seconds and then slowly sank just under the surface of the water so we could easily see their bodies' right next to the boat. Lisa and Brigitte were able to get some stunning photos of the chevrons (white markings on the right hand side of the head) which are needed for identification.

With the waves throwing us around the boat a bit we headed for calmer waters near the coastline and travelled close to the north east of Faial where we could see the area of most recent volcanic activity - Capelinhos. Although it was windy, the sun was beating down and it was perfect to come across a group of bottlenose dolphins leaping across the sheltered bay. So, only two more days of data collection and all fingers are crossed for a blue whale sighting. Alison is so keen to see one that she has even named it...Eric!?

#### 17 May

Today is Lisa's birthday and unbeknown to most of us, Chris had bought her a necklace with a little stone turtle on it. It must have brought us good luck because Lisa not only spotted a turtle, but managed to catch it in the net before it dived. It was the largest turtle we have seen on the expedition and its shell alone measured 40 cm in length. This was first turtle this expedition we were able to tag, so whilst Pavan stroked the back of its neck to keep the animal calm Lisa prepared the tags. The two little metal identity clips were attached to its flippers so that if someone else manages to catch the turtle again, they will be able to record exactly where it has been, over what period and how much it has grown. The lucky catch didn't occur during turtle time, but none the less everyone was so excited about having the animal on board. This was only the second turtle we have seen this slot!

We were also treated to some absolutely fantastic displays of acrobatics from hundreds of striped dolphins. The striped dolphins are not as gregarious as common or bottlenose and don't often come close the boat. But in line with the good luck we have had on this slot we had them bow riding and have also seen hundreds of them leaping out of the water in unison. It really is an amazing sight and you can't help but laughing and smiling!

#### 18 May

The last day of the slot and the last day of this year's Biosphere expedition in the Azores. As we left the harbour this morning expectations were high.. we were still to see a blue whale. The sea was choppy, which made the photography of our first sighting of three Sei whales extremely difficult. Then it came over the radio from the lookouts on land that there was another baleen sighting - a blue whale. Did you hear the screams? A huge cheer went up from the boat as Chris drove us as quickly as possible to the location the vigias had described. Sure enough, there in all his glory was.... Eric! This blue whale must have known that he had a boat full of excited team members as he arched high before diving so that everyone could really see his mottled skin and get some idea of his massive size. We waited until he resurfaced for air - this time alongside the boat and then after a few tall blows he arched again preparing for another dive. This time, however, he really gave us all a special treat and lifted his tail in a fluke - a really rare sight to see with a blue whale. We must have been heard for miles around as everyone cheered and screamed with delight!!!

# 19 May

So the expedition has come to a spectacular end. The species sightings for the last two weeks are as follows. One, long awaited and very much adored blue whale! Eight fin whales and five Sei whales. We had 115 sperm whale encounters from which Lisa has identified 73 different individuals. (On the whole expedition we have identified 167 individual sperm whales!). We have had the pleasure of seeing 950 striped dolphins spread over 7 encounters. We spotted 170 common dolphins on 16 different occasions, 105 bottlenose seen on 5 separate days. Risso's numbered 101 spread over 8 different encounters and 120 pilot whales seen over two days! What can I say - I am overwhelmed by how much we have seen. I never realised how much life these little islands in the middle of the Atlantic attract and support.

I am now sitting in Lisbon airport - a place that all the team members have had the pleasure of visiting! Already it seems a long way away from bobbing about on the ocean in Physeter. I would like to say a massive thank you to everyone who has participated in this year's successful expedition, for all your hard work, concentration, patience and laughter.

Don't forget to put your photos on the photo exchange site at <a href="http://www.imagestation.com/album/pictures.html?id=2094214769">http://www.imagestation.com/album/pictures.html?id=2094214769</a> (there's nothing on there yet, so COME ON share nicely!). How to work the site is explained at <a href="http://www.biosphere-expeditions.org/picturexchange">www.biosphere-expeditions.org/picturexchange</a>.

Take care and safe travels

Clare:)