

MALDIVES

18 – 25 April 2009

Leaders

Dr Chas Anderson

Sue Anderson

Robert Anderson (Junior Ranger)

Neil Arnold

INTRODUCTION

Relaxation is the key element of this holiday. Much of the time is spent leisurely watching from the upper deck which is protected from the sun by an extensive awning. When one of the watchers discovers a bird, a whale or a dolphin it's 'all hands on deck' and out come the notebooks and cameras. It was wonderful to be able to study the behaviour of the rather enigmatic cetaceans; during the week we were able to identify eight species (three whale and five dolphin species.) The Maldives are the best place in the World to see Dwarf Sperm Whale and they duly obliged, as did Cuvier's Beaked Whale and the scarce False Killer Whale; probably the most exciting event of the week, though, involved an unidentified whale; all will be revealed in the text!

During lunch one day there was also a sighting of a Sperm Whale but Chas, who was on watch, was the only one to enjoy this spectacle as it had dived by the time we all scrambled out on deck.

My thanks go to the Anderson family for sharing their skills with us, especially to Robert who gave more zest to our snorkelling trips. I am also grateful to the crew of the Fathima and its attendant dhoni. As usual they looked after us with great care and contagious cheerfulness, following the example of Mohammed, the captain. I can't wait to get back again next year. Many photographs were taken, some of those taken by George, John and Chris appear in this report; my thanks go to all of them.

I very much enjoyed your company and hope we will meet again in the near future.

My very best wishes

Neil Arnold

Principal Leader

The Travelling Naturalist

DIARY

Sunday 19th April

MALÉ

Weather 4/8 cumulus, sunny, light breeze (1), near calm sea (sea state 1)

After a pleasant overnight flight we arrived at Malé, our landing coinciding with that of a Great White Egret! We met Graham and Barbara who were to join us for the week and then Chas, Sue and Robert arrived and we made our way to the safari boat Fathima by dhoni, a smaller craft which was to accompany us for the week.

Once on board we settled into our cabins and then sat on deck chatting as the crew prepared to sail. At 12.10 we sailed south along the edge of the Malé Atoll and, once into deeper water, encountered the first pod of sleek Spinner Dolphins. At this time of day they were somewhat inactive, “logging”, i.e. lying quietly at the surface. There were about fifty in total. (All counts of dolphins will be estimates – accurate counts are difficult as there are always some individuals submerged)

Lunch featured local Yellow-finned Tuna, then, at 13.20, we came across a more active pod of Risso’s Dolphins. This larger, greyer dolphin with a higher fin was readily identifiable but the variety within the group was very marked, the younger animals being the darkest, the females showing pale heads but the older males were very pale, often showing scars, the results of rivalry during the build up to mating.

Half an hour later we found ourselves in the midst of scattered groups of Risso’s Dolphins, numbering at least a hundred animals. They displayed a wide range of behaviour including “breaching” (throwing themselves clear of the water), “tail lobbing” (hitting the water with their tail), “spy hopping” (sitting vertically in the water whilst exposing just the head), and the strange “tail up” behaviour where individuals hang in the water raising their lower bodies and tails in the air.

Soon after we recovered a dead fish from the sea which turned out to be a species of puffer fish, the first recovered record of that species for the Maldives. Whilst this was going on a small number of birds came on the scene. Wedge-tailed Shearwaters skimmed the surface while Bridled terns and Common Noddies wheeled overhead. At one stage they were joined by a lone Tropical Shearwater and an Arctic Skua.

Later in the afternoon we were joined by at least one hundred Spinner Dolphins. This time they were much more active, demonstrating the “spinning” which gives them their name.

By 16.30 we had reached the island of Gulhi where we anchored. Most of the group went snorkelling while others took a walk round the island where the local carpenters were fitting out various boats. Many fish were seen by the snorkellers and the land lubbers recorded a Saunders/Little Tern, (they are almost inseparable except at very close range), Indian Pond Heron, Common Sandpiper, House Crows and an Asian Koel.

Dinner was early and sleep prolonged.

Monday 20th April

GULHI

Weather 1-2/8 cu. Sunny, light breeze, sea state 1

The day started with the first pre-breakfast snorkel. Later, during breakfast, the boat was surrounded by Yellow-finned Surgeonfish and Needlefish. It could have been an omen.

At 09.30 we motored south, noting two Striated Heron on the island as we left. Shortly after Chas spotted two distant whales “logging” and by 09.55 it was established that there were up to eight Dwarf Sperm Whales logging at the surface. They are very deep divers which hunt squid, but between dives they lie quietly at the surface hoping not to attract predators. Three individuals stayed with us, emerging eight times in forty-seven minutes. Three more were noted at 10.54 once we had moved on.

At 11.54, Chas struck again, seeing two distant beaked whales. We made a slow approach and saw them well enough to establish that they were of the genus *Mesoplodon* but unfortunately we were not able to make a specific identification, so we were left with a mystery. However seeing a member of this deep diving family was thrilling in itself. Appendix A will reveal more.

Whilst watching the beaked whales it was obvious that a number of whales had approached from the north and were now quite close. They proved to be an assembly of False Killer Whales and, though they were well spread out; it was obvious that there were at least twenty. Several came very near the boat and as we approached we could see that one followed a small Pelagic Ray which was swimming slowly on the surface. Suddenly the whale lunged at the ray, narrowly missing. It repeated this ‘game’ several times until it caught the fish. The False Killers were around us until 14.10; they were very active, moving rapidly, even porpoising. It seemed that they were actively fishing. At one stage there were four close by the boat and their fishing attracted a Wedge-tailed Shearwater, to feed on ‘crumbs from the master’s table’. All this behaviour, in the middle of our lunch, somewhat compromised our table manners and caused a run on the leaders supply of rennies during the afternoon.

Also upsetting lunch was the sighting of a Sailfish which swam around the boat and displayed its full sail.’ The rest of the afternoon was somewhat uneventful except for the discovery of a small shoal of Yellow-finned Tuna accompanied by a fishing Common Noddy and a lone Wedge-tailed Shearwater.

At 16.00 we anchored at Vashugiri Island where we saw two Black-naped Terns. Within twenty minutes we were off to one of the smaller islands where it was possible for all of us, snorkellers, non-snorkellers and even non-swimmers to enjoy the edge of a magnificent reef. Even the ‘waders’ were able to enjoy the fish – it was a great end to the day!

Before dinner Chas gave us an informative slideshow on the four cetacean species noted so far.

Tuesday 21st April

VASHUGIRI

Weather 1/8 cu. Sunny, NW 1-2, white horses on the crests of small waves (s.s. 2-3)
The day started well with a passing Lesser Crested Tern and visits to the boat by a medium sized Manta ray and a shoal of Unicorn fish. Once again we visited the idyllic reef and snorkellers and non-swimmers alike enjoyed the fish.

At 09.30 we set sail for the open sea but at 10.24 whilst still within the atoll we discovered two small groups of Indo-Pacific Bottle-nosed Dolphins. These smaller bottle-nosed dolphins were very inactive, quietly logging, sometimes showing only the dorsal fin. Outside the atoll at 11.45 a lone Dwarf Sperm Whale was seen, quietly resting at the surface.

At mid-day a flock of birds was spotted swooping over a school of fish which were splashing at the surface. The flock consisted of Common Noddies, Bridled Terns, a Tropical Shearwater and one Lesser Noddy. As we approached the fish we were surrounded by at least fifty Striped Dolphins which were very active, no doubt joining in the hunt. Just before lunch five Tropical Shearwaters came close by the boat.

After lunch at about 14.00 two Risso's Dolphins appeared, soon to be joined by five more. By 14.30 we were approaching a reef, alongside which were some fifty Common Noddy and a handful of Wedge-tailed Shearwaters. There were also four Spinner Dolphins, logging quietly.

At 15.35 about fifty Risso's Dolphins announced themselves by breaching, the splashes showing up over a mile away. The finale of our day was a display of spinning and active swimming by some hundred Spinner Dolphins. Once at anchor, at Hurahu Kandu it was time to snorkel again.

Before dinner Chas entertained us again; this time on the deck. We sat enthralled by the night sky. There was no light pollution so the spectacle was just stunning, especially the Milky Way, which is so difficult to appreciate from well lit Britain. Chas then tackled the origin of atolls, especially the part played by Darwin in explaining the phenomena.

Wednesday 22nd April

HURAHU KANDU

Weather 1/8 cu. Sunny, a stiff breeze (W2-3), s.s. 2-3. Wind and sea state moderated to 1 in the afternoon.

The pre-breakfast snorkelling was as popular as ever.

At 08.30 we were entertained by a party of about one hundred Spinners and, before we set off at 09.00, thirty-five Common Noddies and a Black-naped Tern was noted, close by.

Our next sighting, as we followed the line of the huge reef, was a Wedge-tailed Shearwater and we were surprised to see a Striated Heron at sea, in fact it nearly landed on the boat. Before lunch we came across about fifty Spinner Dolphins and a pod of fifteen Risso's Dolphins, possibly all males as they were grey and showing the scarring associated with 'combat'. Many were logging but one breached four times, showing the cleft head responsible for the rather unfortunate nickname 'bumhead'!

Sometimes whale watching can be frustrating. At 12.35, during lunch, Chas, who was on watch, saw a Sperm Whale fluke and then deep dive. We headed to the area and waited for nearly an hour but it failed to show itself.

By 16.00 we had arrived at Maduvaree where we were greeted by a dozen Spinners and a flock of Noddies including six Lesser Noddies. We split into two parties with the more adventurous snorkellers taking the launch to a deep, current affected reef while the rest went ashore. Both groups had a great time.

As the landing group approached the island we noted a Pond Heron, Grey Heron and a House Crow. The island was very orderly with lots of new building going on, including a new Mosque and a wall round the new football ground. The old buildings were constructed of small blocks of coral, cemented together and then rendered. The modern buildings were made of concrete blocks, the use of coral now being illegal. It was obvious that the islanders lived by fishing, boat mending and, currently, building.

Before dinner we had another slideshow on Striped, Spotted, Bottlenosed and Fraser's Dolphins.

Thursday 23 April

MADUVAREE

Weather 3/8 cu. Sunny, W 2-3, s.s. 2-3

Once again the day started with snorkelling, after which, during breakfast, we set sail to the north and were soon surrounded by Spinners. By 10.40 we came across more Spinners, but in contrast to those we had seen earlier, these were very active. Some two hundred animals were spinning, slapping the surface of the sea with their beaks, breaching and falling back into the sea without spinning. Many were bow riding. Half an hour later we realised that eight Spotted Dolphins were riding the bow with the Spinners. We watched, fascinated, for an hour.

The afternoon produced more Spinners, then, as we neared our anchorage at the lovely island of Anbara, we were thrilled to see a Hawksbill Turtle on the surface. The reef at Anbara turned out to be a perfect spot for all those who wished to snorkel. The site was magnificent but its main advantage was that it could be accessed either from the dhoni or from the shore. This allowed all of us to savour the reef, even one non-swimmer, who, equipped with a flotation jacket, enjoyed a wonderful new experience.

The slideshow was on reef fish and invertebrates, enabling us to marvel at Chas's underwater photography. He then shared digital images of his recent trip to Sri Lanka, including those of Blue Whale *Balaenoptera musculus*.

Friday 24th April

ANBARA

After another wonderful snorkel, we left at 09.00, staying inside the atoll for an hour before reaching the open sea. In spite of careful searching, we did not manage to see any whales or dolphins. In the afternoon, while we were watching, Chas told us a mystery story, involving a migrant dragonfly, the Wandering Glider, which kept us enthralled. (Details in Appendix B)

At 15.00 our diligence paid off. Two Cuvier's Beaked Whales appeared but then dived; though we waited for fifty minutes, this was the only sighting as this species is a deep diver.

Later we encountered more wonderful Spinners before returning to our first night's anchorage at Guhli and more snorkelling.

Once again we gathered on the top deck, enjoying the balmy atmosphere, whilst Chas talked about the seasonal changes in the Maldives and the effect on cetaceans.

Saturday 25th April

GULHI

Weather 3/8 cu. Sunny, W 2-3, s.s. 1-3

The early morning snorkelling was graced with a Manta Ray and three Hawksbill Turtles.

We moved off at 08.10, rendezvousing with the snorkellers in the dhoni.

The morning was dominated by Risso's Dolphins, Common Noddies, Bridled Terns and Tropical Shearwaters.

We continued to sail north until we had passed the capital. Soon after lunch two beaked whales showed themselves. We watched them in short spells for an hour and a half. They appeared three times, sometimes as close as fifty metres from the boat. Although we took many photographs and made copious notes they remained unidentified, though some of the features matched those of Cuvier's Beaked Whale. *

As we arrived at our anchorage at Malé three Green Turtles were noted. A flock of twenty Cattle Egrets also flew to roost later in the evening.

A convivial evening followed, once we had attended to most of the packing.

* After examining all the photographs Chas sent Neil an e mail confirming the identification as Cuvier's Beaked Whale.

Sunday 26th April

MALE

Having said our farewells to the crew, the Andersons and Barbara and Graham (who were staying another week – you can go off some people!) we 'sailed' to the airport.

Mid-evening found us at London Heathrow collecting our luggage and saying our goodbyes.

APPENDIX A

The Beaked-Whale Mystery

We were particularly lucky that we were able to enjoy prolonged views of the two whales and were able to photograph them. Despite that a specific identification was not forthcoming. Having eliminated those species of beaked Whale that have been identified at sea in the Maldives and any that might be likely in the Indian Ocean we were left with a mystery. It seemed likely that we had come across a beaked whale that belonged to one or other of two species of the genus *Mesoplodon*; in fact, two species that to date had not been reliably identified at sea. Consequently it was a great privilege to add a piece to an on-going jig-saw puzzle, one intriguingly without a picture on the box lid!

Beaked Whales

GINKGO-TOOTHED BEAKED WHALE. *Mesoplodon ginkgodens*

First described as a stranded corpse in Japan in 1958. It is only known from a few dozen widely scattered strandings and captures in temperate and tropical waters of the Indo-Pacific Ocean, from Sri Lanka, the west coast of North America and the Galapagos Islands. There have been a few records from New Zealand. Most records are from the seas around Japan. There is a record of a stranded animal in the Maldives but there are no reliable sightings at sea.

Mesoplodon hotaula

This beaked whale, which as yet has no English name, was found stranded in Sri Lanka in the early 1960's. It was described as a new species, but was immediately synonymized with *Mesoplodon ginkgodens*. Later, in the mid 2000's, two more specimens, which appeared to be similar, were stranded on Pacific Islands. The major event, however, as far as we are concerned, took place in Malé in 2007. Chas was walking past a gift shop in the town when he noticed a single whale vertebra in the window display. On enquiring as to its origin he was taken to a separate store room at the back of the shop where he was shown two cardboard boxes containing the complete skeleton of a beaked whale which he did not recognise. The whale had been washed up on a local island and the fisherman who had found it had decided to bury it and extract the skeleton on the chance that it may have some worth. DNA testing of small samples of bone, or tissue, established that all of the above strandings related to *Mesoplodon hortaula*, a species which has been forgotten about for nearly fifty years.

The resurrection of *Mesoplodon hotaula* has yet to be “written up” in a scientific journal, an event that should soon come to fruition, Chas being one of the authors.

Neil, after Chas, with vital amendments by Chas

APPENDIX B

The Dragonfly Mystery - The Wandering Glider

On 21st October 1983, Chas, who was in the early days of his career as a fish scientist for the Maldivian Government, had an experience that would colour his life for years to come. He saw huge numbers of the dragonfly *Pantala flavescens* in the Maldives. The sudden appearance of this insect was well known to the Maldivians who accepted it as an annual occurrence. To Chas, though, it was a mystery: where had thousands of dragonflies come from in islands that had few fresh water habitats where they could have bred? It seemed likely that they must be migrants. Over many years Chas set up a network of contacts who would inform him of the arrival of these insects. The spread of the contacts grew until he was in touch with observers in Africa, India and the other islands of the Indian Ocean enabling him to work out the migration route of this dragonfly.

Most insect migration is quite unlike that of birds which involves one generation: in the case of insects usually more than one generation is involved.

For the Wandering Glider, four generations are involved before the cycle is complete as breeding takes place as adults follow the seasonal rains. The first generation breeds in India in June-July, when the paddy fields are wet. They then migrate, passing through the Maldives in October-November, eventually turning up in East Africa, where they breed in the ‘short rains’. In East Africa the adult dragonflies, generation two, emerge in November - December and fly to South Africa where conditions are right for laying eggs. From February - March the third generation hatch and fly to East Africa where the ‘long rains’ make conditions right for breeding. In June - July a north easterly movement takes the insects back to India. All of this is driven by the monsoon weather conditions which provide seasonal rains and appropriate winds to assist the insects in their travels.

This wonderful story will be told in a scientific paper to be published in July 2009. “Do dragonflies migrate across the western Indian Ocean?” R Charles Anderson Journal of Tropical Ecology 25 2009.

Neil, after Chas, with more vital amendments by Chas.

CHECKLIST**BIRDS**

PETRELS & SHEARWATERS.

Wedge-tailed Shearwater	<i>Puffinus pacificus</i>	Forty records throughout
Tropical Shearwater	<i>Puffinus bailloni</i>	Fifteen records

HERONS, EGRETS & BITTERNES

Striated Heron	<i>Butorides striatus</i>	Three, including one at sea
Cattle Egret	<i>Bubulcus ibis</i>	Twenty Malé
Grey Heron	<i>Ardea cinerea</i>	Seven records on atolls
Great Egret	<i>Ardea alba</i>	One at the airport, Malé

SANDPIPERS

Common Sandpiper	<i>Actitis hypoleucos</i>	One
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GULLS & TERNS

Lesser Crested Tern	<i>Sterna bengalensis</i>	One record at sea
Black-naped Tern	<i>Sterna sumatrana</i>	Three records
Saunders/Little Tern	<i>Sterna saundersii/albifrons</i>	Neither specifically identified as not seen at close range
Bridled Tern	<i>Sterna anaethetus</i>	Thirty seven records, usually in small flocks
Brown (Common) Noddy	<i>Anous stolidus</i>	Common, over 300 records
Sooty (Lesser) Noddy	<i>Anous tenuirostris</i>	Ten records, usually amongst brown Noddies

SKUAS

Arctic Skua	<i>Stercorarius parasiticus</i>	One
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CUCKOOS

Asian Koel	<i>Endynamys scolopacea</i>	One
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CROWS

Indian House Crow	<i>Corvus splendens</i>	Common
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MAMMALS

CETACEANS*

Great Sperm Whale	<i>Physeter catodon</i>	One sighting by Chas, we were all at lunch!
Dwarf Sperm Whale	<i>Kogia sima</i>	Two sighting. Up to ten individuals on the first sighting and one on the second
Cuvier's Beaked Whale	<i>Ziphius cavirostris</i>	Two sightings, two and two
Beaked Whale sp	<i>Mesoplodon sp</i>	One sighting, two
False Killer Whale	<i>Pseudorca crassidens</i>	One sighting, thirty
Indo-Pacific Bottle-nosed Dolphin	<i>Tursiops aduncus</i>	Two sighting, five
Pan-tropical Spotted Dolphin	<i>Stenella attenuate</i>	One sighting, eight

Striped Dolphin	<i>Stenella coeruleoalba</i>	One sighting, fifty
Spinner Dolphin	<i>Stenella Longirostris</i>	Fourteen sightings, eight hundred
Risso's Dolphin	<i>Grampus griseus</i>	Eight sightings, two hundred and twenty five

* Small groups were counted, larger groups estimated

Neil Arnold, April 2009

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