



Bird Fish

Main photo: Tourism WA
Other photos: Earthwatch



Ningaloo Reef, on the westernmost tip of West Australia, is arguably the best place on Earth to swim with whale sharks, the world's biggest fish. But why would anyone want to do that? **Philip Johansson** jumps into deep water to find out, and to learn how people can help conserve these endangered leviathans

PICTURE A DARK, ominous shadow the size of a school bus moving towards you through the deep water. Now imagine you and nine others are being urged by a dive master to jump off the back of the boat into the

shadow's menacing path, like wetsuit-clad lambs to the slaughter. "GUY, GUY, GUY, GUY!" she yells. This is Australian for "go, go, go, go!"

Would you jump? If you had travelled halfway around the world to swim next to a whale shark, and your adrenaline was through the roof, I think you



Above A combination of fear, awe and elation take over as you enter the water alongside the beast

Above right Excited swimmers enjoy an unforgettable experience

would. I certainly did, splashing into the water, other swimmers plunging in all around me like lemmings. I put my mask underwater and there was only the silence of 100 metres of ocean below me, the sunlight through crashing swells, and a face-to-face encounter with the most awesome fish I'd ever seen. >>



“Thankfully the whale sharks’ huge mouths are only for sucking in vast amounts of plankton”

Whale sharks are the largest living fish in the world, reaching a colossal 18 metres, but they are gentle giants. Thankfully, their huge mouths are only for sucking in vast amounts of plankton. This one was petite by whale shark standards, only about five metres, but still big enough to inspire jaw-dropping wonder. She stared at me with tiny, wide-set eyes and the broadest smile in nature, then turned on a dime to swim past me. Her star-spangled skin was dappled with sunlight, and she moved along in slow, easy undulations. Our group hustled to line up on either side of the beast, swimming along with her in formation as we were instructed to.

RARE WONDER

Whale sharks meander through tropical and warm temperate seas around the world, but are nowhere considered common. Ningaloo Reef, Australia's longest and most spectacular fringing reef, is probably the best place in the world to see one. Thanks to mixing tropical and temperate currents and a mass



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coral-spawning event each austral autumn, there is an abundance of nutrients and plankton here uncommon in most warm seas. Each year, between April and July, as many as 100 whale sharks emerge from the distant depths to enjoy this feeding frenzy. And hundreds of lucky people, including myself, come to snorkel alongside them.

I was here as a volunteer with Earthwatch, the global volunteer environmental organisation, to help marine biologist Brad Norman assess the population dynamics and conservation needs of these awesome animals. Norman and his colleagues at Ecocean have been exploring the biology of these sharks for the last 12 years, and are making great strides toward their conservation around the world. Ecocean initiated a web-based photo-identification library that uses the unique spot pattern of each whale shark to 'fingerprint' individuals. They've identified more than 300 individual whale sharks on Ningaloo Reef, but the library has thousands of entries from 30 sites around the world, and continues to grow. It is only a matter of time before resightings of Ningaloo sharks in distant parts of their range, perhaps Indonesia, the Maldives, or even the Seychelles, will show the mysterious migration patterns of these giants.

Whale sharks were not even known to science until the first specimen was 'discovered' off the South African coast in 1828. Even as recently as the 1980s, there had been less than 350 confirmed reports worldwide. But since then, shark fisheries around the world have homed in on these shark-meat bonanzas, often found meandering slowly near the water's surface in search of plankton. The Indian fishery alone took 1,000 whale sharks in two years, a terrible toll on a species that does not reach maturity until 20 to 30 years old, and may live more than 100 years. India and the Philippines ceased whale shark hunting in the last decade, and Ecocean is working with Taiwan, the last major hunter of whale sharks, to follow suit. Although their global population is still distributed around the world, they are now alarmingly rare. Ecocean's photo-identification library will help determine exactly how rare.

PHOTO OPPORTUNITY

Which brings me back to why I was jumping into the water with the mother of all sharks that sunny day in April. Working with Brad and my teammate, Angela from New Zealand, I swam along with the whale shark, attempting to take clear photos of the spots used for photo-identification, in the area just



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The Ningaloo Reef is home to an abundance of sea life that attracts divers from around the world. **Opposite page** Teams of volunteers work alongside ecologists to find out more about these mysterious creatures of the deep.



behind the left gill slits. We also took photos of other distinctive features, such as notches in the shark's fins, and attempted to measure the animal. Brad dove down with a metre stick to swim alongside the whale shark, while I took photos of the shark with the stick for scale. It took several tries to find the appropriate distance from the shark, but we finally got a good photo. If Brad identifies this whale shark in future years, he'll be able to calculate the animal's growth rate; currently another unknown.

Our day on the boat included diving with two different whale sharks, the five-metre female and an even smaller male that sped along, giving us land lubbers a run for our money. We swam with them a total of six times, on each occasion following the same adrenaline-pumping procedure: lining up at the back of the boat and splashing in on command, reminiscent of skydiving or bungee-jumping. And each time we jumped in with the same eagerness to swim with giants. Other boats waited their turn to dive in, following an unwritten code of high-sea etiquette. Apparently, visitors that come later in the season usually find even more sharks in a day.

WATER WORKS

The tour also featured a fabulous picnic lunch, including salads, sandwiches, and fresh tropical fruit. It's amazing how much of this I was able to put away... I guess swimming with whale sharks all day builds up a good appetite. The boat pulled into the quiet, turquoise water behind the fringing reef for lunch, with a view of the arid Cape Range to the east and the breakers to the west. I sat between a lively couple from the UK, who came to Western Australia specifically to swim with whale sharks, and a fellow from Germany. Some of them were experienced divers, but anyone who is a confident swimmer could keep up with a meandering whale shark.

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Many of us took the time, while the boat was anchored behind the reef, to jump in and snorkel around the 'bommies,' or patch reefs, and discover the abundance of coral reef fish lurking there. From parrotfish to angelfish, the colours were amazing; but my favourite was a hand-sized damselfish that defended her algae-covered patch of reef with the oversized vigour of a shark. Some of the dive boats also offer a scuba-diving option during the day out, for experienced certified divers who want to go deeper into the splendours of Ningaloo Reef.

LAND LUBBERS' LABORATORY

Most visitors to Ningaloo Reef get out for one day on the boat to swim with whale sharks, an experience they will remember for the rest of their lives. As an Earthwatch volunteer, I was out on the boat for three days, each time feeling more comfortable with the routine on deck, the scenery, the delicious lunch, and of course the mysterious whale sharks themselves. I got to recognise individual sharks by sight, and felt like I knew them on a first-name basis.

Back at the lab, on our days off from swimming with sharks, Angela and I updated the photo-

identification library with images of our own, as well as clips from videos taken by tour boat operators in the area. We also sifted through plankton samples that we had collected using plankton tows while we were on the boat. We used microscopes to find myriad shimmery shapes and translucent, leggy critters; a veritable buffet for a peckish whale shark. It hardly seemed like a substantial diet for a shark weighing several tons, but the abundance and diversity was astounding and the vast creatures were clearly managing to find their fill. I will never regard a mouthful of sea water in the same way. Brad hopes that systematic samples of plankton diversity will help pinpoint the conditions that continue to attract whale sharks here each year.

There were many other attractions to take in while on shore: snorkelling in the aptly named Turquoise Bay, swimming with sea turtles on North West Cape, watching shore birds in Mangrove Bay, or touring the rugged Cape Range National Park for emus and kangaroos. The spectacular Yardie Creek Gorge has a unique geological history and is home to a variety of cave-living creatures, from spiders and snails to fish, found nowhere else in the world. The multi-coloured gorge is also home to a colony of rare black-footed rock wallabies.

But the highlight of Ningaloo Reef, the main reason people come from thousands of miles away, is the biggest fish on Earth. With the efforts of Ecocean, and volunteer photographers on Ningaloo Reef and around the world, whale sharks will hopefully return to Western Australia for many years to come.

Need to know Ningaloo Reef factfile

GETTING THERE

The best way to get to Exmouth, on the northern tip of North West Cape, is a one-and-a-half-hour flight from Perth, aboard Skywest Airlines, for about AU\$500 (E200); plus AU\$20 (E8) for the shuttle into town, www.skywest.com.au. The alternative is to rent a car and drive from Perth, a gruelling 1,300km through arid bush. There is also a Greyhound Australia service from Perth to Exmouth, www.greyhound.com.au

BEING THERE

Exmouth, population 2,500, offers all the attractions and conveniences of a peaceful resort town, with a business centre that covers all of your needs, from basic food stores to Driftwood Jewelers offering sterling whale shark pendants. There is a town beach, as well as other nearby beaches for relaxing, and numerous sites in nearby Cape Range National Park for spectacular snorkelling. Snorkel gear can be rented for AU\$12 (E5) per day, plus deposit. For transportation, you can hire a scooter from What Scooters, www.whatscooters.com.au, or travel in style in a limo from Exmouth Bus Charters, www.exmouthbuscharter.west-oz.com. A massage at Wilder Wellness Cuisine and Treatments or ancient temple-style Kuhuna Bodyworks at Ningaloo Health Foods can make your stay in Exmouth a truly unforgettable one.

STAYING THERE

There are a variety of places to stay in and around Exmouth, ranging from a tent site at Lighthouse Caravan Park for AU\$20

(E8) to self-contained chalets at Exmouth Cape Holiday Park for AU\$185 (E74). We stayed at the comfortable Best Western Sea Breeze Resort, part of a historic naval base five kilometers north of Exmouth, featuring the excellent Sailfish Restaurant. There are also many places that offer backpacker dorms for those travelling on a budget. The Potshot Hotel Resort provides a lively bistro and pool bar in the town centre, so even if you don't stay there you will likely find yourself there some evening. To learn more, go to www.exmouthwa.com.au/accommodation.asp

WHALE SHARK TOURS

There are a number of companies that operate whale shark tours out of Exmouth, with prices starting at AU\$300 (E120) per person. For those who would like to include a scuba-dive during their outing, prices start at AU\$360 (E144) per person. These full-day charters include transfers from your accommodation, buffet lunches, refreshments and all snorkeling gear. All companies have a 'no sighting policy,' which means that if no whale sharks are sighted on your tour you can go out on the next available day for free. Be sure to book your whale shark tour well in advance and plan your tour at the beginning of your holiday, in case you don't see any sharks on your first time out. www.exmouthwa.com.au/pages.asp?code=50

FURTHER INFORMATION

For more about participating on Earthwatch's Whale Sharks of Ningaloo Reef project, visit www.earthwatch.org/expeditions/norman.html

To find out about Ecocean, visit www.ecocean.org

From top to bottom
Photographing whale sharks may help to determine their migration patterns. The colourful rock formations of Yardie Creek Gorge, Cape Range National Park is home to curious emus