

Tiger shark on shark dive at Fuvahmulah in the Maldives

Text and photos by Michel Braunstein

Over the last few years, Fuvahmulah has become a world-famous pristine destination for close encounters with large tiger sharks. The green island is located at the deep south of the Maldives archipelago. Michel Braunstein reports.

Local tiger sharks have been spotted close to the island since the very first people arrived around a thousand years ago. The locals are not afraid of tiger sharks. On the contrary, they live with them.

Many generations ago, fishermen who were cleaning fishes in the port used to throw the remains into the deep ocean. Over time, to spare boat fuel, they started throwing the remains right outside of the port and noticed that tiger sharks would gather at the port entrance every day to enjoy their meal.

Today, inhabitants continue this tradition of distributing snacks in the outskirts of the port to please their tiger friends. The locals invite visitors to meet the sharks, educate them about this sea predator, and show them that human beings are not regarded as shark food. They also remove the hooks from unfortunate sharks caught by some sport

fishermen whose lines broke. Tiger sharks are among the few shark species (about 10 out of 500) considered to be dangerous to humans. Fuvahmulah sharks are impressive and must be respected;

smaller ones operate in Fuvahmulah. I chose to dive with Pelagic Divers Fuvahmulah dive centre, which was amazing. All dive centres share the same tiger dive site, and they coordinate the diving schedule for their various groups. Three dive guides always accompany each group of divers. All

dive guides are highly trained and are very familiar with the sharks' behaviour.

They know how to repel the sharks if they are used to eating. This technecessary and keep divers safe.

To attract sharks to the spot, the cised. Since sharks are accustomed

to consuming the fishermen's fish remains, they are fed the same food nique does not disrupt their natural life cycle; sharks do not become dependent on these "snacks" nor do they become aggressive when they do not get them and they still know



they do not try to hurt humans. Two main dive operators and three dive guides hide "snacks" under stones. Using "baits" is often criti-

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Considered a dangerous shark species, in Fuvahmulah tiger sharks are impressive and deserve respect. On shark dives, they generally do not try to hurt divers, but dive guides are highly trained and repel sharks if necessary to keep divers safe.

how to feed themselves in the ocean. Using "snacks" simply facilitates observation and the interaction with the predators, so that the divers can get to know and understand them. Most importantly, it shows that the sharks are not killers, as often falsely portrayed in popular movies and tabloids. Finally, and as previously stated, this technique also enables the removal of painful items from sharks such as hooks, ropes or nets.

Tiger sharks are beautiful creatures, and they can make your dive experience highly moving and unique. Fuvahmulah is one of the only places in the world where sharks can be approached and observed with so much ease. Most sharks are local and are given first names. At times, new visitors or new pups join the family. Diving with Fuvahmulah's tigers is quite easy and takes place at a shallow, 10-metre (30 feet) depth.

The dive experience

During the pre-dive briefing, our dive quide Ina explained that there are three guides with the group to keep a proper overall watch of both divers and sharks during the dive; however, it is also set up in case there is any incident, so one of the guides can pull the victim back to the boat, while the second one repels the sharks if necessary, and the third one takes the rest of the dive group to finish the dive close to the reef. That was not really encouraging...

We left the small port of Fuvahmulah, and after a ten-minute boat ride, we reached the dive site, just outside the port. Our divernaster told us to be negatively buoyant while entering the water and to start descending immediately after jumping in. The reason for this was to prevent curious tiger sharks from coming too close to see if there was



Dive guides placed "snacks" under stones to attract the sharks (above); Some sharks had a fishing hook caught in the mouth, which needed to be removed (top left).



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any interesting fish to taste. Well, that made me a little bit unsure of how to proceed, as I could not descend immediately, since I had to wait for someone on the boat to give me my

It all happened quite fast though, with no issues.

big camera rig.

We started to descend to the location we were aiming for, and I noticed a huae tiaer shark swimmina next to us in the blue. It was heading for the same location, where it appar-

ently knew there would be some interesting snacks.

When we arrived at the spot, we waited a moment for the previous group to leave, then took their plac-

es. We placed ourselves in a line. In the middle of the sandy area, Ina was waiting for the boat to send down a bucket with some fishtails. He placed the snacks under some heavy stones, and the tiger sharks came close to get them out. There were six or seven that turned around, went away, then came back again. When they went too close to Ina, he repelled some sharks by pushing them back on their snoots (noses).

Most sharks are local and given first names, with new pups joining the family at times. Shark dives gener-

The older ones, which were also biager (up to 5.7m), knew the game well; they had developed some skills to get the snacks out from under the stones. For the younger ones (3m long), it was still quite new, and they did not know exactly how to proceed.

We watched this ballet of sharks, which was breathtaking. These animals were impressive. They were

auite slow and did not pay too much attention to the divers. They deserved a lot of respect, and we needed to avoid making them take an aggressive attitude.

On my second dive day, Ina came to take me from the side where I was in line with all the divers, and he brought me to the center of the playground. Wow, that was quite thrilling! I could almost touch the sharks, or they could touch me, because they were so close.

It was an unforgettable and incredibly exciting experience. I will surely go back again as soon as I can!

Other underwater attractions Besides the amazing tiger sharks, Fuvahmulah offers other beautiful underwater attractions. The reefs are beautiful, and make good supplemental dives to complement your



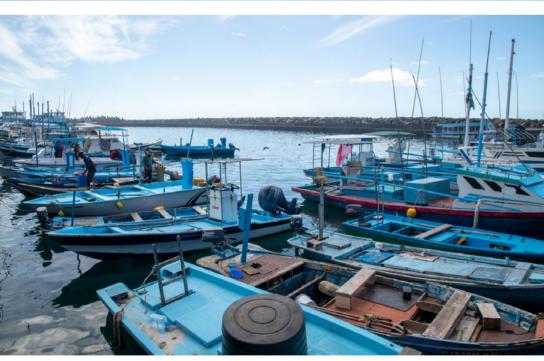
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ally take place at shallow depths of around 10m.





Fuvahmulah (left) has serene white sandy beaches (above) and traditional bright blue boats in port (lower left).



shark dives. Thresher sharks may be spotted (though not on every dive) at deep cleaning stations between 40 to 50m deep. They must be approached very slowly because they are very shy and swim rapidly into the depths. Under the right conditions,

you may encounter awesome schools of scalloped hammerhead sharks in the current. There are also whale sharks.

Black oceanic manta ravs can be spotted around the cleaning stations all year round, especially during their mating season between March

and May. Whitetip sharks and grey reef sharks can be seen quite often. Depending on the season, you can also see schools of barracudas, yellowfin tunas, sailfish, mola mola, whales and more.

Topside excursions

After dives, there are also some cool things to do. The dreamy Thoondu beach is a must. Do not miss it if you are on the island. There is also Bandaara Kilhi and Dhadimago Kilhi, two beautiful freshwater lakes on the island, which are great for hiking. They are also where you can spot many species of birds and freshwater fish.

There is a cool mud place you can enter (preferably not with your favourite swimsuit). It is supposed to be very healthy for the skin. You can also visit some pre-Islamic historical sites. In addition, there are splendid spots where you can surf or

paddle. In the very hip pub called "Led Zeppelin," you can eniov succulent meals and a nice atmosphere. For transport between places, it is very convenient to rent a scooter.

More about the location

The island is in the deep south of the Maldives, about a 70-minute flight from Mal. It also has its own domestic airport, which makes it easy to reach. Usually, planes stop on another island on the way, which extends the flight time.

There are 14,000 inhabitants divided in eight different districts, which makes it the second-largest population hub in the Maldives. The locals speak a dialect that is unique to the island and distinctive of the official Maldivian Dhivehi language.

The island's economy relies mostly on fishing and agriculture. It is the biggest producer of mango and banana in the

country. Maldivian Rufiyaa is the official currency, but US dollars and Euros are accepted everywhere.

There are some hotels in Fuvahmulah, including Tiger Shark Residence, a nice quest house close to nature, and Atraxis, a more modern and international hotel. Electrical power plugs are UK-style, like all over the Maldives.

Belgian underwater photographer and writer Michel Braunstein, who is based in Israel, has had a passion for the sea since he was 10. inspired by the films of Jacques Cousteau, and has been diving and taking underwater photos since his 20s. Starting with a rented Sea&Sea camera, then a Nikonos V he got as a birthday present, he eventually went digital and today shoots with a DSLR camera. In 1991, he developed a dive

computer with an optical PC connection, before the first model with a PC connection hit the market, which was made by Suunto. He moved to Israel from his Belgian homeland in order to be close to his beloved Red Sea. He has since dived many oceans, rivers and lakes all over the globe and his work has been published in magazines around the world, including Idive (IL), Diver Magazine (CND), Scuba Diver/ Sport Diver (US), Unterwasser (GE), Let's Dive Mag (SP), Underwater Photography Mag (UK), Subaqua (FR), Marine Diving Mag (JP) and X-Ray Mag (DK). The first version of his website won the Prix du site de promotion (Promotion Website Prize) at the 34th edition of the prestigious Festival Mondial de l'Image Sous-Marine in Antibes in France (2007). Please visit:

michelbraunstein.com

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Tiger shark on shark dive at Fuvahmulah in the deep south of the Maldives

THE IMPORTANCE OF SHARKS

In the video clip below, there is a sequence filmed showing a small camera laying on the around that looks like food. A shark comes and bites it to check what it is, then releases it. The shark, however, did not try to harm or bite the divers in the clip. We are not their food. See video: youtube.com

There are a few accidents each year, all over the world. They usually occur when sharks do not recognise targets correctly; to a shark, when spotting a surfer or swimmer from the depths, they look like a shadow. Just like with the camera,

a shark can swim up from the depths to catch a wrongly identified prey, taste it, then reject it. In some cases, this can be fatal.

Sharks need to be respected. They are in their own home, and we are the visitors. Again, they do not eat people, they like different food.

Sharks are important for the oceans' health. They are at the top of the food chain, and if they disappear, all the ecosystems will be disturbed. The fish they consume would become too numerous, which in turn would eat too much of the smaller fish. At the end of the food chain, there are small critters that feed on plankton,

which produces a great part of our oxygen. If these critters (tiny shrimps) become too numerous, there would not be enough plankton to produce oxygen for humanity.

By destroying the highest level, the lowest level would also be destroyed, and the ocean would not be the planet's primary luna anymore.

Approximately seven people are killed each year due to accidental shark attacks worldwide. In contrast, an estimated hundred million sharks are killed every year due to fishing. The shark population has declined by 70 percent over the past 50 years.



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Nurse shark

Some sharks return to the same sites to breed for decades

Some species of shark return to the same breeding grounds for decades at a time, and live longer than previously thought.

Scientists with the New England Aquarium found that nurse sharks (Ginglymostoma cirratum), returned to the waters off the Dry Tortugas, 70 miles (113km) from Key West, to mate for up to 28 years. The Dry Tortugas has been known as a courtship and mating site for nurse sharks since 1895.

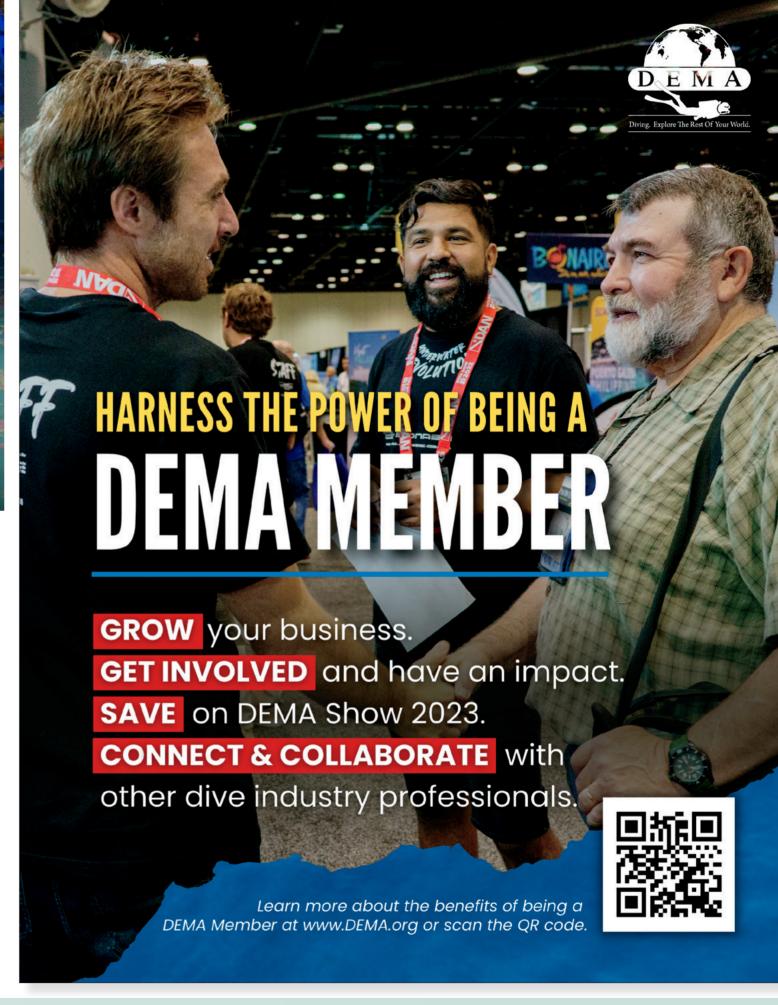
A 30-year (1992–2021) study documented long-term site fidelity to this area, with data from 137 adult sharks.

Known individuals returned for up to 16 different mating seasons and for periods of up to 28 years, indicating that the shark's lifespan extends well into the forties, rather than about 24 years as previously believed.

Of all the sharks returning to the site, nearly 60 percent were monitored for more than 10 years and 13 percent were monitored for more than 20 years.

Males arrived annually in May and June and departed in July, whereas females arrived biennially or triennially in June, with a secondary peak in site use in September and August, likely associated with thermoregulation during gestation.

The scientists wrote that this evidence of long-term mating site fidelity of this shark population reveals the importance of identifying and protecting mating sites for this and other elasmobranch species. ■ SOURCE: PLOS ONE



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Great white shark

Great white shark swims more than 10,000km in 150 days

The adult male shark, fitted with a pop-up satellite tag, travelled more than 10,000 kilometres in just five months.

Researchers from the New South Wales (NSW) Department of Primary Industries (DPI) and Deakin University fitted an adult male shark with a pop-up satellite tag and tracked it for more than five months.

After being tagged, the shark swam more than 20km out to sea, then headed north to Queensland.

It roamed between 80 and 280km offshore between Agnes Water and the southern end of the Great Barrier Reef, before heading to the cooler waters in southern NSW, Victoria and Tasmania.

DPI scientist Paul Butcher said more than 950 sharks had been tagged as part of the project, but this specimen was unusual because of its size.

The data collected so far showed that the larger great whites spent most of their time 20 to 30km offshore. They dive down to 700 to 800m in water depth, but spend most of their time in the top 50m of the water column.

SOURCE: NSW DEPARTMENT OF PRIMARY INDUSTRIES



Tiger shark in the Bahamas

Shark and ray populations in Northwestern Atlantic are recovering

The sharks and rays in the Northwestern Atlantic are experiencing an increase in population numbers.

The shark and ray population in the north Atlantic are in recovery, according to a recent study published in the *Proceedings of the National Academy of Sciences* (PNAS) journal.

Lead author Nathan Pacoureau, postdoctoral research fellow at Simon Fraser University (SFU), and his team came to this conclusion after analyzing trends in fishing pressure, fisheries management and population status for wide-ranging coastal sharks and rays in the western Atlantic Ocean.

The study also found that three species no longer experience declines and six species of eleven are recovering. It was found that although the extinction risk increased with fishing pressure, this was offset by an action plan implemented in 1993.

The plan—the 1993 Fisheries Management Plan for Sharks—focused

on regulation, enforcement and monitoring. Although the results showed improvement in population numbers, Pacoureau acknowledged that they were a "microcosm of the wider problem faced by sharks and rays."

Elaborating, he said, "many shark and ray species range widely and successful conservation in one country can be undone by less regulated fishing areas outside those borders."

Using the International Union for Conservation of Nature (IUCN) Red List Index, the team showed that unrestrained fishing caused populations of the same species to collapse in the southwest Atlantic. In fact, the number of wide-ranging coastal species threatened with extinction was nearly four times lower in the northwest than it was in the southwest.

In conclusion, the study showed that well-enforced, science-based management of carefully monitored fisheries could lead to conservation success, even for slow-growing species.

■ SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES



Scalloped hammerhead shark



Southern stingray in the Florida Keys



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