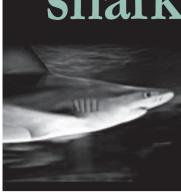
shark tales



Great white shark during a cage dive in South Africa

Text and photos by Brandi Mueller

It was seven in the morning and my coffee hadn't kicked in yet. The dive quide was giving me a slightly more thorough dive briefing than normal. I wasn't supposed to wear anything colorful or shiny and black gloves and a hood were required. Also covered in black neoprene, he was putting on chainmail gloves and told me he'd have a pole with him. He said it was more for the potato cods though, not the sharks.

Taking a giant stride off the back on the boat, the chill of the water snapped me out of my early-morning haze. Below me, the sharks were already there; at least ten were circling below the boat. The food wasn't even in the water yet, but the sharks knew the drill: The boat shows up, divers jump in, and eventually, they get a snack.

Settling into a rocky area where I could stabilize myself to photograph without damaging coral, I looked around and noticed the sun shining through the water, casting a soft yellow glow on the reef. Ten or so sharks had been hanging around, but as soon as the small metal container with the delightfully smelly

shark snacks was placed, the sharks seemed to emerge from everywhere.

Controversy

Debates about shark feeding are endless, with passionate people on both sides. Those for feeding talk about how diver interaction with sharks will help sup-

port a positive image of sharks instead of the aggressive, man-eating image created by movies and television. On the other side, those against wonder about the effects these practices have on sharks' natural behavior. They also point out that having divers and sharks in such close proximity with food is bound to

eventually lead to accidents.

There is no doubt that observing wildlife in their natural habitat usually leads to people to take an interest in that animal. We care about what we know and what we have seen. Those lucky enough to see sharks in the ocean connect with them and are more likely to share their

experiences and find out more about what they observed.

This is where conservation starts. People are less likely to make an effort to protect something they have never seen.

Reversing the fearful public opinion of sharks begins with education, and some of the best education comes from pho-



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tographs and reallife stories of experiences with sharks. When a group of divers see sharks in the ocean, they will go back home with their photos and videos (and all their limbs) and tell their friends and family that the sharks did not even notice they were there; the sharks were only after the shark food. This information then spreads to others, by those people relaying stories to more people about sharks not being deadly human predators.

Some argue that the stories brought back are still of fear and negative images of sharks. When a bait bucket is opened, there is nothing sweet or cute about the way the sharks go after the food, nor will photos of tiger and great white sharks probably ever be depicted as "friendly" or "lovable."

Not to mention, friends love a good thrill story about how you weren't devoured by 50 sharks in a feeding frenzy: "We dove with tiger sharks and lived to tell the tale"—these stories are still laced with fear and elude to survival of a scary event, when in reality, it is wasn't scary at all.

We hope that our photos of these apex predators will help show other people that sharks are not predators of humans—but they don't often do that. So are we really changing perspectives? Shark conservation is good

Shark Feeds

business. Shark feeds (and scuba diving) promote tourism, and in many areas, create an important source of income for poor countries. Research has been done showing that a shark is worth far more in the ocean than it is being served up in shark fin soup. But shark feeds are still creating an unnatural experience, and whenever something becomes a business and money is involved, standards of safety for the sharks and for the environment may fall to the wayside when money becomes the driving force.

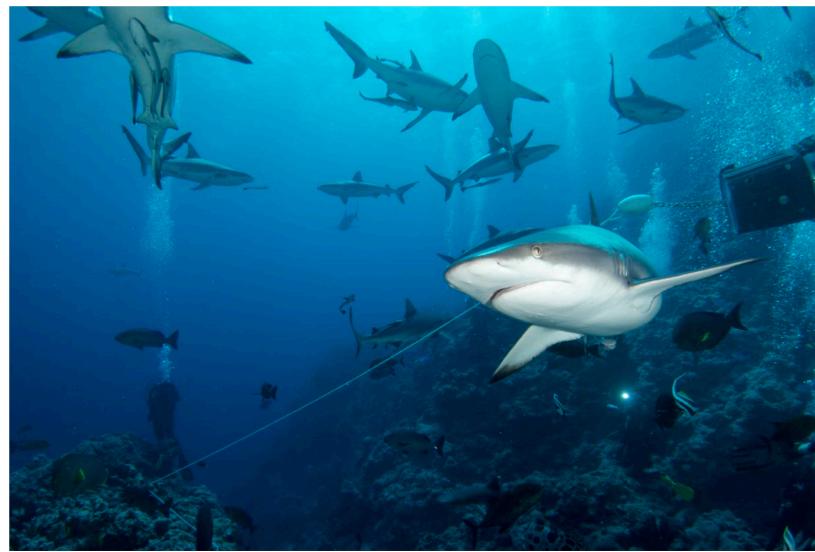
Changing shark behavior?
Some of the biggest and most

important questions concern whether or not we are changing shark behavior with shark feeds. I personally feel that they must have some effect on shark behavior. Sharks at dive sites, which frequently have feeds, arrive like Pavlov's dogs, just from hearing the sound of boats showing up. They are exhibiting a learned behavior, but I don't necessarily think it is detrimental to the sharks. Sharks are quite smart and appear to learn quickly.

Sharks have been using humans to get free meals (of fish) whenever they can. Fisherman, for centuries, have seen sharks following fishing boats, and sharks learn to

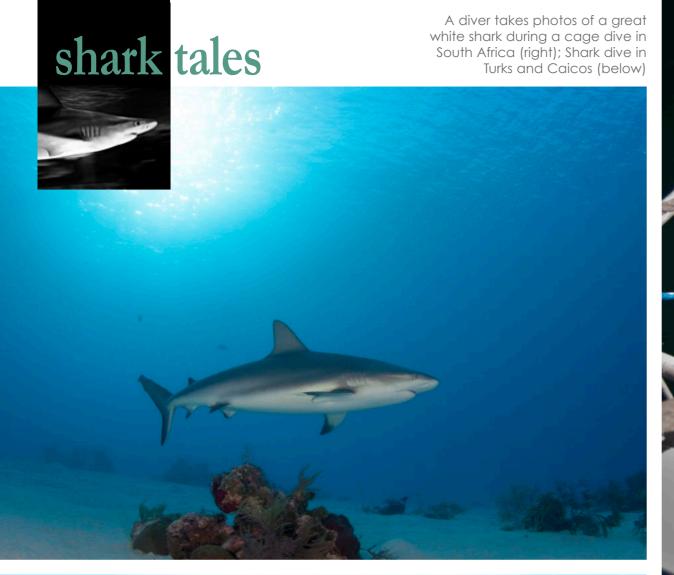
follow spear fisherman underwater, to try and steal a meal someone else caught.

There is some question of whether or not sharks become dependent on the feeds for survival, but during most shark feeds there are many sharks present and only a small quantity of food, so there is no way that all those sharks are using it as their only food source. In some places, shark feeds only occur a few times a week, with as many as 50 sharks showing up for one fish head. That one small bucket of food is not enough to satisfy even one shark, so it is unlikely sharks are losing their predatory instincts



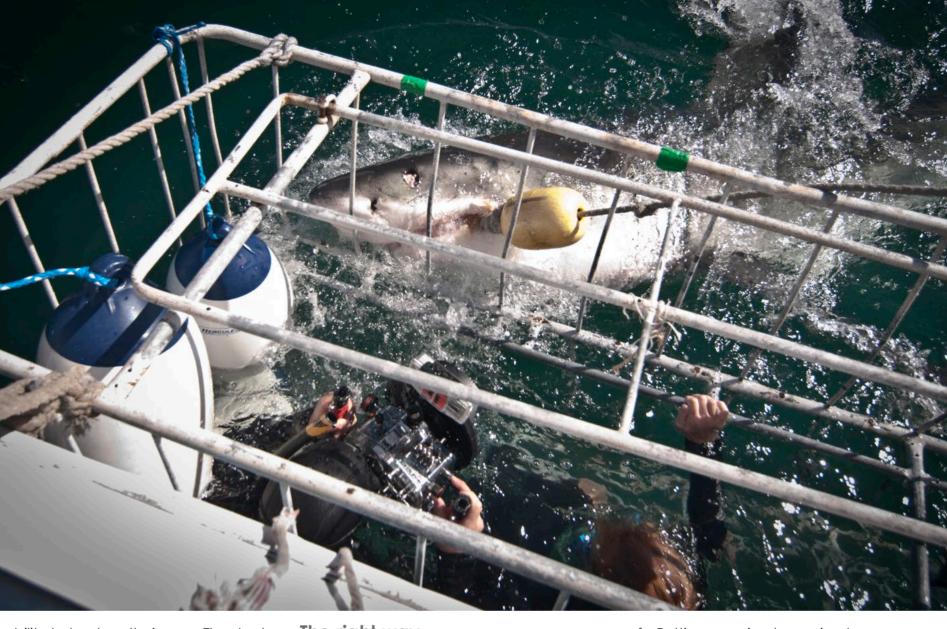
THIS PAGE: Scenes from shark dive at Osprey Reef, Great Barrier Reef, Australia

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Shark dive at Osprey Reef, Great Barrier Reef, Australia



or ability to hunt on their own. The shark feed is really more of a snack.

Other issues include the potential for shark feedings to lead to an increase in aggressiveness towards humans, or that sharks may become too comfortable around humans and boats, associating the two with being fed. It may be dangerous to humans to encourage these apex predators to associate people and food. But so far, this has not been documented.

Shark attacks rarely happen on scuba divers, because sharks can fully see what they are (i.e. not their prey). Shark attacks on humans are almost always due to misconception. Sometime when you are underwater, look up at the surface on a sunny day; a snorkeler or a surfer is easily mistaken for a seal flailing around in the glare.

The right way

Just like any activity, there's a right way and a wrong way to do it. Dive operators, scientists and shark divers have come up with some recommended guidelines to keep both divers and sharks safe. Some of these recommendations include not chumming on the surface or around boats; not feeding by hand; not handling the sharks; and not taking fish for the feeds from the reef or inshore areas. In some places, invasive lionfish are being used for shark feeds, which both helps to rid the reef of lionfish and does not deplete the reef of other fish for the activity.

Other recommendations address the best locations to do shark feeds. The area feeds should do their homework first. should be coral rubble, or sandy, and be able to handle a large amount of divers, without being destructive to healthy

reefs. Putting mooring buoys in place so boats do not have to anchor and minimizing the number of feeding sites and how often they occur, helps minimize any destructive effects shark dives may have.

Dive operations that offer shark feeds are in a unique position to have access to many people who care about sharks and can use that access to promote shark awareness. This puts them in a unique position to help with shark conservation, both by raising awareness amona their customers and by being able to spread shark and ocean education to the community living around the shark feeding areas.

Divers who want to partake in shark Research tour operators and find out how long they have been in business; how long have they been doing shark





Shark dive in Turks and Caicos (left); Shark dive at Osprey Reef, Great Barrier Reef, Australia (above)

As responsible divers, I leave it to

you to dive with operators who care about the sharks, the divers and the marine environment. Do your research, and if you see something that does not seem right, say something. Usually, dive guides and shop owners want to protect the environment too (they were new to shark diving once, too) and a suggestion might lead to better practices, which leads to better experiences for everyone. Do not underestimate the power of the consumer, because if we do not say something, who will?

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dives; how the dives are done; and if possible, read reviews from former customers. Support companies that believe in shark education and conservation. Do not dive with companies that are not putting the sharks first.

My dive

As the gray reef sharks circled around us, I could not help but be amazed at the sheer beauty of these animals. I perched myself on a rock quite close to where the food was, and the sharks came extremely close, for almost an hour. It was clear the sharks had no interest in us. They moved around us to get closer to the food, but did not even seem to pay attention to our presence there.

Back on board, we raved about how many sharks there were, how close they got, how sleekly beautiful they are, and also how they

had no interest in us whatsoever. They only cared about the food, and once that was gone, so were they. A few were seen swimming along the wall, typical of most of our dives at this site, but most disappeared back into the blue. The show was over, and the sharks knew it too.

Our group dive was a typical example of how shark feeds can be a positive experience and beneficial to shark reputation, and thus, conservation. We were 12 divers, almost all armed with cameras, taking hundreds of stills and videos. We would share that media with our friends and families, and in turn, they would tell stories of how they knew someone who dived with sharks and "didn't get eaten." Then, this story would keep spreading. This is how the negative reputation of sharks can be changed—one diver at a time.





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Magnuson-Stevens Fishery Conservation & Management Act § 1866 Shark feeding

Except to the extent determined by the Secretary, or under State law, as presenting no public health hazard or safety risk, or when conducted as part of a research program funded in whole or in part by appropriated funds, it is unlawful to introduce, or attempt to introduce, food or any other substance into the water to attract sharks for any purpose other than to harvest sharks within the Exclusive Economic Zone seaward of the State of Hawaii and of the Commonwealths, territories, and possessions of the United States in the Pacific Ocean Area.



Attracting tiger sharks with bait, as seen here at Bahamas' Tiger Beach, is about to become unlawful in all the United States

US Congress moves to ban feeding and "attracting" sharks, unless you're an angler

A bill that would ban divers from feeding sharks in US waters has been introduced in Congress.

On 23 June 2016, US Senator Bill Nelson introduced a bill aimed at preserving and enhancing saltwater fishing opportunities for recreational analers, and for other purposes, called "Access for Sportfishing Act of 2016". Among other provisions the proposed act amends to the 2010 Shark And Fishery Conservation Act making it unlawful for any person:

- (1) to engage in shark feeding.
- (2) to operate a vessel for the purpose of carrying a passenger for hire to any site to engage

in shark feeding or to observe shark feeding.

Attaction prohibited

The act defines the term "shark feeding" as the introduction of food or any other substance into the water to feed or attract sharks for any purpose other than to harvest sharks.

Exceptions

Any incidental feeding or attracting of a shark in the course of educational or scientific research conducted under a permit issued by the Secretary of Commerce or lawful fishing under the Magnuson-Stevens Fishery Conservation and Management Act shall not be considered a violation of this section.

In Florida, feeding fish, sharks, or other marine species while diving

or snorkeling is already prohibited. It is also prohibited to operate a boat that is hired to carry passengers to any area within state waters to feed marine species or view marine species feeding. The Fish and Wildlife Conservation Commission states that these regulations were developed out of concerns for the safety of divers, surfers and swimmers and the effects of concentrating and training sharks to associate humans with food.

Anglers may, divers not

"Chumming" or feeding fish for the purpose of harvesting marine species as otherwise allowed by FWC Commission rules is, however, permitted. In other words, it is okay if you are going to kill the shark but not if you just want to have a closer look. ■



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Photo by Matthew James Smith

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