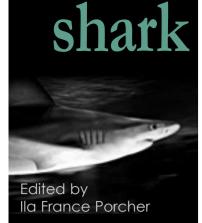
## shark tales



# Deep Trust In Sharks



Text by Ila France Porcher Photos by Jim Abernethy and Ila France Porcher

Jim Abernethy, owner and operator of Scuba Adventures, was the dive operator who showed all of the others that sharks are peaceful animals who want nothing to do with humans as a food source.

He spends most of his time with wild sharks during dives from his liveaboard ship, The Shear Water, at remote sites in the vicinity of the Bahamas, and is on land for only about 40 days a year.

In order to show people the true nature of sharks on his dives, Jim specifically targeted those with the worst reputations. He was the first eco-tourism guide

operator to do so. Soon he was taking divers to see great hammerhead sharks, tiger sharks, bull sharks, oceanic whitetips and lemon sharks. For roughly the first seven years of these interactions, the other operators who have now followed his lead, fought and voiced their opinions that people would soon be dying because of Jim's foolishness.

But Jim was right, and he was the one who showed all of the others that sharks are peaceful animals who want nothing to do with humans as a food source. Now there are at least half a dozen shark dive operators trying to replicate what he started decades ago. Jim's eco-tourism shark business is credited with being the first to offer night dives with all of these species, too.

As Jim became familiar with shark behaviour, he began caressing them gently on their faces when they curiously approached him. As they got over their fear of his touch, he was able to remove their parasites and massage their heads. The sharks clearly enjoyed these affectionate attentions and responded by returning to him more often and more confidently, apparently considering him to be a type of cleaning station.

#### Removing hooks

So when some of them appeared with hooks in their mouths, he was able to use these tactics to get them to swim up to him over and over, so that he could examine their hooks repeatedly before removing them.

One eight-foot male lemon shark was blind in his left eve. yet he had managed to survive in spite of this serious handicap. Jim named him Captain Ron. and always gave him special attention when he saw him. He knew how hard it is for an animal with any handicap to meet the challenges of living wild.

Jim had known Captain Ron for a decade when he appeared with a large "J" hook piercing his snout—the hook passed right through the flesh of his nose, and into his mouth. Jim started by touching his face whenever he passed with gentle caresses, and as Captain Ron relaxed, he began grasping his nose for short periods. The hook was close to the shark's teeth, so Jim was concerned about being accidentally bitten, and waited

for the right moment. When he sensed that the time was right. he held the animal's head still with his right hand long enough to remove the hook with his left hand, while Captain Ron remained relaxed and nearly motionless in the water. Jim released him, and the shark's response was to circle and come back.

It was a week before Jim returned to the area, and Captain Ron swam straight up to him, allowing him to examine the wound. It had nearly healed. The hole made by the hook had filled in, and the redness around it had gone. Captain Ron was even more affectionate as a result of the incident, repeatedly returning to swim close beside Jim and let him touch his face.

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THIS PAGE: Jim Abernethy examines the would in the mouth of a shark named Emma

Shark Emma's dorsal fin wound (left); Healed dorsal fin (below) These two photographs. taken a year apart show the healing of the wound

Though most of the sharks drawn to Jim's dives remain distant and never do approach closely to interact with him, he found that no matter what the species. a natural bond would form between him and certain individuals over time, facilitated by his affectionate gestures. In the wide region known as Tiger Beach, there are approximately 17 such tiger sharks, whom he calls "supermodels." who come to him on sight for the affection that he gives them on every encounter.

#### Emma

One of these is a matronly four-meter (14-foot) individual whom Jim named

Emma, after his quest, Emma Finn. Over the years, the great shark has grown increasinaly trustina and intimate with him and their bond has steadily deepened. She is clearly able to recognize him from among all of the divers present, and comes straight over to him whenever she sees him, while he strokes her head and face.

When Emma came to a dive with a fish hook stuck through her lower jaw, Jim gently touched her until he



had the opportunity to pull it out. Twice he was able to remove hooks stuck into the outside of her mouth in this way, by caressing her gently first, and waiting for the right moment to coax out the hook.

Then, one day Emma appeared at the beginning of a dive with fishing wire hanging from the side of her face, and a large hook stuck deep into the muscle of the right hinge of her jaw. The hook was deep inside her huge mouth, and Jim observed her circling around him, wondering how he would be able to remove it, and especially about how he would protect his arm from her teeth when he reached inside. His first thought was to get a piece of PVC tubing to protect his arm, then open her mouth and remove the hook, but just at that moment, Emma came straight toward him, and just before she reached him, she bit down on a large coral head. This was an inexplicable move—sharks never bite down on coral in such a way. Yet, this unprecedented act permitted Jim, moving swiftly on the spur of the moment, to reach

inside her mouth, take the hook in his finaers, and rip it out!

Blood poured into the water. Emma took her jaw off the coral head, and soared around bleeding. She stayed in the area, and continued to approach Jim to be stroked as she always did.

Later that day, while Jim was stroking her head, he tried opening her mouth to get a look at the wound, by sliding his right hand onto her nose and using his left hand to open her lower jaw. Thus encouraged, Emma opened her mouth, and he was able to see that her wound was very swollen, and was between fifteen to twenty centimetres (six to eight inches) long.

A week later Jim returned to the area. and was again able to coax the huge tiger shark to open her mouth for him. The open wound had closed, to his great relief—he was impressed by the shark's ability to heal up quickly.

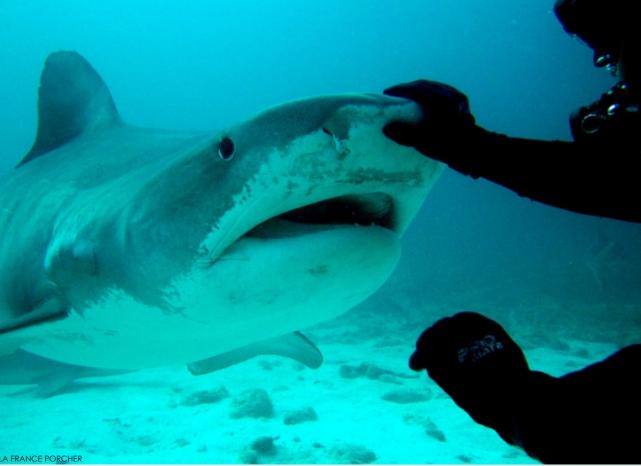
For the next four or five weeks he opened Emma's mouth to see how her wound was healing whenever he saw her, which was about five times a week. Eventually, she began swimming up to him and opening her mouth by herself.

But by the time this writer was able to visit, to observe Emma's behaviour, the tiger shark had not been seen for about six months.

But one evening, an enormous tiger shark passed swiftly just at the visual limit. I thought of Emma—the shark was so much bigger than any of the others. She was preanant, and the tip of her dorsal fin was missing. Soon she reappeared and alided straight into the centre where the divers were watching. Jim was on board at the time, so word was sent that Emma had come. She was energetically roaming the area when Jim arrived on the seafloor, and she immediately swam to him.

#### Wounds and healing

Though I had found it hard to believe that a tiger shark would willingly open her mouth so that Jim could inspect her wound, that is exactly what she did. Jim was still reaching out for her when she opened her mouth. He rested his right hand on her head, and looked inside. She was remembering him and their complicity over her hook wounds from six months before!





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Emma appeared to be excited, roaming around energetically, and often approaching Jim. I saw her open her mouth when she approached him four times. Her momentum kept her moving forward so she rose upwards, Jim moving with her, so that by the time he was able to take a good look inside, she was rising nearly vertically.

Jim described how Emma had lost the tip of her dorsal fin. He and Emma had reunited soon after she had birthed the year before, and he noted that each week, she had another mating scar. (Females generally acquire significant mating wounds because the male holds

her with his teeth to stabilize the pair during copulation.)

One day a small male tiger shark of about three meters (ten feet) in length was with her, and kept trying to mate with her, biting her on the back of her head. Emma rejected him and eventually she swam away. Jim followed, trying to keep them in view, but he was left behind. When Emma reappeared, the upper part of her dorsal fin had been ripped off! Filaments of cartilage were coming out of the wound, and some of her fin was missing.

Jim was able to document the healing, which involved flesh replacement.



Emma opens her mouth so that Jim can examine her hook wound (below)

#### Shark advocacy

Jim described an incident in which a shark trophy hunter had visited one of the dive sites and fished some tiger sharks in the five-and-a-half-meter (18-foot) range, in hopes of setting a fishing record. As a result of the slaughter, the sharks disappeared from the area for a period of two months. Sharks of other species have also been documented to flee an area for a period of time, after some of their numbers have been slaughtered.

Knowing sharks in their liquid realm so well, and regularly witnessing such incidents, Jim has become a passionate and very powerful advocate for sharks. When he was disparagingly referred to as a "loose cannon" by one of his adversaries, Jim retorted that he was no cannon but an F-22 Tactical Fighter for sharks. And he is. As an award winning photographer, author and film-maker, his influence is growing and spreading. His original work for sharks, and his unique story is also being documented through different movies and films which will soon be available.

As well as fighting for sharks as an individual, Jim also works through a variety of important NGO's including Operation Blue Pride, which he founded in 2011. Operation Blue Pride invites military veterans to go underwater and discover the gravity-free submarine world and the sharks who inhabit it. These wounded, handicapped men and women fall in love with the majestic creatures, while the underwater environment relieves them of the pain they feel above the surface. This special combination is the key to its success, and the organization is now building a worldwide army to take



lla France Porcher is a self-taught, published ethologist. She began her career as a successful wildlife artist, documenting the behaviour of the wild animals she painted. In Tahiti she found sharks to be so intriguing that she launched an intensive study of them, systematically spending time with them and recording their

actions, following the precepts of cognitive ethology. She is credited with the discovery of a way to study these much maligned predators that does not involve killing them, and has been called the Jane Goodall of sharks for her documentation of their intelligence in the wild. Her book about shark observation, My Sunset Rendevous: Crisis in Tahiti, is available at: Amazon.com



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A "strange creature" astonishes bathers, washed up on a beach in Spain.

A swimmer at Villaricos, Spain, found a 13 foot sea creature decomposing in shallow waters on the beach on August 15, 2013. Authorities pulled the cadaver onto the beach and cordoned off the area.

The pale body was very long and slender, and decorated along its length with what looked like horns. Its head, found separate from the body, was horned too.

The Spanish marine biologists who studied it were mystified. Several theories were put forward ranging from it being an oarfish to the backbone of a shark. But the true identity remains a mystery. Because of its state of severe decomposition, it had to be buried for safety reasons, so further efforts to identify it have only the photographs to work with.

The Association in Defense of Marine Fauna, (PROMAR) in Villaricos in Almería, southern Spain, continues to try to identify the animal. Spokesman Paco Toledano said: "It's hard to know what we're dealing with. It is broken up and we can not identify what it is. Maybe it's a bull fish," he joked.



"Perhaps if we were able to analyze the bones we might know more, but this specific genetic analysis is very expensive and who would pay? We've certainly never before seen anything like this."

A spokesman for the Marine Biological Association said: "A few people have said it could be the backbone of a shark with the rest of it decaying away. Really we would need a vertebrae to properly identify it. If it was a shark it would have a cartilage skeleton as opposed to bone. As for the horns - it's pretty inconclusive. No one knows of anything with horns in the sea. From the picture you wonder if it is even part of the creature."



### Great white sharks fight and inflict wounds upon each other

Martin Graf, CEO of Shark Diver, sees the great white sharks of Guadalupe Island regularly, and is familiar with the different individuals who attend the shark dives. A year ago a male named Chuggy, appeared with a terrible head wound, which was clearly the bite of another great white. It was feared that he would not survive, but he recently reappeared alive and well. The second photograph shows the stage of healing now.

As shown, the wound is between his aill rakers and the back of his skull, so Chuggy was lucky that the teeth of his attacker missed his vital organs, in spite of removing a large chunk of flesh. Though a year has passed, he still has a lot of healing to do.

The ability of sharks to heal swiftly is well documented. Females are usually badly bitten while mating, so a superior ability to heal may have evolved over the aeons along with their teeth. Fights between sharks are virtually unknown in other species—the high cost of a fight, given the damage their teeth can inflict, has been thought to be too great.

Yet great white sharks do bite each other and inflict serious wounds. Martin has seen them appear to avoid conflict through head on confrontations and parallel swimming, after which the smaller shark retreats. But violence ensues at times. Martin says, "We see areat white sharks with injuries that vary in severity, but they are common, not so much in younger sharks, but after they reach about 11 or 12 feet, it's rare to encounter one that doesn't have scars or mutilations. I have seen dorsal fins, pectoral fins, and caudals bitten, and even bitten off."

Chuggy's wound is much worse than those he usually sees.

In his book, The Secret Life of Sharks, researcher Peter Klimley describes how this unusual species uses a ritual to avoid physical conflict when a preyusually a seal—comes under dispute. He filmed many events in which each shark slapped the water at an angle with its tail, and verified that the one who raised the most water, and blasted it farthest, won the seal. He was the first to document a ritualized conflict in any species of in this ancient line of animals. It was an unexpected finding,

> because for the ritual to be effective, each shark must make an evaluation of the other's power, and accept the outcome. Klimley found that the winner was acknowledged by the loser without a physical battle for the seal, which would have badly hurt both sharks. ■



Chuggy's wound



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