

MISUNDERSTOOD

ONE DAY, A FEW years after "Jaws" was published, I was diving in the Bahamas, examining a pile of old cannons on a reef. A friend who had discovered them wanted to know if I thought they were merely a "dump"—weight jettisoned by the crew of a ship that had run aground on the reef—or if the ship itself had sunk there and might still be buried in the sand nearby. So down to the reef I went, to where the cannons littered the reef like Tootsie Rolls dropped from the pocket of some sweet-toothed giant, and as I sank through 50 feet of gin-clear water I turned in slow circles to see what company I might have.

I wasn't worried about sharks. The reef sharks of the Bahamas generally are shy and averse to scuba divers, and the odds were long against a tiger shark, a more dangerous species, being in the neighborhood. And, since we were anchored miles from deep water, the chances of encountering an open-sea predator like a mako or an oceanic whitetip were less than minimal.

As for great whites, well, the possibility of encountering a great white was so remote as to be nonexistent. Great whites like cold water; this water was bathtub warm. They like deep water; this water was shallow. They're drawn to seal colonies or to the carcasses of dead whales, where food is abundant; here there was nothing worth eating.

Those were the facts. And surely I,

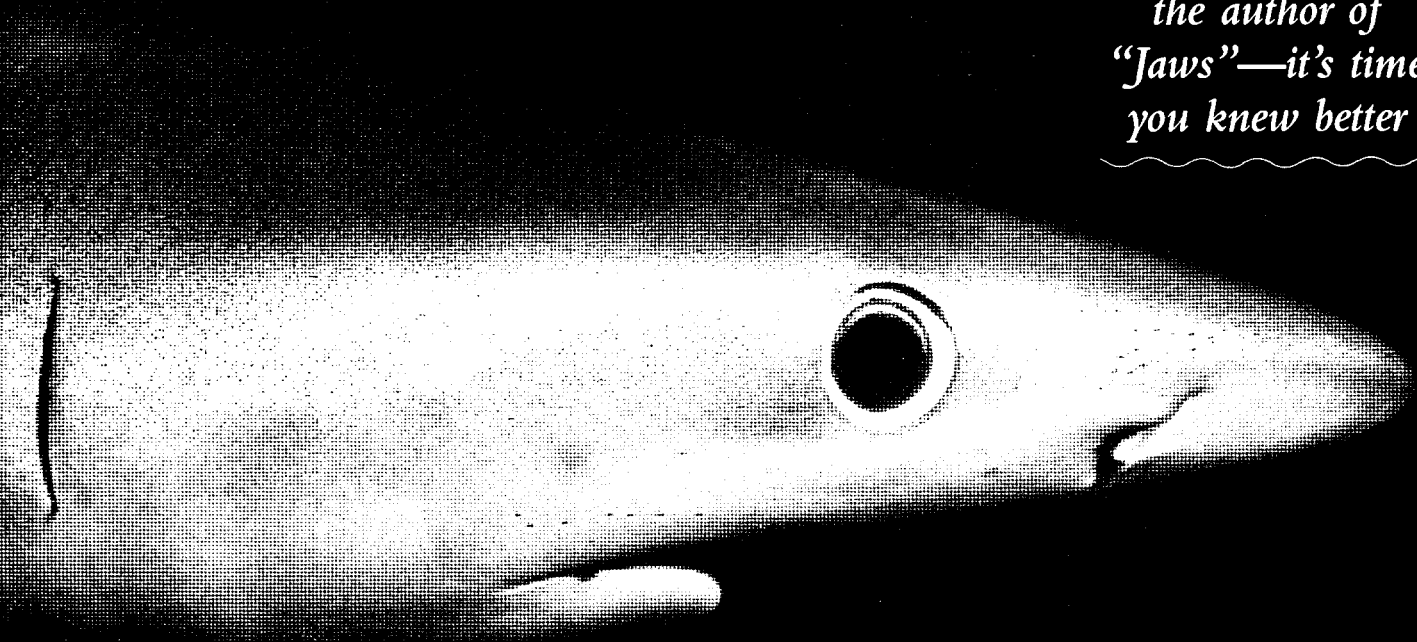
recently catapulted to two-bit celebrity by my supposed expertise about sharks, should have known the facts.

In any event, as I swam slowly from one end of the reef to the other, searching for pieces of wood, encrusted iron, shards of pottery—all telltale signs of a shipwreck—I heard a sound above me. I looked up and saw one of my shipmates lying on the surface in snorkeling gear, slapping the water with one hand. He pointed to the far side of the reef where evidently he'd seen something worthy of my attention. I waved and shot him the "Okay" sign: I'd get to it in a minute. I continued on.

Again I heard him slap the water. Again I looked up. Now he was pointing with some urgency. Again I waved and kept going. *I'd get to it.*

MONSTERS

*Do you think of
the shark as a
killer that
attacks without
provocation?
Take it from
PETER BENCHLEY,
the author of
"Jaws"—it's time
you knew better*



The next sound I heard was the "thrum" of his fins churning the water as he hurried back to the boat. Strange, I thought.

I reached the end of the reef, and started to turn back. Then, suddenly sensing another presence, I raised my eyes and found myself face to face with, and not five feet away from...a great white shark.

No question, no doubt. The pointed snout, the underslung mouth, the black eye, the torpedo shape of the gunmetal gray body (12 feet long, perhaps, though it looked to be at least 25) and, most distinctive of all, the unique caudal peduncle—rounded protrusions near the tail, resembling horizontal stabilizers—all broadcast the majesty of a great white.

I froze, able only to picture the

ironic headlines that would announce my demise.

But the shark froze, too. And then, abruptly, frantically, implausibly, the great white wheeled around, voided its bowels, and disappeared in a nasty brown cloud.

I didn't move. I was too breathless and grateful and stunned. Did that actually happen? Could the most fearsome predator on earth, the largest carnivorous fish in the sea, have fled from a puny human—from me—like a startled rabbit?

Back on the boat, when my pulse had dropped below 250 and my skin color had lost its necrotic gray, I began to wonder if the accepted facts about sharks were not facts at all, and I've been reappraising ever since. The process is ongoing and

endless, but if I've been able to draw a single, solid conclusion, it is this: The more we know about sharks, the more we realize how much there still is to be learned.

When I wrote "Jaws" more than 20 years ago, we lived in a different age. Richard Nixon was President, there was no cable television, no such thing as a VCR, Steven Spielberg was an unknown wunderkind in his twenties, and our knowledge of sharks—science's and the general public's—was still in its infancy.

My research for the book was thorough and good....for its time. I read papers, watched all the documentaries, talked to all the experts. I realize now, though, that I was very



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a fistful of dollars.*

much a prisoner of traditional conceptions. And misconceptions.

In those days, for example, it was common knowledge that sharks were not only carnivores, they were omnivores; they would eat anything. They would attack, kill and devour human beings without much, if any, provocation. They would attack boats. They were compelled by their nature—all species, without exception—to keep moving, or they would die of anoxia, a severe lack of oxygen. The shark had, as Richard Ellis points out in his superb book, "Monsters of the Sea," "...come down through history with a reputation as an ancient, mindless, man-eating, ship-following, eating machine that should by rights be eradicated from the face of the earth."

But, as Ellis goes on to say, "As with all myths, this one has some grains of truth embedded in a substantial matrix of fantasy."

I couldn't write "Jaws" today. The extensive new knowledge of sharks would make it impossible for me to create, in good conscience, a villain of the magnitude and malignity of the original.

Current theory holds that, with rare exceptions, sharks do not intentionally attack human beings. In fact, most of the 368 known species have neither the capacity nor inclination to attack, and only ten or twelve species have been known to even hassle a human.

Some attacks probably are cases of mistaken identity: Photographs have demonstrated that, seen from underwater, a person on a surfboard silhouetted against the sun is indistinguishable from a sea lion. A clumsy human swimming in

murky water could easily be taken for a wounded fish. And a scuba diver wearing a black wetsuit and black fins may well appear to a passing shark to be an acceptable meal of warm-blooded mammal—a sea lion, perhaps. (Of course, if a

iversity of Maryland discovered in waters off Mexico, there are sharks who can rest motionless, extracting oxygen from the water carried over their gills by flowing currents.

In any event, despite the attacks that



CHUCK DAVIS

3,000-pound shark chooses to sample a scuba diver, believing it to be a sea lion, by the time it realizes its mistake, apologies may ring a bit hollow.)

Other attacks may be triggered by a shark's instinct to protect its territory. Some sharks emit warning signals and demonstrate distinctive postures before they attack. Reef fish receive the messages and take cover; humans may not perceive or understand them, and may invite trouble by refusing to retreat.

We also know now that even the most formidable great white shark does not attack boats. Responding to complex and confusing electromagnetic signals in the water, a great white will test a boat, exploring it with its mouth to determine if it is edible.

And not all sharks have to keep moving. As Dr.

Eugenie Clark of the Uni-

do occur—and each one generates appallingly sensational headlines—it is generally accepted today that a person has a much greater chance of being killed by bee stings than by a shark.

None of this is meant in any way to dismiss the danger or diminish the horror of a shark attack. Great whites have been documented at 23 feet long and can weigh more than three and a half tons. They do eat people now and then, and surely there can be no more gruesome a way to go than to be gobbled up by a monster fish. I will never forget the celebrated Australian diver Rodney Fox recalling for me the nightmare of being attacked in the 1960s. "I looked down," he said, "and saw that great conical head rising at me through a cloud of my own blood, and that's when I knew I was in trouble."


But sharks are more often victims than vil-

Largest shark: Whale shark. Up to 59 feet long. **Smallest shark:** Dwarf dog-shark.

Up to 7.9 inches. **Species of shark:** 368. **Species that have**

attacked people: 21. **Shark attacks reported per year:** 100. **Fatal attacks per year:** Fewer than 30. **Sharks killed per year:** 100 million. **Odds of being killed by a shark:** 1 in 300,000,000. **Odds of being attacked by a shark:** 1 in 100,000,000.

Odds of being audited by the IRS: 1 in 66.



lains. No one knows precisely how many sharks are killed every year, but a widely accepted estimate is 100 million. In other words, for every recorded attack on a human being, more than four million sharks are destroyed by human beings.

Much of the killing is wanton and wasteful. Thousands of sharks die in nets or on longlines and are discarded by fisheries because they aren't needed. Others are massacred because a few body parts are worth a fistful of dollars, as with "finning," in which a shark is caught, its fins are sliced off to be sold to make soup in Asia, and the still-living animal is tossed back into the sea to die.

Our excess, as one may expect, is returning to haunt us. Shark catches, which ballooned in the last 20 years, are beginning to decline, not from lack of initiative but from a lack of sharks. Great whites have already been declared endangered in South Africa and parts of Australia, and the populations of several others species have been reduced to a point where recovery is very much in question.

There's a curious paradox inherent in our reckless assault on sharks. As the bizarre overreaction to "Jaws" demonstrated, while we may fear sharks and profess to hate them, we are also thrilled by them. Ellis quotes sociobiologist E.O. Wilson on man's contradictory view of sharks, specifically the great white. "We're not just afraid of predators," Wilson writes. "We're transfixed by them, prone to weave stories and fables and chatter endlessly about them, because fascination creates preparedness, and preparedness, survival. In a deeply tribal sense, we love our monsters."

The mistake we make, then, either in seeking to destroy sharks or in not caring if we even inadvertently destroy them, is one of cosmic stupidity. If I have one hope, it is that we will come to appreciate and protect these wonderful animals before we manage, through ignorance, stupidity and greed, to wipe them out altogether. 