Devils Teeth Excerpt

Introduction

An ocean without its unnamed monsters would be like a completely dreamless sleep.

—John Steinbeck, THE LOG FROM THE SEA OF CORTEZ

The killing took place at dawn and as usual it was a decapitation, accomplished by a single vicious swipe. Blood geysered into the air, creating a vivid slick that stood out on the water like the work of a violent abstract painter. Five hundred yards away, outside of a lighthouse on the island's highest peak, a man watched through a telescope. First he noticed the frenzy of gulls, bird gestalt that signaled trouble. And then he saw the blood. Grabbing his radio, he turned and began to run.

His transmission jolted awake the four other people on the island. "We've got an attack off Sugarloaf, big one it looks like. Lotta blood." The house at the bottom of the hill echoed with the sounds of scientist Peter Pyle hurrying, running down the stairs, pulling on his knee-high rubber boots, slamming the old door behind him as he sprinted to the boat launch.

Peter and his colleague Scot Anderson, the voice on the radio, jumped into their seventeen-foot Boston Whaler. The boat rested on a bed of rubber tires beside a cliff; it was attached to a crane which lifted it up and into the air. The crane swung the whaler over the lip and lowered it thirty feet, into the massive early winter swells of the Pacific.

Peter unhooked the winch, an inch-thick cable of steel, as the whaler rose and fell into troughs big enough to swallow it. He started the engine and powered two hundred yards toward the birds, where the object of all the attention floated in a cloud of blood: a quarter-ton elephant seal that was missing its head. The odor was dense and oily, rancid Crisco mixed with seawater.

"Oh yeah," Peter said. "That's the smell of a shark attack."

In a world where very little is known for certain, they knew that below them a great white shark was orbiting, waiting for the seal to bleed some more, and that this shark would soon be returning for breakfast. It might be Betty or Mama or the Cadillac, one of the huge females that patrolled the east side of the island. These big girls, all of them over seventeen feet long, were known as the Sisterhood. Or it might be a "smaller" male (thirteen or fourteen feet), like Spotty or T-Nose or the sneaky Cal Ripfin. These sharks were called the Rat Pack. It might be any number of great whites. At this time of the year there were scores of them cruising this 120-acre patch of sea, swimming close to the

shoreline of Southeast Farallon Island as hapless seals washed out of finger gulleys at high tide and into the danger zone.

In any given year more than a thousand people will be maimed by toilet bowl cleaning products or killed by cattle. Fewer than a dozen will be attacked by a great white shark. In this neighborhood, however, those odds do not count. At the Farallon Islands, during the months of September through November, your chance of meeting a great white face-to-face is better than even money, should you be crazy enough or unlucky enough to end up in the water.

The two men stood at the stern holding long poles capped with video cameras. There were several beats of the kind of absolute silence that you hardly ever get in life, eerie moments when time seemed to stop and even the birds became quiet. Then, fifty yards away, the ocean swirled into a boil.

The dorsal fin of myth and nightmare rose from below and came tunneling toward them like a German U-boat, creating a sizable wake. The shark made a tight pass around the boat, pulling up just short of the stern. Its body, which was almost black as it broke the surface, glowed with cobalt and turquoise highlights underwater. “He’s coming up!” Peter yelled. The whaler rocked. A massive triangle of a head lifted out of the water and, in a surprisingly delicate way, bit the back corner of the boat. Scot leaned closer and filmed. The shark’s black eyes rolled; they could plainly see the scars all over its head and its two-inch-long teeth, backed by rows of spare two-inch-long teeth. Then, as quickly as it had come, the shark slipped beneath the surface, dove under the boat, and reemerged next to the seal. As the great white snatched the carcass, shaking it, bright orange blood burst from the sides of its mouth.

“It’s Bitehead!” Scot said. He broke into a full-face smile beneath his wraparound sunglasses.

“Ah, Bitehead,” Peter said. There was a moment of pleased recognition, as if greeting a fond acquaintance they had just happened to run into on the street. “We’ve known this shark for ten years.”

Every September, one of the world’s largest and densest congregations of great white sharks assembles in the waters surrounding the Farallon Islands, a 211-acre archipelago of ten islets in the Pacific, twenty-seven miles due west of the Golden Gate Bridge. No one fully understands what this gathering represents, why great whites, the ocean’s most solitary hunters, choose to reside for a period of time in such close quarters. What’s known for sure is that the sharks remain at this location for approximately three months. And this: having studied them for over a decade and a half in the Farallon White Shark

Project, Scot Anderson and Peter Pyle have discovered that year after year, the same sharks return to exactly the same spot.

This annual reunion is at least partly about hunting. Despite strange inventories of items found in the bellies of sharks—a cuckoo clock, a fur cape, license plates and lobster traps, a buffalo head, an entire reindeer, and even, in one unlikely scenario, a man dressed in a full suit of armor—what great whites really love to eat are seals. And the Farallones are dripping with seals—northern elephant seals, harbor seals, fur seals, seals, seals, seals—all barking and bellowing, draped on the rocks like a blubbery carpet.

It wasn't always this way. The islands' seals, which once numbered in the tens of thousands, were hunted almost to extinction 150 years ago. Only after Southeast Farallon Island, the largest in the group, became a wildlife refuge in 1969 did the populations begin to recover. And as the seals returned, no one was happier to see them than the sharks. In 1970 Farallon biologists witnessed their first shark attack, on a Steller's sea lion, a brawny animal that itself looks like a predator. During the next fifteen years, more than one hundred attacks on seals and sea lions were observed at close range. But the sharks were only warming up. By the year 2000, Peter and Scot were logging almost eighty attacks in a single season. Still, even accounting for the allure of a seal smorgasbord, why did these particular sharks keep returning? And why were they clustered together so tightly? No one had ever documented such behavior among great whites before.

Not that anyone's had the opportunity. The Farallon Islands are the only place on Earth where it's possible to study great white sharks behaving naturally in the wild. Unsubjected, that is, to the presence and fumblings of humans. In South Africa's "Shark Alley," near the town of Gaansbai, the channel is stained red with chum, and often there are a dozen boats banging up against each other while as many as sixty divers sardined into steel cages clog the thousand-yard-wide passage. In Australia, great white sharks contend with underwater electrical charges, beaches ringed by netting, trophy fishing, and more chumming. The Farallon great whites, on the other hand, are largely unharassed. They might cross paths with the occasional boatload of day-trippers from San Francisco, but they're subjected to none of the behavior-altering coercion that nature's top predators regularly endure so that people can sit in the Winnebago or tundra buggy or safari truck and get a look at them.

This is important because despite their visibility at the Farallones, and despite the impressive truth that sharks are so old they predate trees, great whites have remained among the most mysterious of creatures. Even now, after the human genome has been reduced to an alphabet set and spaceships are trolling around on Mars, scientists are still missing some basic information about the species.

How long do they live? Unknown. (But probably at least thirty years, considering that white sharks don't mature until they're over ten years old, all the sharks at the Farallones are adults, and some individuals have been showing up for more than a decade. There are scientists who speculate that they live as long as sixty years, but that remains unproven.)

Where do they mate, or when, or how often, or even how? There are clues to the sex lives of great white sharks, but no facts. Scot and Peter have discovered that, while the males return annually, the females return only every other year, often with fresh, deep bites around their heads. Are these wounds related to mating? Do the females spend their off years giving birth in warmer waters? For that matter, how many great whites are there in the oceans? All of this is a complete mystery. Even the seasonal population at the Farallones is a wild guess: anywhere from thirty to one hundred.

Then, of course, there's the question of size: Exactly how big can these sharks get? And once again there are no straight answers. Because their skeletons are made of cartilage rather than bone, they've left virtually no fossil record aside from teeth. The largest great white shark to have been caught and precisely measured was nineteen and a half feet long, but there have been credible, if unverifiable, reports of much larger animals. Nothing would be too surprising. Sharks are the heavyweight champions of evolution; they've been fine-tuning their act for ages, hundreds of millions of years before party-crashing humans were even a glimmer in the primordial eye. They're resistant to infections, circulatory disease, and, to a large extent, cancer. They heal rapidly from severe injuries such as lacerated corneas or deep gouges. Everything about the animal is stacked toward survival. From the moment baby whites are born, four-foot-long replicas of their mother, they are already in pursuit of their first meal; from hundreds of yards away they can detect minute millivolt electrical impulses given off by their prey's heartbeat.

Like the great white itself, the Farallon Islands are a nearly perfect freak of nature. Their ecology is a house of cards—an intricate confluence of ocean and seals and birds and sharks, all circling back on each other, everything existing in sublime balance. But in nature, complexity also means fragility. Though the islands are part of the 1,255-square-mile Gulf of the Farallones National Marine Sanctuary, that sanctuary happens to straddle the West Coast's busiest shipping lanes. In 1971, 840,000 gallons of oil oozed into the Gulf of the Farallones, killing more than twenty thousand seabirds. Thirteen years later, in 1984, a tanker exploded and deposited 1.4 million gallons of crude. And right now, hundreds of ships are scattered on the nearby seafloor, poised to begin blurping up oil like toxic lava lamps as the salt water slowly eats away their hulls. Factor in the presence of a sunken ten-thousand-ton aircraft carrier once used for nuclear target practice and forty-eight thousand barrels of radioactive waste, and the picture gets even more precarious.

The islands themselves are fragile, hollow in places, and made of eighty-nine-million-year-old granite, much of which has gone rotten and crumbles to the touch. The word farallon is Spanish for "rocky islet in the ocean" (the plural is farallones, pronounced "fair-alons"), and some, like Middle Farallon, known locally as "the Pimple," are really more like protruding rocks than actual islands. All ten are part of the ragged edge of the continental shelf as it juts out of the Pacific before plunging two miles—the depth of the Grand Canyon—into darkness. Technically, the Farallones are just an exotic suburb of San Francisco, as they lie within the city limits. But few of the Bay Area's seven million residents are aware of their existence. And even supposing someone knew that the Farallones were out there, he surely wouldn't have any idea of the violent, desperate history of the place: the accidents, the murders, the forgotten town, the homegrown war. Each year there are fewer and fewer people alive who remember the stories. On satellite photos of the Bay Area, the Farallones are usually cropped out of the frame.

This obscurity is understandable. The boat ride from the mainland is a riot of turbulence and nausea that can last more than six hours—and that's on a day when a captain is willing to attempt the voyage. Even coast guard crews balk at the crossing, admitting that they try to take a helicopter when possible. No one lives year-round at the Farallones. Peter, Scot, and a revolving handful of colleagues bunk in the only habitable building, a 120-year-old, no-nonsense house on Southeast Farallon that looks like it could stand up to anything. And it has: The place gets regular lashings of the meanest weather the Pacific can dish out. Thirty-knot winds, blanketing fog, and fifteen-foot seas are standard.

Even if a visitor is hearty enough or curious enough to make the trip to the Farallones, upon arrival he cannot set foot aground—it is a tightly supervised National Wildlife Refuge, within a National Marine Sanctuary, and the only people allowed there by federal law are the biologists who monitor the wildlife. In any case, there's nowhere to land a boat. The islands are perimetered by sheer cliffs and treacherous hidden rocks that create abrupt surf breaks. A quarter million seabirds spend the year painting these rocks, and the stench of ammonia will knock a person back on his heels. Noisemaking is prohibited, planes may not fly directly overhead, and all boats are required to remain at least three hundred feet offshore. And you sure as hell don't want to go in for a dip. When all the impediments are taken into account, there is really only one reason to visit the Farallon Islands: because it is the spookiest, wildest place on Earth.

I became haunted by the Farallones in 1998, when I happened to see a BBC documentary about Scot and Peter's work. Television tends to make even magnificent things seem puny, but this program managed to convey how enormous the sharks were, how toylike the men's research boat was by comparison, the extraterrestrial nature of the place. When the show came on I was lying on my living room floor, bleary with mononucleosis, and I wondered if I might be hallucinating.

On-screen, the islands jutted from the Pacific like the fangs of a sea monster badly in need of dental work. The water was a fathomless black; fog crept through savage rock archways. But the islands' most surreal feature lay beneath the surface. When the blond man identified as "Scot Anderson, biologist" leaned over the edge of their eleven-foot boat and lowered an underwater video camera, it was only seconds before a great white shark appeared in the frame. And then another, and then another. There was no chum in the water, no bait. The sharks were just there, swimming around, stacked like planes over O'Hare. Is this some kind of hoax? I wondered. A camera montage? This cannot be real. How on earth could great white sharks the size of cube vans be hanging out in a pack within the San Francisco delivery radius for a pizza? And who were the two crazies sitting in the middle of it all in a rowboat?

Great white sharks elicit a kind of universal awe—and not just because of their ability to snack on us. Grizzly bears can devour people with equal proficiency, and while they certainly command a healthy respect, it's nothing like our primal response to seeing that black flag shearing the water. Ask the Discovery Channel; its annual Shark Week is a ratings bonanza that has drawn as much as a 100 percent increase in viewers, and the network invariably schedules it during the sweeps.

Even to the most dedicated control freak, white sharks represent the terrible, powerful unknown. They live in a different element than we do, they're not cute, they're not at all cuddly, and on some level they seem like the closest thing we've got to living dinosaurs. Their otherness is what both compels us and scares the pants off us. That, and their several sets of teeth. It's a complicated relationship. The biologist Edward O. Wilson summed it up beautifully when he wrote, "In a deeply tribal way, we love our monsters."

Most prefer to love the monster from a distance, or perhaps only in photographs, rather than marching right up to pet its fur or examine its claws (or stroke its fin, as Scot did on the BBC program when a shark passed alongside him). Survival usually trumps curiosity and that's good because those are the people we can count on to stick around and continue the race, passing their sage judgment down to their children. Then there are the others. Like me.

As far back as I can remember, I've had the feeling that the most exciting things in life were locked away somewhere, like Fabergé eggs or hundred-year-old Scotch. And that the only way to get to them was by relentless searching. You weren't going to stumble across a lost civilization on your way to catch the commuter bus, for instance, or find a goblin shark lying in the seafood section of Safeway. Seeing the moon on TV, visiting the wildest creatures in cages, nose-pressing museum cases to admire a souvenir of history—all this added up to an unacceptable trade-off. And yet pretty much everyone I knew had already made it.

And in truth I had too. But at the age of thirty-four, ten years into a successful career in the magazine world, there was still more restlessness and curiosity in me than I knew how to handle, and I wouldn't say that I ever felt content. Bodies of water caused the most distraction. They drew me in deep, like a hypnotist's coin, and I could never look at one without wondering what was under its skin. The green-black Canadian lakes where I spent my summers, the gin-clear Caribbean, the fathomless Pacific, the shallow, antiseptic glint of a swimming pool: I wanted them all the same.

My fascination with water led to an athletic career as a swimmer that has lasted for twenty-five years. For up to six hours a day I stared at the bottom of every possible kind of pool, did millions of laps and countless flipturns, and I still couldn't get enough water. The only thing more satisfying than being in the pool was swimming in a lake or a river or the ocean, where I might possibly see fish. Even the lowliest trash fish, a crappie or a perch or a rock bass, worked a kind of spell on me, an irrational mix of captivation and terror. While other people were looking up into space, wondering about black holes and distant galaxies, I was staring down into some expanse of water, hoping for a glimpse of fin.

Oceans cover 71 percent of the earth, and it's estimated that no one has ever laid eyes on 95 percent of the life-forms that live there; only a piddling fraction of this aquatic real estate has been explored. Breakthroughs in deep exploration have made it possible to venture farther into the abyss, and in recent years jaw-dropping images of formerly unknown creatures have come back from below—beings that stretch the imagination such as the fangtooth fish and the vampire squid and the gulper eel. Scientists have only just discovered hot vents on the ocean floors—boiling, mineral-saturated water that spews up from the Earth's crust into the sea through chimneylike formations. (These chimneys might be the very source of life, that's all.) Through the use of new technologies like sidescan sonar, astonishing treasures have been found: Six hundred shipwrecks, some from prebiblical times, are lying in one small swath of ocean off Portugal. At least three sunken Egyptian cities thought to be more than two thousand years old have recently been discovered kicking around on the bottom near Alexandria's harbor. When underwater archaeologists began to explore them, they happened upon Napoleon's sunken fleet.

In other words, even in places where the topside is familiar, there are whole new universes and ancient buried worlds swirling around down there, like rooms you didn't know about in your house. I found this thrillingly spooky. For years, I'd had a recurring dream—actually, it hovered on the edge of nightmare territory—in which I floated at night, surrounded by large, unearthly fish. I could never see them clearly, but I knew the water was alive with them, all these hidden creatures, sweeping and circling. When I saw the Farallones on the screen that first time, the memory of these phantoms vaulted out of semiretirement and into my consciousness. This was some weird water. What was going on beneath the surface?

Finding out more proved difficult. the BBC piece about the Farallon sharks was the only one that existed. What articles I could turn up tended to be wonky treatises on seal populations and seabird migration, or terse newspaper stories that raised more questions than they answered. The Los Angeles Times called the Farallones "the most forbidding piece of real estate in America, if not the world," but didn't elaborate. A New York Times headline from 1858 reported that a fisherman had been "seized by an octopus" at the islands, yet provided no details.

I came across random facts that intrigued: A female skeleton had been found in a sea cave, and to this day her identity remains a mystery . . . a century ago on Southeast Farallon Island there was a town that even had its own school . . . a new kind of jellyfish had been discovered there; it had arms instead of tentacles. And the sharks, always the sharks. Commercial divers refused to work anywhere near the place. Government divers were not permitted to enter the surrounding waters for insurance reasons. Great white sharks had even foiled a world-record attempt to water-ski from the Golden Gate Bridge to the Farallones. "That was the stupidest thing I ever did," admitted the skier, who spent hours plowing through bone-jarring fifteen-foot swells, only to have his boat spring a leak when he neared the islands. Swimming beneath the hull to check for damage, he suddenly realized he was not alone: "All I could see was a swarm of sharks." The man leaped back into the boat, whereupon he and his crew hightailed it back to San Francisco, bailing as fast as they could.

Being at the Farallones, it seemed, was like hanging around Mount Olympus as the gods glided by for another round at the buffet. And in this foreboding spot, humans were neither wanted nor needed. The usual rules of civilization did not apply. Here was a place where nothing was fake and nothing was for sale, where cars and credit cards, cell phones and expensive high-heeled shoes got you nowhere, where animals thrived while people died in any number of unlikely ways. This lost outpost, it seemed to me, was more than an unexpected scrap of America, more than a window into an interesting marine world. It was a glimpse into another realm.

As I watched the two men on TV, surrounded by sharks in their little boat, I realized that somewhere between San Francisco and the Farallon Islands, there was a border crossing. On one side of the divide was the world of blacktop and happy hour, and on the other was an uninhabitable place where four-hundred-million-year-old predators still roamed. I wanted to cross that line while it still existed, before civilization reached out and blurred it, then tamed it, then erased it completely. But how? The place was off limits, forbidden in every way. And aside from that, I had no idea how I would get there. But the Farallones had stirred something in the deepest folds of my imagination, and I knew that one way or another I was going. I had to. How often do you have the chance to step inside your own dream?