

Sharks are being wiped out by the tens of millions around the world.

So why are we so slow to come to their rescue?

Off the coast of Narragansett, a local diver invites us to see past the stereotypes and meet our neighbors.

BALD Reputation

BY MICHAEL LOMBARDI
PHOTO BY BRIAN BORDIERI

DINING OUT A seafood shack worth the clams

Grass-fed beef: From Portsmouth to your plate

JAWS REDUX Sharks need love, too

Rhode Island

MONTHLY



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LAST SPRING, I ATTENDED the Rhode Island opening of *Sharkwater*, an independent documentary by conservationist filmmaker Rob Stewart. The film depicts anything but the man-eating monster we remember from the 1977 movie *Jaws*. In Stewart's film, sharks are the victims, of finning, and his portrayal of the animals and their human predators earned top prizes at film festivals all over the world. »



Left: The team deploys the cage. Right: The author shooting video from inside the cage. Facing page 4: Blue shark anatomy.

The experience is priceless—two top predators on this planet meeting face to face to say hello and share a mutual respect.

Four people were in the theater, myself included. Frustrated, angry, saddened, bewildered—my emotions were mixed. I couldn't understand why this film wasn't reaching more people.

Sharks are the dominant species, the humans of our waters. The top of the underwater food chain, sharks are critical to keeping the ocean's ecosystem in balance. All marine life is affected by their survival, simply put, sharks play a vital role in the survival of humanity as we know it.

I began coordinating this expedition shortly after viewing *Sharkwater*. I wanted to bring a message back to Rhode Islanders about these animals, to show my sense of awe and respect for sharks in the hope others would feel equally inspired to protect them. As it happens, we live near one of the world's great places to seek them out.

August 17, 2011 Coffee in hand, our team groggily loads several hundred pounds of camera, video and dive equipment onto the M/V *Sequoia* in Point Judith. Our mission is to venture some thirty miles offshore, where we will document the sharks off the Narragansett coast. It's our first expedition working together joining our small group of educators and

conservationists to Dr. Brad Wetherbee, a shark biologist from URI. Even in our sleep mode, there's a nervous excitement in the air. Our team has discussed the expedition for months, and it's finally a reality.

8:00 A.M. We're on our way. The morning air is crisp, the skies are crystal clear, and calm seas pave our departure from the Harbor of Refuge as we head out to Cox's Ledge, southeast of Block Island.

In the decade I've spent as a professional diver, my appreciation for the underwater world has changed. My focus has shifted from the actual process of diving to forging a more personal connection with the environment and its inhabitants. It is a connection that few are fortunate to experience. The ocean accounts for more than three-quarters of the surface of our planet, and humans do not permanently occupy any of it. We have explored less than 1 percent of its waters.

I've been lucky to encounter at least a few sharks by chance, usually reef sharks in the tropics, but also hammerheads and even a rare bonnet whaler. This will be my first expedition devoted specifically to seeking sharks. Most interestingly, I'll be right in my Rhode Island backyard.

Our waters in Rhode Island are inhabited by numerous species, including blues, thresher, porbeagle, mako and the occasional hammerhead. A great white or two is observed each season. Narragansett is home to the National Marine Fisheries Service's Apex Predator Investigation program, which conducts life history studies of commercially and recreationally important shark species on the East Coast.

While some shark species will make their way to inshore waters, those here generally prefer the warm offshore waters of the Gulf Stream. Blue sharks, *Prionace glauca*, are the most abundant, especially during summer months when they breed and feed before departing to southern latitudes for the winter.

Blue sharks take their name from the distinctive coloring along their backs. They can grow up to thirteen feet in length, weighing as much as 400 pounds. They're sleek, well-built for cruising. They're among the most common sharks in the world, and thus one of the most influential species on this planet.

8:05 A.M. An hour into our trip, the land is fading into the horizon. We double- and triple-check that our video equipment is afloat. After setting up the cameras and installing them in their specialized housings, we dunk them in the water and watch for bubbles that would indicate signs of a leak.

The combination of early morning coffee and adrenaline has transformed our group into a much livelier bunch. Even this seasoned team shares a sense of anticipation about the prospect of diving with

sharks. We spend the next hour or so talking with our guest, Dr. Wetherbee, whose current research focuses on the habitats, movement patterns and migratory routes of pelagic and coastal sharks. He talks with us about the stigma that surrounds sharks. It doesn't matter that only a small percentage of sharks actually kill humans, or that elephants kill more people a year than sharks do. There's something about our helplessness in the ocean, the inability to see what lies beneath, that taps into our primitive fear of being eaten. Sharks don't sing and "smile" like whales and dolphins. It is actually rare for a shark bite to break through flesh or cause a death, but the few instances capture worldwide attention.

Wetherbee explains that like whales, sharks mature late and have few young, making them especially vulnerable to overfishing. Money to fund shark conservation and research isn't as forthcoming as it is for other commercially sought fish, like tuna, but attitudes are changing slowly. It may take a long time. Wetherbee points out that thirty years ago people thought killer whales were the enemy, until people saw them in aquariums, doing tricks.

NOON More than two hours from shore, with only slight swells gently rocking the boat, we have all so far managed to avoid seasickness. Seasickness is a funny illness—just the right mix of conditions can trigger the spell even in a seasoned sailor. Here, roughly thirty miles offshore, conditions can change in an instant. There is no land in sight, and you are a long way from home. Amidst this vastness, it's just you and the ocean.

Our captain, Charlie Dondos, pulls the boat to a halt as if pulling into his own driveway. The vessel sits at the surface hovering over nearly 300 feet of clear, blue water. Today we will be doing blue water dives, with no bottom in sight. It can be disorienting, but the cages behind the boat provide a point of orientation for our team.

We use chum, a mix of fish parts, to lure the sharks to us. The cages are precautionary; the species we anticipate encountering are generally harmless to people, but with so much food in the water, it is possible they could accidentally nip at something they shouldn't.

We chum and wait. The chef's choice for today is mackerel. *Continued on page 44*



Save Our Sharks

Sharks haven't enjoyed the protections that cuddly creatures enjoy. Concern is finally growing about the alarming decline (up to 80 percent, according to many reports) in global shark populations over the last fifteen years. Some species that make their home in nearby waters:



Hasking shark*

Known as a "gentle giant," the ocean's second largest fish (reaching up to forty-five feet), is strictly a plankton eater, recognizable by gill slits encircling its entire head.



Thresher shark

The thresher uses its elaborate tail to round up schools of fish for feeding. Threshers reach up to 20 feet, half of which includes the tail.



Porbeagle*

Often mistaken for the shortfin mako, heavily targeted porbeagles are one of the fastest-swimming sharks. They can be seen at "play" in games of tag or tossing seaweed.



Shortfin mako

Considered the most challenging game fish in the world because of its aggressive nature, the shortfin mako can jump up to twenty feet clear out of the water.



Sand tiger

Deceptively vicious-looking, the sleek sand tiger comes to the surface to swallow air so that it can float motionless in the water while stalking its prey.



Great white*

The famous white shark stalks its prey using sensors on its snout that detect electrical charges given off by organisms in the water.

*International Union for the Conservation of Nature Red List "Vulnerable" species.

Bad Reputation

BY CHRISTOPHER FROST

As the boat drifts, an oily slick of glistening blue and silver forms what we hope will be a shark highway.

All eyes are fixed on the water, looking for some sign—a fin breaking the surface, a splash from a shark striking bait in the slick, shadows under the boat. Lowering a white disk on a rope, we check the visibility. We can see about thirty feet of depth, which is pretty good, and likely to improve as the sun moves overhead later in the day. Good visibility is especially helpful when looking for sharks, which often lurk below the surface.

We wait and wait. And wait.

ALAS, I've packed a mix of sandwiches, fruit, chips and other snacks that are relatively friendly to a stomach out to sea. With sun-stroke setting in, we take a break from the waiting game to head inside to eat. Still no sign of sharks. We are slightly discouraged. This was the maiden voyage of the *Seagull*, and we start to worry perhaps the new boat is bringing some bad juju. At 12:30, someone spots something swimming at the surface about a hundred yards away. The animal disappears and resurfaces alongside the boat. It is a minke whale, about twenty-five feet long and resembling a humpback, though smaller. The whale circles the boat several times, and a couple of us scurry to gather our equipment and jump in, but the whale stays just out of sight of the stern.

Back on board, we begin to chum more aggressively by adding concentrated mackerel oil into the mix. The stretch of the oil, having sat on the hot deck all day, is overpowering. For a second, I shudder at the thought of having to jump through the oily slick.

Captain Charlie recounts "the good old days" when blue sharks would show up by the dozens in a very short time period to this same location. He wonders aloud if today's poor showing might be an indicator of the decreasing local population.

THE ACT OF FENNING A SHARK is fast and simple. The fins are cut from the body of a live shark, which is then dumped overboard. Without its fins, the shark sinks, drowning or hitting the ocean floor to starve. Its death can take days.

The fins are the key ingredients of shark fin soup, an Asian status symbol that is

It's a small male blue shark, probably five feet in length. The shark is drawn immediately to the large chunk of bluefish hanging from the side of the boat and doesn't seem the least bit interested in us. I leave the cage to swim alongside him. We spend the next several minutes together in the water, oblivious with him passing closer than arm's length. Sharks can sense fear and anxiety with a sort of sixth sense that humans do not have. Sensing this fear or anxiety in another large animal, such as us, could trigger the sharks to show signs of aggression to mark their territory—or they may flee entirely. Despite the adrenaline rush of being in the water with an apex predator, I focus on staying calm, reminding myself that there is no reason to fear this animal. With each pass, I can sense that the shark is just as curious of me as I am of him. I can feel the water move from his powerful swim strokes. His black eyes shift their focus between me, the cage, the camera and the chum as he takes in his surroundings. The sun in the water catches the pearl-crested blues of his back.

One shark begins to take an interest in my fins, running his nose against them as I kick.

ALAS! The rest of the team has dove in, along with two more sharks, which seems to appear magically from the deep blue water. They are both males, one about six feet in length, the other as long as nine. The sharks clear the area around the cage and boat, munching on the small chum pieces. I remain cautiously outside of the cage, seeking the best position to capture video of the three feeding sharks. One begins to take an interest in my fins, running his nose against them as I kick against the slight current. They probably resemble a fish, so I retreat to the cage for a few minutes to dissuade his interest.

We stay with them for about two hours. They make several close, engaging passes as if to check us out. We keep in mind that other species frequent the area (such as the more aggressive mako shark), but we see only blues. The experience is priceless—two top predators on this planet meeting face to face to pay hello and share a mutual respect. ☐

MISSION

MISSION FULFILLED
The ride back to Point Judith is quiet, a time for personal reflection on the day. The boat's diesel motors purr and soft grey rolls over the rail. With our bodies chilled from being in the water, we huddle up in sweatshirts, and everyone seems to find their own corner of the boat to close their eyes. We all realize how privileged we are to have had such an experience, and right in Rhode Island.

THE OCEAN IS THE ONE that binds our state. As children, we built sand castles on the beach and splashed in ankle-deep tide pools. As teenagers, we ventured out just a little further, riding the waves, perhaps taking up sailing or fishing. As adults, we settle into beach chairs and keep a careful eye on our own kids as they repeat the cycle.

Narragansett Bay and its watershed are part of our everyday lives. Each day, we use it, appreciate it, work to protect it and, sadly, pollute it. The results of conservation efforts are in sight, but there is more work to be done, with many fisheries still struggling.

The challenge remains in communicating these facts to capture attention and inspire action. Humans occupy only a small footprint of the planet, yet we are its stewards. We have a responsibility to all other species on Earth to do our part in preserving and protecting the ocean.

While our field event was successful, the mission continues. The video footage we captured will be shared with school and community groups across the state to shed light on the critical environmental issues, and opportunities, to be found right in Rhode Island.

I hope people will see it's the little things that go the longest way. Make mindful decisions. Share experiences with your neighbors. And most of all, inspire future generations to see beyond humanity's footprint. Encourage their curiosity and appreciation of the vast majority of our blue planet that begins where the sand meets the waves. ☐

Professional diver, author and environmentalist Michael Lombardi founded the nonprofit organization, Ocean Opportunity (oceanopportunity.com), based in Providence. He is a member of the Explorers Club, an elected director for the Society for Human Performance in Extreme Environments, and one of Providence Business News' "40 Under Forty" in 2007.



Rhode Island

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NATURAL

Swimming with Sharks

Michael Lombardi has explored the world's most exotic underwater locales, but there's plenty to fascinate him in Rhode Island.

Mike Lombardi can keep his cool in a shower of sharks. After all, the twenty-nine-year-old diver has explored waters as far as Antarctica, staying off hypothermia while ice diving alongside six-hundred-pound seals.

This month, the Providence resident will photograph blue sharks forty to sixty miles off the coast of Narragansett, an area that is home to one of the world's healthiest blue shark populations. "Blue sharks are relatively docile," he says. To attract his subjects, Lombardi and team will leave a chum slick of squid and fish parts and photograph the thirteen-foot sharks as they feed. (An underwater cage provides an escape should any less-than-docile predator show up.)

The expedition is a project for Oceans of Opportunity (oceansopportunity.com), the Providence-based nonprofit Lombardi founded to educate the community about blue technology and scientific discovery. "People in Rhode Island are very receptive to ocean-related stories," says Lombardi, who made his first dive in Jamestown at age sixteen. "Things here have changed dramatically over the last couple of years. Visibility has increased amazingly and shellfish populations are making a comeback. You can see efforts to save our bay starting to work."

The August expedition will also raise awareness of threats facing sharks worldwide. "Shark finning is a multibillion-dollar industry that is wiping out populations of sharks (and by-catch)" to meet a still-growing market in Asia, he says. "Blue sharks, being an abundant species, are one of the most heavily targeted."

His mission will succeed easily if humans prove to be as eager students as are sharks. "Sharks are very curious, especially the younger ones," says Lombardi. "You might be the first human they've ever seen, so they'll come in very close to find out about you." —MICHELLE WALKERMAN