

Signature Traits

Contributors' Picks

Text and photos by John A. Ares, Sheryl Checkman, Larry Cohen, Lureen Ferretti, Anita George-Ares, Gary Rose, Michael Rothschild and Olga Torrey

We asked our contributors to share their favorite underwater images that showcase the distinctive features of various underwater creatures, and they returned with a broad selection of macro and wide-angle shots featuring a variety of marine life, from majestic sharks and sea turtles to tiny nudibranchs and crustaceans. Here, *X-Ray Mag* contributors share their selected images from the tropical waters of the Philippines, Indonesia, Malaysia, the Cayman Islands, Saba, the Bahamas, Isla Mujeres in Mexico, and Cocos Island in Costa Rica, to the subtropical and temperate waters of the US East Coast.





Tiger shark (above), Jupiter, Florida. The very prominent bars and bands identify this individual as a young adolescent. Gear: Nikon D500 camera, Tokina 10-17mm lens at 10mm, Nauticam housing, Inon Z-330 strobes. Exposure: ISO 100, f/8, 1/100s.

Instant Recognition

Text and photos by Gary Rose, MD

There are thousands of different species of fish that inhabit our oceans. Recognizing the different species and understanding the behavior of each is always a challenge. As divers navigate their way around shallow reefs in coastal waters or in the deeper blue water column, identification and understanding the behavior of different fish species will result in a safer and more rewarding experience. Conveniently, within the elasmobranchs (sharks), there are a few species that are instantly recognizable.

When I dive with new divers, I always enjoy the excitement they display when they instantly identify a nurse shark (Photo 1). The barbels (the two appendages that hang from the very front of the snout) are an instant giveaway. In addition, they have two equal-sized dorsal fins that are located far back on their bodies. Interestingly, over millions of years of evolution, the bottom portion of their tails has become absent as they spend most of their time lying on the sand and under coral outcrops.

I always love diving with tiger sharks. In the shallows of Tiger Beach, Grand Bahama Island, I have dived with 18 of them at one time. One only has to see

Great hammerhead shark (previous page), Bimini, Bahama Islands. The shape of the cephalofoil (head) and the huge dorsal fin are quick identifiers. Gear: Nikon D500 camera, Tokina 10-17mm lens at 17mm, Nauticam housing, Inon Z-330 strobes. Exposure: ISO 400, f/11, 1/125s.

a tiger shark to instantly identify it by its beautiful bars, bands and stripes. When they are young, the bars and bands are very dark and clearly delineated (Photo 2). With age, they fade but are still very visible. A word of caution: When diving with tiger sharks, you must always keep your head on a swivel and *never, never* lose eye contact.

Of all the sharks, my favorite is the great hammerhead. Fortunately, I get to see them from January to May on my weekly dives in Jupiter, Florida. I also love diving with them in the shallow, crystal-clear waters of Bimini, Bahamas. The huge dorsal fin, which is always taller than the thickness of their

bodies, is a great identifier. But, the major instant identifier is their majestic cephalofoil, "the hammer" (Photo 3), which they gracefully swing from side to side to pick up minute electrical signals from their favorite food, the stingrays hiding buried in the sand.

Whale sharks are huge and can grow up to 33ft long (Photo 4). It is the unusual and beautiful surface markings of spots and bands that instantly identify these gorgeous sharks. Despite their enormity, they are filter feeders and eat only plankton, the smallest, almost microscopic creatures in our oceans. Isla Mujeres, Mexico, is a wonderful place to snorkel with whale sharks.

Signature Traits



Nurse shark (top right), with two very posterior, equal-sized dorsal fins and barbels suspended on the edge of the snout, Bimini, Bahama Islands. Gear: Nikon D500 camera, Tokina 10-17mm lens at 17mm, Nauticam housing, Inon Z-330 strobes. Exposure: ISO 200, f/11, 1/125s. Whale shark (above), Isla Mujeres, Mexico. The spots and bands are always a giveaway, as is the enormous size. Gear: GoPro Hero4 Black camera.

One of my favorite courses I teach is "Shark Behavior and Identification." These four examples (Photos 1-4) are easily and instantly identifiable. There are many more species of sharks, and it can be very

challenging to distinguish them from each other. As divers become more skilled with identification, they also gain knowledge of behavior, which results in greater enjoyment and safety. Visit: garyrosephotos.com