

## Avoiding Shark Attacks

“Between the months of five through nine, go swimming in the ocean from nine to five.”

Robert Hueter,  
Mote Marine Laboratory



Although the relative risk of shark attacks for humans is very small, swimmers and surfers can help prevent attacks by following these ISAF safety tips:

- Always stay in groups because sharks are more likely to attack a solitary person.
- Do not swim or paddle too far from shore, away from the assistance of lifeguards or friends.
- Do not enter the water if bleeding because a shark's sense of smell is highly sensitive.
- Avoid wearing shiny jewelry because reflected light resembles the sheen of fish scales.
- Avoid being a visual attraction for sharks by using extra caution when waters are murky. Avoid the water if you have uneven tanning and bright-colored clothing because sharks see contrast particularly well.
- Refrain from excessive splashing and don't allow pets in the water because of their erratic movements.
- Remember that sightings of porpoises do not indicate the absence of sharks – both eat the same food.
- Exercise caution when occupying the area between the sandbars or near steep drop-offs where sharks hang out.
- Do not enter the water if sharks are known to be around, and calmly evacuate the water if any sharks are seen.
- Do not harass a shark – even nurse sharks can bite.
- Avoid areas where people are fishing or using bait.

## Learn More

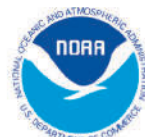
Are you fascinated by sharks and want to learn more about their underwater world? Check out these resources:

- NOAA Fisheries, including regulations, research and tagging programs, [www.fisheries.noaa.gov/sharks.html](http://www.fisheries.noaa.gov/sharks.html)
- International Shark Attack File, [www.flmnh.ufl.edu/fish/isaf/home](http://www.flmnh.ufl.edu/fish/isaf/home)
- Mote Marine Laboratory, [www.mote.org](http://www.mote.org)
- BRIDGE, an ocean sciences resource center for teachers, [www.vims.edu/bridge](http://www.vims.edu/bridge) and search for “sharks”
- U.S. Lifesaving Association, [www.usla.org](http://www.usla.org)
- *Guide to Sharks, Tunas & Billfishes of the U.S. Atlantic & Gulf of Mexico*; to order, call Rhode Island Sea Grant, 401-874-6800 or email [tkennedy@gso.uri.edu](mailto:tkennedy@gso.uri.edu)

**Acknowledgments:** NOAA Fisheries, North Carolina Sea Grant, Florida Sea Grant, Rhode Island Sea Grant, North Carolina Aquariums and Dare County Emergency Management.

Produced by **North Carolina Sea Grant**,  
NC State University, Box 8605, Raleigh,  
NC 27695-8605.  
[www.ncseagrant.org](http://www.ncseagrant.org) • 919-515-2454

*Photos by Chris Crumley and Mote Marine Lab.  
Illustrations by Duane Raver.*



UNC-SG-02-07

Updated June 2016.

## Shark Sense: Atlantic and Gulf Regions



## The Legendary Shark

Before there were dinosaurs, before there were humans, sharks were swimming in the Earth's seas. After almost 400 million years in the ocean, sharks have developed a reputation as very dangerous fish.

### How dangerous are sharks?

Although a shark attack is a potential danger for anyone frequenting marine waters, the risk should be kept in perspective, says George Burgess, director of the International Shark Attack File (ISAF) in Florida.

“Bees, wasps and snakes are responsible for more fatalities each year,” says Burgess. “The reality is that, on the list of potential dangers encountered in aquatic recreation, sharks are right at the bottom of the list.”

### Are shark attacks more frequent now?

The chance for encounters between humans and sharks has increased. “While the number of shark attacks has consistently risen, so has the human population,” says Burgess.

“More people are spending time in or near the ocean than ever before. Also, records for tracking shark attacks have become more efficient, contributing to the increased number of reports.”



## Shark Spectrum

More than 350 different species of sharks inhabit the world's oceans. They come in all sizes and shapes — from the huge whale shark that grows up to 40 feet long to the lantern dogfish that reaches only 7.9 inches.

In the Atlantic and Gulf regions, more than 40 species of sharks live in temperate waters as well as some colder seas. Many shark species use coastal bays and estuaries as pupping and nursery grounds. Shark migration may be short or long, depending on food availability, environmental conditions or reproductive cycles.

### Valuable Species

Sharks play an important role in the ocean and are among the top predators of the marine food web. They primarily eat fishes. Some sharks also eat crabs and other invertebrates, dead animals, and even trash.

A number of sharks are commercially important as seafood for consumers. Commercial catch regulations have sparked debate.

The National Oceanic & Atmospheric Administration (NOAA) Fisheries is committed to conserving shark populations and the valuable fisheries dependent on them. To refine shark science and management NOAA Fisheries is:

- Conducting shark research on a variety of topics — from food habits to shark nurseries where pups are born.
- Implementing regulations within U.S. waters.
- Seeking international conservation with other shark-fishing nations.

## Atlantic Ocean and Gulf of Mexico



1 Sandbar shark (*Carcharhinus plumbeus*)



4 Spinner (*Carcharhinus brevipinna*)



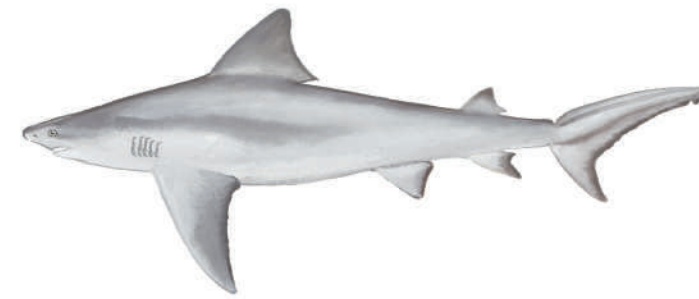
2 Sharpnose (*Rhizoprionodon terraenovae*)



5 Blacknose (*Carcharchinus acronotus*)



3 Blacktip (*Carcharhinus limbatus*)



6 Bull (*Carcharhinus leucas*)

### Did you know?

- Of the 350 or so species, about 80 percent of sharks are unable to hurt people or rarely encounter people.
- White sharks are relatively uncommon large predators in the U.S., preferring the cooler waters of the West Coast and the northeastern East Coast.
- Sharks' eyes, which are equipped to distinguish colors, employ a lens up to seven times as powerful as a human's eye.



7 Tiger (*Galeocerdo cuvier*)

## Kinds of Sharks

*In the Atlantic Ocean and Gulf of Mexico, some common sharks are:*

1 **Sandbar shark** (*Carcharhinus plumbeus*), also called brown shark, is brown or gray in color. It is recognized by its large triangular-shaped dorsal fin. It can grow to about 8 feet.

2 **Sharpnose** (*Rhizoprionodon terraenovae*) is distinguished by its whitish spots, long, somewhat flattened snout, thin body, brown to olive-gray body color, and white edges on its pectoral fins. The species usually grows to 3 feet.

3 **Blacktip** (*Carcharhinus limbatus*) is recognized by black tips on its pectoral fin — a trait shared with several other species, most notably the spinner shark. It has pronounced Z-shaped marks on its sides and white anal fin. It grows to about 6.5 feet.

*Along the Atlantic and Gulf Coast beaches, the number one species for biting is the blacktip shark. Other sharks often involved in encounters on the East Coast are:*

4 **Spinner** (*Carcharhinus brevipinna*) is a slender, fast-swimming shark that often leaps “spinning” out of the water. It has pronounced Z-shaped marks on its sides and a black-tipped anal fin. It can grow to 9 feet.

5 **Blacknose** (*Carcharchinus acronotus*) is a small shark with a very noticeable dusky smudge or “moustache” on the tip of its snout, which is more prominent when young. Its maximum length is about 4.5 feet.

6 **Bull** (*Carcharhinus leucas*) is one of the most dangerous sharks along the southeastern coast, but attacks humans infrequently. It is recognized by its short, broadly round snout and small eyes. It can grow to 11.5 feet.

7 **Tiger** (*Galeocerdo cuvier*), which is as dangerous as the bull, has a broad, almost squarish snout and telltale stripes on its body (spots as juveniles). The teeth are serrated with deep notches on the outer ridges. Its maximum length is 18 feet.