Marine Biology and the Human Connection

Shark Attacks on Humans

Sharks have acquired a rather unsavory reputation due to accounts of attacks on humans in the popular press, as well as in various movies and novels. In truth, the annual risk of death from lightning strikes is 47 times greater than that from shark attack. Although any large shark may be a potential risk to human beings, most species are actually rather timid and cautious animals. Of the approximately 403 shark species, less than 10% have been documented in attacks on humans. The three species most often involved in deadly attacks are the white shark (*Carcharodon carcharias*), tiger shark (*Galeocerdo cuvier*), and bull shark (*Carcharhinus leucas*). All of these sharks are large and cosmopolitan in distribution, and they feed on large prey such as marine mammals, sea turtles, and large fish. Other shark species that have been implicated in human attacks include the mako (*Isurus oxyrhynchus*), great hammerhead (*Sphyrna mokarran*), oceanic whitetip *(Carcharhinus longimanus*), Galapagos (*Carcharhinus galapagensis*), and various “reef” sharks.

Since 1958, the International Shark Attack File, administered by the America Elasmobranch Society and the Florida Museum of Natural History at the University of Florida, has compiled statistics on shark attacks throughout the world. According to these data, about 40% of attacks reported worldwide have occurred in North American waters, but only about 8% of those were fatal. Australia had the second highest number of attacks (40% fatal), followed by South Africa (25% fatal). Surfers are the most common targets, followed by swimmers waders, and divers.

**Types of Shark Attacks**

Worldwide, there are usually less than 100 shark attacks and fewer than 15 fatalities reported annually. Three types of attacks are often described: **hit-and-run, bump-and-bite,** and **sneak attacks**. Hit-and-run attacks occur most often in shallow water under conditions of low visibility on swimmers or surfers who are splashing the water. The shark bites and then releases the swimmer, usually causing relatively minor lacerations on the limbs that are seldom life threatening. Bump-and-bite attacks, in contrast, occur on swimmers or divers in deeper water. The shark bumps the victim before attacking. Sneak attacks different in that they occur without warning. Both sneak and bump-and-bite attacks may occur repeatedly and cause deep lacerations that are often severe enough to result in the death of the victim.

**Preventing Shark Attacks**

Preventing shark attacks involves such commonsense practices as never swimming alone and avoiding areas where people are fishing or where blood and human wastes may be in the water. Don’t swim at dusk or at night or where the water is murky or turbid. Also, refrain from splashing. Don’t war shiny jewelry because it may be mistaken for the scales of prey fish. If sharks are sighted, leave the water quickly and calmly.

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Shark Attacks on Humans

1. How many different shark species are there?
2. What percentage of shark species has been known to attack humans?
3. What are the typical species that attack humans?

1. Most attacks recorded worldwide were in what country?
2. Are most shark attacks fatal?
3. Which two types of shark attack often occur repeatedly?
4. Humans doing what activity are most often victim to shark attacks?
5. List two ways to “avoid” being attacked by a shark.