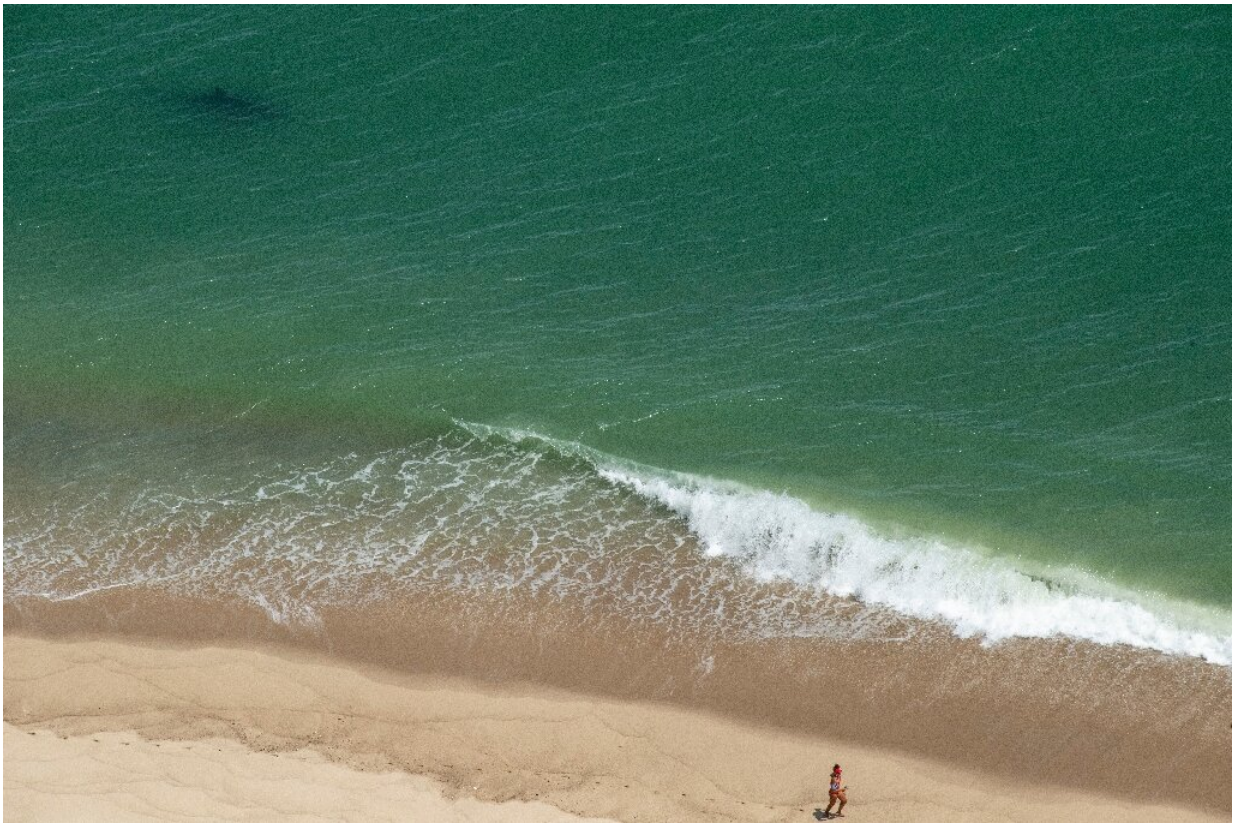


# Why shark encounters are increasing along the US East Coast

July 25 2022, by Lucie Aubourg and Issam Ahmed

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A person runs as a great white shark swims just meters (yards) away on the Cape Cod National Sea Shore on the eastern side of Cape Cod, Massachusetts.

Sun lotion, insect repellent, and the Sharktivity app are this summer's must-have beach accessories along the US East Coast as human-shark

encounters increase.

Ironically, conservation wins for [vulnerable species](#) might be behind the unfortunate uptick, say experts, while there might also be a link to climate as the apex predators' prey move to new waters.

Every summer, great whites move up the Atlantic coast of the United States, toward New England, their number peaking between August and October.

"There's a general increase in the population that we think is the population rebounding after being protected," Gregory Skomal, a senior fisheries scientist for the state of Massachusetts, told AFP.

Around 300 of the animals, the world's largest known fish, have been tagged over the years, with roughly a hundred or so passing through the waters around Cape Cod every year.

The iconic movie "Jaws" was shot in this region, and the creatures are a major tourism draw, adorning baseball caps and [t-shirts](#). On the flipside, however, there have already been temporary beach closures this year after confirmed sightings close to shore.

A major part of the reason is their main prey, seals, are also rebounding thanks to increased protections.



The iconic movie "Jaws" was shot in Cape Cod, and the creatures are a major tourism draw.

"If you have more sharks feeding close to land and you have more people swimming, the chances for those kinds of negative interactions increases," said Skomal.

Enter the Atlantic White Shark Conservancy Sharktivity app, which was developed with input from Massachusetts wildlife officials to provide information on shark sightings from researchers, safety officials, and user reports.

## **Surveillance patrols**



In New York state, the governor has just announced additional surveillance patrols, including via drones and helicopters.

On the tourist beaches of Long Island, half a dozen shark bites have already come to light, after three years of none at all.

Here, great whites are less likely to be the culprits than other species of shark that operate in the region, in particular tiger sharks, [sand tiger sharks](#) and bull sharks.



Seals are rebounding in Cape Cod -- and so too are their predators, great white sharks.

Nick Whitney, a senior scientist at the New England Aquarium, believes the increasing encounters here might be linked to the sharks' bait fish—menhaden, also known as porgies or bunkers, recovering.

This might be because of cleaner waters off New York and New Jersey, "but it's tricky to figure out how much of it is increasing populations or just populations moving around as a result of changing ocean conditions from climate change."

But if things can thus vary greatly from one year to another on a local level, the global level remains steady at around 75 [shark attacks](#) recorded each year, said Gavin Naylor, director of a research program on sharks at the University of Florida.

This follows a brief drop to around 60 during the two first years of the COVID-19 pandemic.

Annual global deaths are around five. In the past twenty years, only two deaths have been reported north of Delaware in the United States, in Cape Cod in 2018, and in Maine in 2020.

But in the future, it is reasonable to think that the number of victims will increase.

# The great white shark

World's largest predatory fish

**Known to eat:**  
 sea lions  
 seals  
 small toothed whales  
 sea turtles  
 squid  
 other sharks  
 carrion

300 teeth in up to 7 rows  
 Max tooth length: 5.7 cm

Rough skin with a lateral line sensitive to movement 250 m away

Acute hearing in tiny ears behind eyes

Retina split for day and night vision

Can smell 1 drop of blood in 10 billion drops of water

**Length:** 4.6 - 6 m  
 Weight average: 1,300 kg  
 Max weight: about 2,200 kg

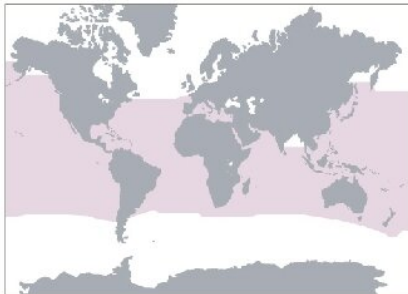
Big, fat, oily liver helps shark float

Skeleton made of cartilage, not bone

Pores on snout can detect power and direction of **electrical currents**

**Swim speed:**  
 up to 50 kph

**Range**



**Threats:**

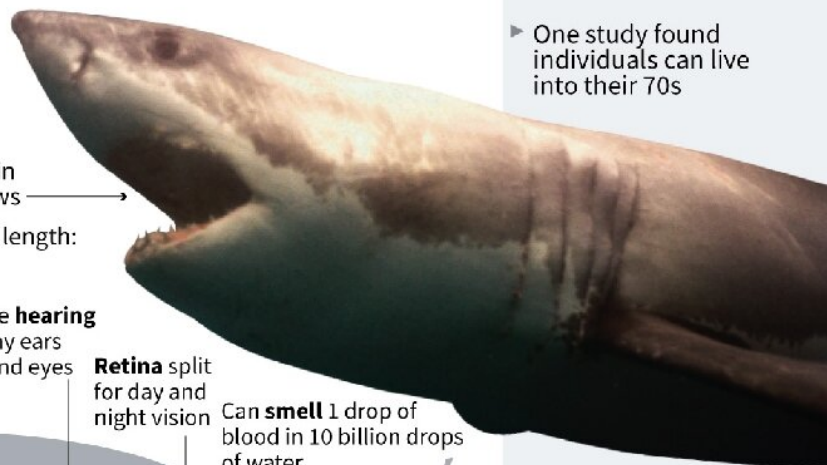
- Commercial fishing for fins
- Sport fishing
- Entanglements
- Destruction of near-shore habitats

**IUCN**

**conservation status:**  
 Vulnerable

One individual great white has been tracked swimming from South Africa to Australia

Source: National Geographic/Livescience.com/IUCN/ocean.si.edu



▶ One study found individuals can live into their 70s

Carcharodon carcharias

▶ Reach maturity at around 15 years

**Shark species existence:**  
 350 - 400 million years



**Attack:**

Fast, surprise, from below, with powerful bite

Most great white bites on humans are not fatal, their bites are thought to be "sample biting"



Factfile on the great white shark.

"We are going to get more fatalities. There's more white sharks, the probability is going to increase," predicts Naylor, even though the trend isn't yet statistically significant.

Surfers, who venture farther into the water, accounted for half of unprovoked attacks in 2021. Farther south, Florida, with its many tourist beaches and tropical climate, is still where 60 percent of US and 40 percent of world attacks occur.

## **Take precautions**

Sharks are far from the bloodthirsty beasts sometimes portrayed in movies.

Studies have shown that they can mistake surfers or swimmers for their usual prey—notably white sharks, which have rather poor eyesight.

"With so many people on a global scale in the water, if sharks preferred to feed on prey upon humans, we would have tens of thousands of attacks each year," said Skomal.





Flags direct swimmers to the safest areas on Long Beach in Long Beach, New York; beaches have been closed or restricted after a number of sharks were sighted along Long Island this summer.

With [climate change](#), the expert expects that the increase in ocean temperatures will gradually lengthen the season during which sharks are present in the northern United States.

So what can be done to limit the risks? People should download the Sharktivity app to track sightings.

"Another thing we tell people is just to be aware of your surroundings," said Whitney. Look around for birds flying around schools of baitfish, for example.



Don't swim alone, stick to areas with cell phone coverage, and if bitten, the real danger is bleeding out, so it's important to get to shore and control the bleeding until help arrives.

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