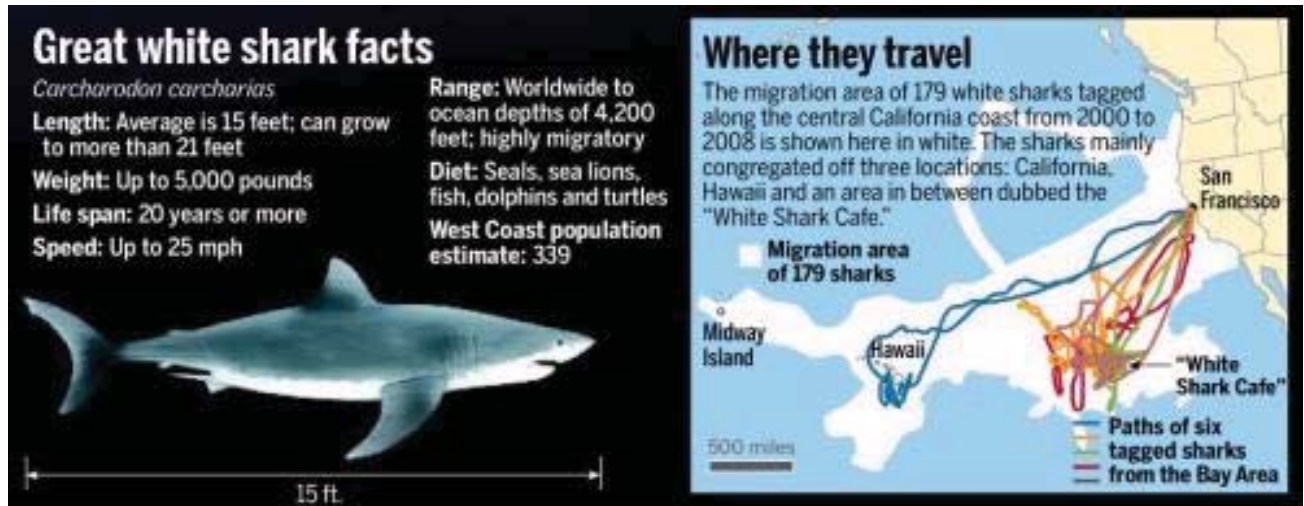


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Great white sharks may be listed as endangered species



By Paul Rogers / Febuary 06, 2013

They've been called everything from killing machines to misunderstood predators who are key to healthy ocean environments. Now great white sharks may be called something else: endangered.

California's Fish and Game Commission on Wednesday will decide whether to take the first steps to add the ocean's most storied marine predator to the state endangered species list. Meanwhile, the National Marine Fisheries Service is expected to decide this summer whether to include great whites on the federal endangered list.

If the sharks -- which in California waters can grow to 21 feet long and 4,000 pounds -- join other struggling species, like California condors and sea otters, on the lists, it could mean tougher rules

on gill net fishing. It might even create a new legal tactic for environmental groups to fight coal-fired power plants, since some white sharks have high levels of mercury, which comes from burning coal, in their tissues.

"There is a lot of evidence that white shark population numbers are very low," said Emily Jeffers, an attorney in the oceans program of the

Center for Biological Diversity, an environmental group in San Francisco that supports an endangered listing.

"White sharks are really barometers of our ocean's ecosystem," she said. "If they're not doing well, we need to figure out why. They are at the top of the food chain. If we want a healthy ocean, we need healthy sharks."

Although some top shark biologists say

a listing would be premature because it is unclear whether the population is decreasing, Jeffers' group and two other environmental organizations, Oceana and Shark Stewards, filed a formal petition with the state in August asking that the population of white sharks in the northeastern Pacific Ocean be declared endangered. The groups noted that two recent studies have estimated the population -- which ranges between Mexico, Hawaii and Alaska -- at 339 adults and "sub-adults" in counts off the Marin County coast and Mexico.

That's a dangerously small number, they say, putting the sharks "at great risk of extinction," particularly since half or fewer are female.

Although they were made famous as ruthless killers by Peter Benchley's 1974 novel "Jaws" and Steven Spielberg's 1975 film of the same name, white sharks in California rarely attack people. In fact, more people have died from bee stings and dog bites.

Although millions of people swim in the Pacific Ocean each year, since 1952 there have been 13 documented fatalities in California caused by white sharks, the last one coming off Surf Beach in Santa Barbara on Oct. 22 of last year.



White sharks eat fish, seals, sea lions, dolphins, sea birds, marine turtles,

rays and other sharks. "The likelihood of humans being attacked is so small," said John McCosker, chairman of aquatic biology at the California Academy of Sciences. "You are safer in the water than you are driving to the beach."

In 1994, Gov. Pete Wilson banned the hunting of white sharks in state waters out to three miles. And in 2011, Gov. Jerry Brown signed a bill banning the sale or possession of shark fins. But the laws have a loophole that allows white sharks to be killed accidentally in fishermen's gill nets.

Last month, state biologists said there is sufficient scientific information for the Fish and Game Commission to move ahead with listing white sharks as threatened or endangered.

Mike Sutton, vice president of the commission, said he expects the five-member body to agree. If that happens, the state Department of Fish and Wildlife will spend a year researching the issue, and then the commission will take a final vote next spring. If the commission votes yes on Wednesday, however, the state's endangered species protections would take effect immediately pending a final decision.

"This is an iconic marine species. It is the species that everybody gets out of the way for. We see that at the aquarium. It inspires people," said Sutton, a former vice president of the Monterey Bay Aquarium. "We need to answer some of the questions posed by the scientists. Is the species in decline? Or is this low number the norm for the species? Is the population stable?"

Sutton said if the commission approves moving forward with the endangered listing, fishermen off Ventura, Long Beach and San Diego who use gill nets fixed on the ocean floor to catch halibut and other species would have 90 days to apply for "incidental take permits" or risk being shut down.

Such permits could change the seasons that the fishermen, who catch a sizable portion of California's halibut, can fish. Or they could require them to bring up their nets every 24 hours, reducing the risk of killing young sharks, which can become tangled in the nets and drown.

Still, McCosker and other shark biologists said researchers don't know whether the white shark population is decreasing or increasing. He noted that there's some evidence it is going up, including the fact that more sea otters have been found dead in recent years with shark bites.

Chris Lowe, director of Cal State Long Beach's Shark Lab, said the number of juvenile sharks caught in gill nets in Southern California has increased to about 20 to 25 a year, up from about five a year a decade earlier. That likely means there are more sharks, he said.

Lowe worries that putting great whites on the list would make it more difficult for scientists to study them and would harm fishermen who have been helping researchers. He said roughly half the

sharks caught in the gill nets die, but those that are freed have a 96 percent survival rate.

But environmental groups argue that because of the unknowns, the best approach is to add another layer of protection.

Said Jeffers: “It’s always better to be cautious than to find out in a few years that we should have done something.”