

# 100,000,000

The number of sharks killed every year, as reported by TRAFFIC, the international wildlife trade monitoring network

## Insight Sharks

Sunday Times



The great white shark is a fully protected species (but you probably wouldn't try to catch it anyway). Its smaller cousins are more vulnerable. Picture: K Baker

The outcry after four bronze whaler sharks were slaughtered in front of tourists has shone a light on the murky waters of shark hunting and the damage it does, writes **Claire Keeton**

# Carnage on the seas

A silvery shape flashes in the swell and is gone. "That's a hammerhead. The first one we've seen today. Last week we were spotting hundreds a day in the reserve before the longliner came back," says white-shark expert and naturalist Chris Fallows. Demersal shark (the term for creatures living close to the seabed) longline boats are "vacuuming up thousands" of sharks every trip they make around the boundaries of De Hoop Nature Reserve, says Fallows, who is fighting to stop the potential extermination of sharks near this protected, flagship marine area.

About 40 smooth-hound sharks, about a dozen adult soupfin sharks and about six hammerheads were killed on board or pulled up dead onto the deck of the White Rose last Thursday, as shown in 25 minutes of film footage shot alongside the vessel.

Smooth-hound and soupfin sharks are classified as vulnerable on the International Union for Conservation of Nature (IUCN) list of threatened species and coded red on the WWF-SASSI list (World Wildlife Fund Southern African Sustainable Seafood Initiative). The hammerhead is on the Cites (Convention on International Trade in Endangered Species) list of protected species.

"This shark fishing is like licensing traps and snares for the predators of the Kruger National Park. Can you imagine the global outcry if that was allowed?" asks Fallows, who also runs a shark-cage diving operation in False Bay.

Demersal shark longline fishing indiscriminately hooks high numbers of sharks and fish and is driving the rapid collapse of at least one shark species off the Cape's southern coast, scientists warn.

Marine biologist Dr Enrico Gennari, the co-founder of Oceans Research Institute, a marine research, education and conservation NGO in Mossel Bay, says that within one month 27 out of 30 smooth-hound sharks tagged in Port Elizabeth were killed by a single demersal shark longline vessel. That's 90%.

Given this carnage, researchers got excited when eight bronze whaler sharks, two smooth-hounds and one gully shark were tured close enough to their boat to be tagged last Friday. To track them they also inserted acoustic transmitters.

Even fisheries scientists warn that smooth-hound sharks (permitted catch by longliners) are being fished out at a rate nearly three times the sustainable level. Their suggestions for quotas are yet to be implemented, says Gennari.

Sharks reproduce slowly and are key predators in the ocean. The longliners' target shark species have dropped by more than 40% (smooth-hound) to 50% (soupfin) since this fishing was first permitted in 1991.

Since 2015, demersal shark longline fishing has escalated sharply. In 2016, 17,600 smooth-hound sharks were caught. By 2018 this was up to 30,100.

But the sheer volume of sharks being hauled out of the ocean is not the only threat to marine ecosystems and the shark-diving tourist industry in SA. Species such as hammerheads and rays are also at risk. Great white sharks have all but vanished from False Bay and



Screengrabs from a video that shows about 40 smooth-hound sharks, about a dozen adult soupfin sharks and about six hammerheads being killed on board or pulled up dead onto the deck of the White Rose near the De Hoop Nature Reserve last week.



## Conservation protocol

Jay Dawsey, right, releases a shark into the De Hoop marine reserve after a transmitter has been placed inside it, far right. The University of Miami's shark research and conservation programme uses satellite tags to track the behaviour of shark species in the subtropical Atlantic and find out about topics like migratory routes and the "hot spots" where they are most vulnerable to capture by longline and destructive fishing. Pictures: Ruvan Boshoff



Tagged sharks can be viewed at <https://sharkresearch.rsmas.miami.edu/education/virtual-learning/tracking-sharks/> Pictures: Ruvan Boshoff

are scarce in Gansbaai – the myth that orcas (killer whales) scared them away is not supported by data.

Gennari says: "While the orcas impact for four to five months in Mossel Bay, their prolonged absence in other areas speaks of other coexisting causes."

It is true that white sharks (as well as bronze whalers, also called copper sharks, and sevengill sharks) are being hunted by killer whales – particularly a pair nicknamed Port and Starboard – but the major threat to great white shark survival is man-made. The smaller sharks and fish they rely on for food are being fished out, and seal hunting is seasonal behaviour off the Cape coast.

The crashing shark population is linked to just three active demersal shark longliners out of six boats

with permits, say conservationists, shark dive operators and shark scientists from the Great White Shark Protection Foundation in Kleinbaai.

"Despite [fisheries'] own scientists ringing alarm bells, the recommendations for slot limits [to protect the young and old sharks] and to put observers on the boat have never been implemented," says Fallows.

Zolile Ngayi, communications director for the environment, forestry & fisheries department, said the MFV White Rose owner, Unathi-Wena, and then-skipper have appeared in court for fishing in a marine protected area. The case was postponed to April 22.

Gansbaai great white shark cage-dive operator Wilfred Chivell says local fishermen also complain about the massive impact of longlining on their

livelihood. "When they can't catch the usual fish they catch sharks, but fishermen say there are no sharks left in Struisbaai, Arniston and Witsand. They say longliners are taking everything, and they are doing it legally."

A live shark provides five jobs to every one job provided by a dead shark, according to Chivell.

"The longliners are killing our jobs. We always used to have eight boats out, now there are only five operating," he says. "They are raping our whole coast, pulling in thousands of sharks on their hooks."

Shark-diving tourists are big spenders who benefit local economies but in Gansbaai shark-spotting tourist numbers have dropped from about 85,000 a year in 2016 to less than 50,000 now.

In a bid to avoid the death of their industry, shark-cage diving operators have been paying local fishermen not to catch bronze whaler sharks in the shark-watching zone, even though this species is not protected. But this deal broke down last week when fishermen caught these powerful copper sharks in clear view of tourists, prompting Chivell to appeal to the government for an emergency exclusion zone.

"If the capture and killing of these sharks continues in this small and specific area in which we operate it will lead to companies closing and people losing their jobs," he says.

Shark-cage dive operators have appealed to environment, forestry & fisheries minister Barbara Creecy to declare a small exclusion zone for the fishing of bronze whaler sharks. She has instructed that consultation to better manage the conflict between fisheries and the shark tourism industry should take place in the next two weeks, says Ngayi.

The Great White Shark Protection Foundation is urging the government to stop the devastating cycle of demersal shark longline fishing by refusing to renew the licences. The renewal of licences forms part of the fishing rights allocation process (FRAP 2021), for which the extended deadline is December 31 2021.

Most processed shark meat, sourced from demersal shark species, was sold and exported to Australia, according to a survey by the wildlife monitoring network TRAFFIC.

Last week, department of environment, forestry & fisheries inspector Dennis Mostert reported that two demersal shark longliners out of Port Elizabeth were exporting their catch to Australia.

Markus Burgener of TRAFFIC said: "The shark meat would be filleted and packed in boxes the same way as hake fillet for their 'flake and chips' market. The declared export value of shark meat exports to Australia in 2017 and 2018 was about R100/kg."

Shark fins are about six times more lucrative at about R600/kg. All fins are dried and exported to Asia, according to SA's shark plan of action in 2013. Burgener said that in 2018 world imports of shark fins (mainly to Hong Kong) from SA were more than 113t, nearly double the 56.9t of shark meat.

To prevent illegal finning, SA enforces an 8% fin-to-carass ratio for domestic vessels and they must be monitored when they offload their catch. But people regularly send Fallows photos of de-finned dead sharks, a grisly catalogue – shark heads on the beach, big bronze whalers with their fins cut off washed up on the shore, a de-finned adult female dead on the beach after aborting her two pups, and headless, finless and gutted sharks dumped on a beach.

Sharks are also caught as by-catch in other fisheries, like large pelagic and recreational fishing.

WWF-SA marine programme senior manager Craig Smith said: "The common smooth-hound and soupfin species have suffered further declines since 2015 and further concern is warranted, particularly since sharks play a critical role in balancing trophic levels and ensuring healthy marine ecosystems."

WWF-SASSI will be doing an assessment this year on the shark stocks targeted by this fishery.