

John / George - FYI (bcc)
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MEMORANDUM 27 April 1992

To: Bill Paty, Chair BLNR; Files
Through: Henry Sakuda, Administrator DAR
From: Don Heacock, Kauai District Aquatic Biologist *DEH*
Subject: Public request for a State funded Shark Control Program

General Comments

Attachment (1) is a letter received on 2 April 1992 from Mr. Rick Bundschuh encouraging the State of Hawaii to cull large sharks around the Hawaiian Islands. Mr. Bundschuh also phoned me and qualified his letter by stating that the "large sharks" he refers to are in fact tiger sharks (Galeocerdo cuvier).

There appears to be an increase in shark attacks (5 have occurred since Nov. 1991) and other related incidents (bumpings, etc.) recently in Hawaii (see Attachment 2). This increase in incidents may be related to the following:

- a. increase in human population and concomitant increase in nearshore eutrophication (ie. increased nutrients) and increase in nearshore productivity;
- b. increase in the number of people involved in ocean nearshore recreation sports.

Specific Comments

Professionally, I recommend that DAR initiate a shark control program by selectively removing large tiger sharks. This species can be selectively caught by using very large hooks and by using shark as "bait", since tiger sharks are the only common species of shark in Hawaii that regularly eat other sharks. It is likely that the selective removal of large, more dangerous sharks (eg. tiger sharks and rare great white sharks) from nearshore waters in Hawaii would lessen the probability of shark attacks occurring.

Initially, the fishing for large tiger sharks should be done statewide with contracts going to select fishers to fish daily for 1 month. Areas to be fished should be selected by District aquatic biologists working with the contract fishers. On Kauai the areas fished should be as follows: Northshore-Haena Point, Hanalei Bay, Kalihiwai Bay; Eastside-Anahola Bay, Wailua Bay, Nawiliwili Bay; Southshore-Makahuena Point, Hanapepe Bay, Pakala/Waimea area. Data would be collected on catch composition, catch per effort (CPE), length-frequency, location of catch, and stomach contents.

Subsequent to the first month of fishing, these contract fishers should be placed "on call" for future incidents where shark attacks or other related incidents occur. If an attack occurs, the contract fishers should respond ASAP within 24 hrs after the attack and attempt to catch the shark involved.

Tourism is a \$10 billion industry in Hawaii and is an industry that can easily be negatively impacted by an increase in shark attacks. I strongly believe that a selective tiger shark control program would be appropriate socially, economically, and ecologically.

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Expert urges measured hunt for tiger sharks

By Walter Wright
Advertiser Staff Writer

Amid mounting circumstantial evidence that a shark killed missing surfer Bryan Adona Wednesday, a leading expert on shark attacks in Hawaii yesterday called for a measured program to "cull" large tiger sharks from popular beach areas around the state.

North Shore surfers yesterday told The Advertiser they spotted a shark three feet wide churning through the waters at Leftovers surf break at about the time Adona, 29, paddled out on his body board late Wednesday afternoon. (See story on Page A2.)

Adona's body board was found the next day at Waimea Bay with a crescent-shaped hole in it that most experts believe was made by a large shark.

As the search for Adona continued yesterday, shark attack expert George Balazs said he believes "the tiger shark population has increased in numbers and in the maximum size of individuals in that population" to the point where giant predators roam the near-shore waters unchallenged by any foe.

Balazs, who has assembled a de-

tailed history of recorded shark attacks in the state, said he based his belief on the fact that no control or culling programs have been conducted on the tiger shark population for the last 15 years.

Balazs, who stressed he was expressing his personal opinion and not the view of the National Marine Fisheries, where he is employed as a zoologist, took a position contrasting with that of Jean-Michel Cousteau, scion of the famed ocean exploration family.

In an interview before Adona's disappearance, Cousteau said he would adamantly oppose shark hunts to cut

down on the shark population in Hawaiian waters.

Cousteau said past shark-hunting programs didn't affect the number of shark attacks.

But Balazs said "It is my personal professional opinion that a selected culling program at high-usage beach sites around the state is a perfectly reasonable thing to do and will in no way endanger the shark population."

"I am not saying kill every dang shark, but selectively fish for the really big tigers at the main sites" to reduce the number of unopposed "apex predators" and coincidentally obtain some research information on

the sharks and their habits. Linda McCrerey, state Department of Land and Natural Resources spokeswoman, said the agency had not decided yesterday what, if anything, to do in response to the Adona case.

"There is no evidence yet that the missing person died from a shark attack," she said. And she said some experts at shark hunting are not convinced that reducing the population will reduce attacks.

McCrerey said there is a real danger that a shark-hunting program would give the public a false sense of security.

Sharks

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THA

Targeted hunts still seem right

Scientists and self-styled experts on sharks seem to agree on only one thing, as Advertiser science writer Jan TenBruggencate noted in Sunday's paper: Too little is known, particularly about tiger sharks, the top predators in Hawaiian waters.

Confirmed shark attacks on live people (not those already drowned) remain few and far between. The odds on a shark being eaten (cooked, of course) by a person are far, far greater than vice versa, which is why the federal government plans to protect 39 shark species off the U.S. East Coast and require permits to sell shark meat.

Unfortunately, shark meat is not popular here. If it were, there might be more regular, unremarkable fishing keeping the shark population under better control.

Still, recent confirmed attacks on swimmers, and one as yet unconfirmed attack on a surfer

on the North Shore, have increased the urgency for a state policy.

The island- or state-wide hunts mounted in the past seem wasteful and cruel. It was as if all the members of the species were somehow morally responsible for one or two large predators behaving naturally in their own

environment. But to do nothing about deadly shark attacks is wrong as well.

So the best response seems to be a policy of quick response to confirmed attacks with brief, narrowly targeted hunts to take only large sharks, especially when attacks are in areas heavily used by people for swimming and surfing.

And the major portion of the \$200,000 the state Legislature is now talking about spending after the recent shark attacks should go to research, so scientists as well as hunters can respond to our shark fears.

