

Mystery Pompano Beach eyeball likely belonged to a swordfish

An eye the size of a softball washed up in Pompano Beach and started an Internet buzz about its origin.

10/15/2012

By CURTIS MORGAN

Cmorgan@miamiherald.com

An eyeball the size of a softball that washed up on Pompano Beach last week didn't come from some strange deep-sea monster. It almost certainly belonged to a swordfish, and not a particularly monstrous one at that.



Research professor David Kerstetter shows off swordfish caught in the Cayman Islands last year. The photo shows the fish's unusually large eyes, much like that washed up last week in Pompano Beach. David Kerstetter / Nova Southeastern University

After examining a beachcomber's curious find, the Florida Fish and Wildlife Conservation Commission said Monday that all the evidence points to a prize targeted by both sport and commercial anglers along the South Florida coast.

The finding came as no surprise to David Kerstetter and his fisheries students at **Nova Southeastern University's Oceanographic Center** in Dania Beach. They enjoyed a good week of chuckles over the Internet buzz, which speculated that the eerie blue orb had come from everything from giant squid to undiscovered sea serpents.

"We kind of knew it was a swordfish from the get-go," said Kerstetter, an NSU research scientist and adjunct professor, who has studied the fish for more than a decade and been eye to eye with hundreds of them on numerous fishing trips. "We figured there was a swordfisherman out there rolling on his

deck with laughter over the whole brouhaha.”

The swordfish spends much of its life swimming through inky darkness, swimming from 800 to 2,000 feet down during the day and then typically moving nearer to the surface at night.

“That’s why they have those large eyes, because they feed in the dark,” said Kerstetter. To further enhance their low-light vision, swordfish have specialized organs that heat their eyes in the cold depths, which helps speed reaction and improve resolution, he said.

Joan Herrera, curator of collections at FWC’s Fish and Wildlife Research Institute in St. Petersburg, said state experts found that the eye’s color, size and structure, as well as the bone around it, all pointed to a swordfish. Cuts around the eye also suggested it had been removed by a knife and either discarded or lost. The FWC intended to conduct genetic testing to confirm the analysis.

The Florida Straits have been closed to commercial long-line fishing for swordfish for more than a decade to protect the fishery, but commercial buoy-gear fishery is allowed from the Middle Keys to West Palm Beach. Sports anglers also target the hard-fighting fish, which is popular table fare.

While removing the eye is time-consuming and not common practice, Kerstetter said some old-timers would collect the small capsule of bone holding the eye and use it as an ashtray.

Though swordfish can top 700 pounds in the Atlantic, most caught off South Florida are considerably smaller. Based on photos, Kerstetter said the eye might have come from a 200- to 250-pound fish but he acknowledged that was a rough guess.

“I’m just, excuse the pun, eye-balling it,” he said. “It’s a good-sized fish but certainly not a monster.”

By CURTIS MORGAN



The giant eyeball after it was found on a Broward beach.

<http://www.sun-sentinel.com/news/local/breakingnews/fl-giant-eyeball-mystery-20121015,0,2019024.story>

Mystery eyeball identified 10/15/2012

So what sort of sea monster produced the giant eyeball that washed ashore last week in [Pompano Beach](#)?

A decent-sized, but by no means record-breaking, swordfish.

The Florida Fish and Wildlife Conservation Commission announced Monday that an analysis of the softball-sized eyeball determined that a swordfish was the most likely source.

After news broke about the eyeball's arrival, speculation among scientists and the public ran to a giant squid, tuna, various sharks and marine mammals.

"Experts on site and remotely have viewed and analyzed the eye, and based on its color, size and structure, along with the presence of bone around it, we believe the eye came from a swordfish," said Joan Herrera, curator of collections at the wildlife agency's research institute in [St. Petersburg](#).

In addition to the details of the eye's appearance, the wildlife commission's biologists detected straight-line cuts around the eyeball that indicated it had been removed by a fisherman.

David Kerstetter, research scientist and swordfish expert at [Nova Southeastern University's Oceanographic Center](#), said the swordfish was probably about six feet long — not counting the sword — and weighed 200 to 250 pounds.

This may seem like a modest-sized fish for such a large eyeball, but swordfish have unusually big eyes to allow them to hunt at night and navigate depths of up to 1,000 feet.

"Their eyes are large because they've adapted to feeding in low light-level conditions," Kerstetter said. "So the recreational fisherman and commercial fishermen target them at night."

Swordfish are abundant off the southeast Florida coast, supporting active commercial and recreational fisheries. They can reach a weight of more than 1,100 pounds and a length of more than 14 feet.

"What's really surprising is that this hasn't happened before," he said. "But strange things happen, especially in South Florida."

Kevin Baxter, spokesman for the Florida Fish and Wildlife Conservation Commission, said the eyeball would be placed in the commission's specimen collection.

dfleshler@tribune.com or 954-356-4535