

Silky shark observed with regrown fin after extensive injury

December 29 2023, by Bob Yirka



Photograph of the dorsal fin of a male silky shark (C. falciformis) taken during a dive in Jupiter, Florida, on July 31, 2022, by Josh Schellenberg. Credit: *Journal of Marine Sciences* (2023). DOI: 10.1155/2023/6639805

A marine biologist at the University of Miami's Rosenstiel School of Marine, Atmospheric, and Earth Science, has documented a case of a silky shark with a regenerated dorsal fin, after much of it was lost due to maiming by an unknown person. In her paper published in *Journal of*



Marine Sciences, Chelsea Black describes her study of this shark.

Fin repair in <u>sharks</u> is rather common, though it is rarely full. Typically scar tissue forms in wounds, closing them, offering a small degree of regeneration. Prior to this latest observation, only one other instance of fin regeneration in any type of shark has been observed. And no prior cases have been documented of a silky shark regrowing large portions of a lost fin.

The shark was spotted by a diver off the coast of Florida, near Jupiter, in 2022—he had noticed that the shark had a very large chunk of its <u>dorsal</u> <u>fin</u> missing. Local divers knew that Black had tagged several silky sharks in the area a few weeks prior for a previous study, so the diver contacted Black directly at the University of Miami.

In studying pictures taken of the shark, she noted that the injury line traced the contours of what had once been the satellite tag site. Some unknown person had cut the tag off the fin, leaving a massive gap. The piece of missing fin was so large that Black expected the shark would likely die due to difficulties in catching food.





Silky shark dorsal fin (a) healed taken May 2023 by John Moore. Silky shark dorsal fin (b) healed taken June 2023 by Josh Schellenberg. Credit: *Journal of Marine Sciences* (2023). DOI: 10.1155/2023/6639805

In 2023, a silky shark with an oddly shaped dorsal fin was photographed in the same area by several divers who submitted their evidence to Black for identification. She confirmed by tag ID number that this was the same injured shark photographed a year earlier.

Now, most of the missing fin had been rejuvenated. She estimated that the shark had lost just over 20% of the fin, and regained approximately 87% of it through rejuvenation. Thus far, testing of the shark has been purely observational, thus it is not known if the regrowth was due to rejuvenation of fin tissue, or if it simply filled in most of the missing parts with <u>scar tissue</u>.



More information: Chelsea Black et al, Resilience in the Depths: First Example of Fin Regeneration in a Silky Shark (Carcharhinus falciformis) following Traumatic Injury, *Journal of Marine Sciences* (2023). DOI: 10.1155/2023/6639805

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