

EXPEDITION PROFILE

August 9th, 2018 aboard DISCOVERY Yacht Shredder

The International Seakeepers Society partnered with University of Miami's Shark Research & Conservation Laboratory (SRC) aboard the DISCOVERY Yacht, Shredder, to retrieve acoustic hydrophones in the clear waters of Little Bahama Bank. This work concluded a landmarkstudy in which researchers learned about a population of large female tiger sharks. Arranged in a strategic array, the receivers monitored the fine scale movements of tiger sharks since 2013. Seakeepers partnered with SRC five times over the course of thestudy to allow the research team to successfully download data, maintain equipment, and tag sharks. This time, a three-person team from SRC, including Assistant Director Stephen Cain and students Abby Tinari and Andy Frigola, was assisted by SeaKeepers staff as well as the captain and crew of D/Y Shredder. This year's expedition benefited from calm seas. As the team made the crossing to Grand Bahama they were cautiously optimistic for success. "These receivers have been dependably there for years," said Stephen Cain. "But you just never know what you're going to find in the wake of storms. Our equipment could be buried under shifting sands or it could be nowhere to speak of." Excitement grew over the course of three days as the team retrieved 29 receivers, and saw numerous shark species free swimming while they completed scientific dives. SRC's Director and Assistant Professor Dr. Neil Hammerschlag is anxious to analyze the receiver data to determine if tiger shark movements were affected by the roiling seasof Hurricane Irma in 2017. He already has data on shark movements when Hurricane Matthew passed over the array in 2016.

Globally, many shark species are in decline as a result of overfishing and habitat degradation. Hammerschlag and his team of researchers are using a variety of tools in the field of marine conservation biology to produce actionable science for the public and key decision makers. In order to better manage protections for sharks, researchers like Hammerschlag need to be able to provide resource managers reliable predictions on the movement patterns of sharks. The acoustic array in Little Bahama Bank, locally known as Tiger Beach, proved the perfect place to deepen our understanding of tiger sharks. We've enjoyed aiding in this study and look forward to learning about the conclusions drawn from it.

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