

A close-up, profile shot of a person with dark hair, wearing a blue hooded jacket, looking down and working with a piece of scientific equipment. The equipment consists of a metal frame with a black cable and a blue component. The background is a bright, out-of-focus white surface.

THE INTERNATIONAL SEAKEEPERS
SOCIETY AND ITS PARTNER SCIENTISTS
STRIVE TO PROTECT AND RESTORE THE
OCEANS. BY DIANE M. BYRNE

OCEAN ADVOCATES



Glen Allen, a yacht captain for more than 30 years, is as passionate about boats as his boss is. So, too, do they share a passion for protecting and preserving the oceans. Allen estimates that the eight boats he manages—ranging from the 36-foot custom water shuttle *Julia* to the 147-foot Feadship *Harle*—have conducted 30 to 40 scientific trips on behalf of the International SeaKeepers Society over the past several years. Even more impressive, *Shredder*, a Grand Banks Eastbay 54, has done the majority of the trips. In fact, the intrepid yacht has done so many outings that Allen declares, “We joked about changing the name of *Shredder* to SeaKeepers. It seems like that’s her mission in life.”

Shredder’s mission is the same as approximately 70 boats and yachts that have worked with SeaKeepers, a non-profit supporting marine science and conservation. Collectively, they help the organization in spreading awareness about critical issues facing the oceans, as well as promoting and enabling scientific discovery. On any given day, SeaKeepers’ team in Florida fields inquiries from scientists and researchers who need help with projects all around the world. The team then sends the word out to its network of contacts as well as via its social media channels. The responses come in, and the results are remarkable: Sharks get tagged in the Bahamas, sea water is sampled in Miami, microplastics are collected in the Atlantic, and more.

Best of all, “All it takes is one email,” says Tony Gilbert, SeaKeepers’ program director.

SeaKeepers got its start in 1998, when two American yacht owners



Shark tagging is just one of many projects SeaKeepers supports by connecting scientists with its network of boat owners.



You don't need to own a superyacht to participate in SeaKeepers' program; boats of all sizes are welcome.

realized they shared more than just a passion for cruising. They were gravely concerned about the deteriorating condition of the world's oceans. In addition, they wanted to help—in a way that would be more impactful than writing a check to a non-profit. But how? As superyacht owners, they realized that yachts like theirs traveled to places that research vessels didn't, and therefore could collect information that the scientific community might not otherwise have access to. Further, they figured that oceanic-data collection systems could be installed aboard their yachts. Following multiple conversations with additional superyacht owners, as well as captains and others in the industry, they helped establish the International SeaKeepers Society.

For several years, SeaKeepers focused on data collection, obtaining the specialized equipment necessary to transmit information about ocean temperature, salinity levels and more via the yachts' satcom. The organization succeeded in attracting superyacht owners like the late Paul Allen, co-founder of Microsoft and an avid conservationist. Along the way, SeaKeepers established relationships with leading scientists too, such as Dr. Sylvia Earle, a renowned oceanographer and explorer named a Living Legend by the Library of Congress for her contributions to American life.

Earle opened the organization's mind to a new way of thinking. According to Gilbert, Earle informed SeaKeepers that scientists wanted and needed to be on board vessels to conduct research, but often couldn't afford the cost of chartering them. The fees ranged from tens of thousands of dollars a day to more than a million dollars over the course of a mission. Realizing that it could be far more effective in pairing scientists with boat owners willing and able to let their craft

serve as the research platforms, SeaKeepers switched gears.

The SeaKeepers DISCOVERY Yachts Program includes educational outreach events, citizen science trips and scientist-led expeditions. The time commitment can be as little as 10 minutes or as long as a week's expedition. Some citizen science trips involve water sampling while moving between ports. Educational outreach events typically involve welcoming a group of schoolchildren on board to learn about sea life in their area.

In early 2018, the 222-foot Feadship *Archimedes* hosted SeaKeepers personnel and a researcher from Florida International University for several days. They deployed nearly two dozen remote underwater video cameras to capture hours of shark footage, so that the researcher could later count all the species. It was particularly important, since Hurricanes Irma and Maria had passed through the Caribbean in late 2017, and storms can lead to degradation of reefs, where sharks congregate.

While superyachts like *Archimedes* and their owners tend to get the most headlines, SeaKeepers has a broad spectrum of devotees. "I want to dispel the notion that we're a superyacht-only club," Gilbert says. "It can be any boat, any size." Witness the above-mentioned 54-foot *Shredder's* frequent missions. Last year, *Shredder* participated in a shark-tagging trip in the Exumas, which utilized new acoustic-receiver technology. It was part of an ongoing shark-sanctuary study to determine how shark populations are faring in protected Bahamian waters. Also last year, *Catniss*, an Endeavour 44 catamaran, took researchers from the University of Texas to the Florida Keys to conduct coral research. They took samples that would later be analyzed for genetic changes related to changing environmental conditions.



The S.A.R.A.H. Initiative provides owners with nets to tow behind their boats, which collect plastics that are then analyzed by researchers at FIU.



Yet another SeaKeepers program where boats of all sizes are needed is the S.A.R.A.H. Initiative. S.A.R.A.H. (Sample, Aggregate, Return, Analyze and Help) is another citizen scientist program, directed at combating ocean microplastics. Microplastics are pieces smaller than 5 millimeters, broken down by UV light and wave action. Turtles and small fish often mistake microplastics for food. Considering larger species feast on these smaller fish, and humans consume fish, the concern is extensive.

In the first step of the program, SeaKeepers sends boat owners a sampling kit, which includes a bin-like net to tow behind the boat. The nets collect a surprising amount of contents, which are then placed into sample filters and labeled. SeaKeepers ships the filters to S.A.R.A.H. researchers at Florida International University. The researchers then analyze the density, type and size of the plastics, adding the details to their ever-growing database, which ultimately will help researchers properly measure and map the plastics problem.

Regardless of what program you participate in, the positive results are mutual. "The crew feel really empowered and good about what they're doing," Allen affirms, adding, "there's so much excitement among the scientists."

Gilbert's greatest needs are finding boats to assist scientists in Alaska, Turks and Caicos, the Bahamas, the Mediterranean and as far as Western Australia. Expeditions range from geological and archaeological research to whale study as well as shark tagging and deep-sea exploration. "I feel like there are a lot more people out there who would find this interesting and aren't aware of the chance," Gilbert says.

Consider yourself aware. Just don't rename your boat SeaKeepers, though—Allen and his boss may beat you to the punch. □