

hen Earl Tupper sold Tupperware in 1958, he did what any self-respecting multimillionaire would do: traveled the world for a couple of years, decided to move to the Bahamas and after that settled in Panama.

"Dad was looking for land to build on and farm," explains his son Mark. "But in the Bahamas, the island's water supply had to come from rain, so in the end he bought San Jose Island off Panama."

Mark arrived after he finished college in Europe and his job was to research the island.

"I came across books that had been published by the Smithsonian research institute on the island of the flora and fauna, so we got in touch with the Smithsonian and went there; it ended up that dad became good friends with the director of the Smithsonian Tropical Research Institute in Panama and began making large donations to help them with their research programs."

Mark had long-loved being on the water. At age 12, he built his first sailboat, and in 1956, his father bought their first yacht. He learned how to operate that, too.

"I bought my first boat after dad died.

It was an aluminum 70-foot Stephens with a 4,000-mile range — a long-range cruising yacht," he says. "I traveled around the Caribbean in that, but we always kept in touch with the Smithsonian. I'd visit

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the research institute at least twice a year and see how the work was doing. One day it occurred to me that I could help in a way that wasn't just a monetary donation.

"I asked them if they'd like to borrow my boat with the crew and I'd pay for all the food so that they could get to places. They used the boat as a floating hotel so the scientists could go to remote places in Panama along the coast where there were no roads. They did paleontology, geological studies, they studied bees — the boat allowed them access to do a multitude of research that would otherwise have been impossible.

"At one point early on, I came through with the boat up to Costa Rica on the Pacific side and in ten days they discovered five new species of coral and several species of fish, too. They even named one of the corals after me."

Tupper sold that boat several years ago and now has *Siren*, a 60-foot Huckins that he uses to sail between Costa Rica and Florida. Nowadays, he helps the institute with new vessels built specifically for marine research.

"But when we started out it was because I saw my boat do nothing for most of the year and I had to pay a crew anyway, so I thought they might as well work on something worthwhile. They enjoyed it and it gave me the opportunity to spend more time with the scientists."

If we're talking stereotypes, yachts symbolize high-living extravagance, wealth and hedonism, while science is serious, stuffy and academic — the two don't naturally sit side by side. But the recurrent theme that seems to bring them together is a

love of nature and an appetite for preservation that an increasing number of owners seem to share today.

"The few people who have big boats get to see some of most untouched spectacular parts of world," says Thomas Petersen, owner of Valkyrie, a 60-foot Sea Ray. "That natural aspect of the environment is why boats are on water, so I think as owners we have a vested interest in maintaining the environment." Petersen is a longtime supporter of The International SeaKeepers Society. This group was established in 1998 by influential yacht owners such as Paul Allen — whose superyacht Octopus has embarked

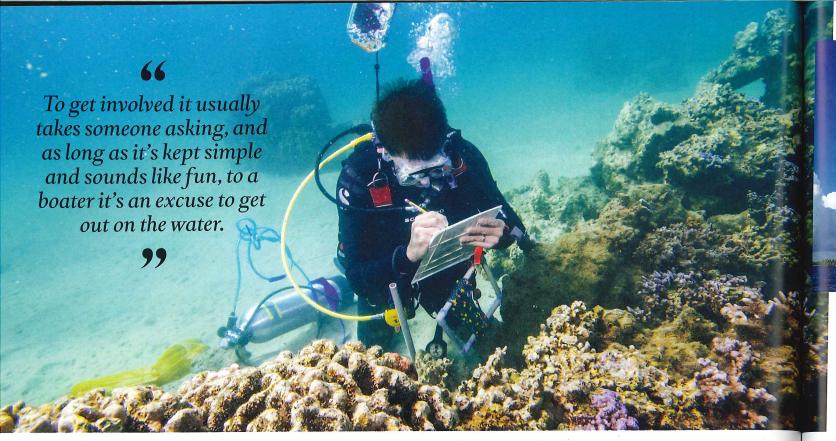
on many a scientific mission — as a means of promoting oceanographic research, conservation and education through direct involvement with the yachting community.

"Ninety percent of costs for marine scientists are the research vessels," says Richard Snow, president and CEO of The International SeaKeepers Society. Not having to pay for vessels makes tasks like shark tagging, genome sequencing, coral reef studies and ocean monitoring in conjunction with NOAA, financially more feasible, he adds.

"Back when we started, the University of Miami developed devices that were fitted on yachts that collected data as they traveled the world's oceans, monitoring salinity, plankton, oil and various other data. That data was sent to a central server



Circle: Mark Tupper lent his yacht to Smithsonian scientists in Central America. Above: Researchers on the yacht Penny Mae work on genome sequencing in Panama.



Above: In 2006, the Khaled bin Sultan Living Oceans Foundation started a four-year research program to map the world's coral reefs. Opposite bottom left: Captain Philip Renaud, executive director of the Living Oceans Foundation (far right in photo), discusses field operations with Global Reef Expedition scientists in the staff mess hall of Golden Shadow (opposite top).

via satellite and any scientist had access to it for use in any study they saw fit," says Snow.

"But we noticed a couple of things after eight years or so. Firstly that satellite technology had increased, so data could be collected with satellites more easily, and the other was that scientists liked to collect their own data as opposed to using external sources. When our technology became obsolete we then decided to allow scientists to go on board the vessels themselves and collate their

own research. Today we have programmers whose sole job it is to pair up scientists with yachts. When a scientist needs a research vessel they come to us. I call us the Uber of ocean research," says Snow.

"They had a unique idea and it has evolved quite a way from the original concept," says Petersen, who observes that oceanic research is on the decline due to a lack of funding and that a major source of expense is getting scientists to and from field locations. "If you have a yacht and you're going somewhere and can offer a lift to scientists, that cost is removed. The research can continue without that huge expense; that was the broad concept that

attracted my wife and me (to SeaKeepers) three years ago."

Petersen, who hails from Ventura, California, decided to sponsor a drifter, a device that monitors numerous elements in the ocean from water flow and salinity to temperature, wind currents and water movement. "We've had many an adventure with our drifter," says Petersen. "We decided to launch it in the Channel Islands, between Santa Cruz and Santa Rosa islands five miles out to sea…and we could track it and see progress.

"My experience has been that to get involved it usually takes someone asking, and as long as it's kept simple and not complicated and sounds like fun, to a boater it's an excuse to get out on the water, and we don't need much of an excuse to do that."

But what is the incentive for owners to take part in scientific missions? Snow points out that having the scientists aboard is like "a free college education."

"I believe owners take part in and donate to scientific missions because they have an interest. I don't think there's a guilt factor," says Captain Mike O'Neill of *Penny Mae*, a 138-foot Richmond motor yacht owned by Lee and Penny Anderson, also founding members of The International SeaKeepers Society.

"Sometimes it's as simple as the yacht has to move from A to B, and if we do some science in between it doesn't cost us anything but it's nice to be able to give something back."

O'Neill has been involved in several exhilarating missions with *Penny Mae*. "Shark tagging in the Bahamas with scientists from the University of Miami was probably the most exciting," he says. "We had eight scientists in total, we were the base of ops, and we gave them accommodation and fed them. Our dive boat did all the blood and guts stuff. Between them and the other team laying transponders, there were twenty people, but *Penny Mae* was

at the center of it all with all the equipment. You get up close and personal with the tiger sharks they're catching and they are some big, powerful animals."

Golden Shadow

Saudi prince HRH Khaled bin Sultan came to allow scientists to use his fleet almost by accident. The former general in the Royal Saudi Air Defense retired post-Operation Desert Storm and decided to commission a new yacht.

"At the time, someone suggested he use what's called a shadow boat system; you build a superyacht and you also build an escort vessel that takes care of all the industrial stuff," explains Philip Renaud, executive director and chief oceanographer of the Khaled bin Sultan Living Oceans Foundation, established in 2000. "Our shadow boat Golden Shadow even has a recompression chamber.

"Its first captain back in the 1990s was a real oceanography fanatic who asked the Scripps Institution of Oceanography if they'd be interested in using *Golden Shadow* for scientific missions. At the time, the Prince was learning to scuba dive and thought it was a brilliant idea, so he agreed to deploy the shadow boat to host oceanographers and their research."

Renaud came on board in 2004 and immediately started doing scientific research missions around the world — the first one of note was with the University of Cambridge in the Seychelles.

"We had a collection of ships, the primary yacht, Golden



Odyssey, and its support boat, Golden Shadow, which carried out the bulk of the missions," says Renaud. "We also had a thirty-meter sportfishing boat called Golden Osprey and a seaplane called Golden Eye.

"A lot of times when we were doing scientific missions, the entire Golden Fleet would be in the vicinity, being used in different ways. Osprey was used as a scientific diving boat, the seaplane for aerial reconnaissance. The Prince has been extremely generous in offering the use of his fleet."

In 2006, the foundation began a four-year research program mapping the coral reefs down the coast of Saudi Arabia. "And in 2008, we announced plans at the World Conservation Congress in Barcelona that we would circumnavigate the world doing the same," says Renaud.

"From 2011 to 2015, we went to fifteen different countries on twenty two-month-long scientific research expeditions, surveying and mapping the world's coral reefs to a resolution no one's ever achieved before.

"Twe never put a price tag on it, but I guess it cost in the region of \$30 million. The Prince is the principal funder. He knows he's not a scientist but wants to facilitate and give the tools the scientists need to do the research."

Renaud agrees that the most limiting aspect of oceanography for scientists is getting to an area to do the work. And that's why ever-traveling superyachts, with their ever-more adventurous owners, are a perfect match for science. The generosity of these visionaries is facilitating the progress of oceanography on a global scale, more now than ever.



A researcher and a gentleman

The 1930 schooner Zaca is best known as actor Errol Flynn's yacht. Her first owner, however, was Templeton Crocker who sailed her around the world on scientific missions. After her launch, Zaca, carrying Crocker and a crew of 18, including a doctor, photographer and Crocker's valet, sailed to the Marquesas, Tonga, Java, Sumatra, India, Europe and the Caribbean. She continued to conduct many scientific expeditions until 1942, when Crocker sold her. In the 1980s, two surviving crewmembers told stories of sailing to the Galápagos and South America and bringing back turtles, iguanas and a tankful of live fish for the San Francisco Aquarium. The American Museum of Natural History credited Crocker in 1935 with discovering new species on his travels through the eastern Pacific.