



2017 SeaKeepers of Bermuda **Awardee Biographies**

JUDIE CLEE

(Profile written by Andrew Stevenson, Bermuda)

Born and raised in Bermuda Judie developed her love of the ocean at a very early age and has spent as much time as possible on, in or under the sea during her entire life.

Judie has contributed much to our understanding of the oceans. She introduced the REEF programme to Bermuda in 2000 and as Principal Investigator, has engaged hundreds of divers to survey fish on our reefs. Judie was named REEF Volunteer of the Year in 2005.

Judie has been an active volunteer for the Bermuda Zoological Society, Ocean Support Foundation, Bermuda's Reef Ecosystem Assessment and Mapping Programme, the Humpback Whale Project, the National Trust's Marine Environment Committee, the Marine Debris Taskforce, BUEI and more. For the last ten years Judie has helped curate the Bermuda Humpback Whale ID Catalogue consisting of over 1,400 individual whale IDs.

Judie has taught young and old about marine life as a diver, lecturer and tour guide over many years. With her devotion as a 'citizen scientist' and educator Judie is outstanding as an ambassador for Bermuda and the oceans.

Judie Clee was given environmental awards by the Bermuda National Trust in 2004 and 2015 for her enduring commitment to protecting the Marine Environment. In 2016 Judie was awarded the Queens Certificate for "Services to Community – marine, environmental conservation".

CHRIS FLOOK

FISH BEHAVIORALIST

Chris Flook, a true naturalist, cares deeply for the environment. However, his real love is for the ocean. A native Bermudian, Chris is a former Olympic and National record holding swimmer. He is an avid fisherman and has been diving for more than 30 years. He was the Collector of Specimens and Dive Safety Officer at the Bermuda Aquarium, Museum and Zoo (BAMZ) for 15 years. During his tenure he assumed the broad role of primary subject matter expert and liaison to Bermuda for some of the world's leading marine scientists. He has had involvement in several projects sponsored by BBC, National Geographic, NOAA, Dauphin Sea Lab and Trinity College Schneider Seaweed Lab.

In 2007, Chris started the Bermuda Lionfish Project; bringing together the Bermuda Government, REEF, NOAA and domestic NGOs to adopt policies and protocols. The Lionfish Project in Bermuda has since been used as a management model by several Caribbean Countries. The initiative continues today through the Ocean Support Foundation and Chris is a member of the Board. From 2011–2014 Chris was the Director of the Blue Halo project through the Pew Charitable Trust. Currently, Chris works at the Bermuda Institute of Ocean Sciences and is a founding member and sits on the Advisory Board of RISE (Robots in Service of the Environment - <https://robotise.com>) creating a robotic solution to address the deep water invasive lion fish problem in Bermuda and beyond.

He has received many awards for his commitment to Bermuda's environment and heritage, notably the National Trust Award for Marine Conservation and more recently the Trust's Clipper Award for Historic Preservation.

PHILIPPE MAX ROUJA

Philippe Rouja is a Bermudian Anthropologist with over 20 years of research experience working with indigenous coastal communities specializing in marine heritage, traditional marine resource management and human health and nutrition, with communities in Australia, the Caribbean and French Polynesia.

Philippe received his PhD in 1999 for his work with the Bardi people in North Western Australia cataloguing their seasonal traditional fishing practices. Post Doctoral research demonstrated the sustainable genius of the Bardi's fisheries management strategies that simultaneously protect the ecology and increase the nutritional benefits through seasonal harvesting focused on rich sources of omega three fatty acids in tropical fish.

Philippe has held the role of Principal Scientist - Marine Heritage and Ocean Human Health, in the Bermuda Government since 2004 where he oversees the management of Bermuda's shipwrecks and acts as a scientific director, partner and liaison on Bermuda-focused international marine science and media projects. These recently include the last Atlantis mobile ocean eco-toxicology lab mission to Bermuda, sea level rise research with the BUEI and the Bedford Institute, rescuing and analyzing 5 bottles of Civil War shipwreck wine and efforts to document the diversity of life in the Sargasso Sea.

From 2003 to 2014 Philippe was a Principle Investigator with the mobile ecotoxicology lab Atlantis working out of the WHO PAHO collaborating center at the University of Laval Hospital under the direction of Dr Eric Dewailly. The labs have worked extensively in remote coastal communities from the Arctic to the Caribbean directly linking the health of the oceans to human health. Philippe was the PI on Bermuda's first fetal cord blood ecotoxicology study followed in 2006 by a benefit/risk assessment of local fish; measuring levels of n-3 fats, selenium, and mercury in commercial species. Interventions through the public health system led to a documented 5 fold decrease of mercury in Bermuda newborns by 2012.

Philippe also oversaw the development and release of a prize-winning mobile phone app to assist pregnant women in Bermuda in making low mercury high nutrient fish consumption choices for local species; www.benefishary.com. Philippe is also a founding member and scientific advisor to the newly formed RSE (Robots in Service of the Environment) mission to design and build lionfish culling underwater vehicles (<https://robotise.com/lionfish-project/>). In the last 5 years Philippe has begun specializing in the communication of shipwreck and science stories through the medium of film and has participated, and is partnering in, the production of several documentary films coproducing the recent film UTSUK on dietary transition if the Arctic (www.utsukfilm.ca) and a shipwreck sea level rise film, The Riddle of the Crest, (<https://vimeo.com/106349035>) and the film "Downings Wreck" on the rediscovery of Bermuda's founding shipwreck the Sea Venture. .

In 2000 Philippe and Eric Dewailly founded the ongoing Ocean Human Health Research Programme to pursue "curious" research questions and tell science stories with local and indigenous marine specialists. www.oceanhumanhealth.com In 2010 Philippe was selected as the Bermuda College's Corange/Roche Bermudian Scientist of the year. Philippe is a trustee of the Adara Foundation and the Bermuda Underwater Exploration Institute and is adjunct faculty at the Bermuda Institute for Ocean Sciences.

Philippe also breeds prize-winning French Creve Coeur Chickens.

JP SKINNER

JP Skinner was born and raised in Bermuda where he developed a genuine passion for the ocean. He pursued a degree in anthropology at the University of California, San Diego, before returning home to teach for several years in a local primary school. A keen water-sports enthusiast and environmentalist, he eventually combined his interests in education and the outdoors by launching Waterstart Ltd., an ocean exploration program for teens. After several successful summers of marine education, JP began work at the Bermuda Institute of Ocean Sciences, and began building a suite of outreach programs which included Waterstart as the summer focus. These programs eventually coalesced into BIOS's "Ocean Academy" and reached thousands of local students each year.

Today, Ocean Academy continues to thrive at BIOS but JP has taken Waterstart independent once again with the goal to expand outreach and develop the local network of informal education opportunities. Now in its 15th year of operation, Waterstart has an alumni following of over a thousand ocean-stewards and maintains its mission to promote outdoor education and personal growth. JP is still enthusiastically at the helm and is currently steering the program towards new sustainability-focused initiatives.