

ISLAND UPDATE

FALL/WINTER 2015 • VOL. 17, NO. 2
Protecting the unique habitats and cultures of islands worldwide

Enduring Partnerships

hen Seacology invests in an island community, we're in it for the long haul. In the same way that a village makes a long-term commitment to protecting its marine or terrestrial environment, we make a long-term commitment to the projects we fund. So if conditions change and more funding is needed later, we want to be there for our partners. As a small, nimble organization—and with our donors' ongoing support— Seacology can move quickly to meet changing needs or deal with emergencies.

Natural disasters are not uncommon at our project sites, given that most of our work is done on tropical islands. For example, a Seacology-funded community hall at Felemea, on Tonga's 'Uiha Island, was damaged beyond repair last year by Cyclone Ian, which devastated parts of Tonga and Fiji. Thanks to the generosity of our supporters, especially our longtime funders at the NuSkin Force for Good Foundation, we were able to fund a completely new, reinforced community center to replace the ruined one. A Seacology expedition visited the site for the opening of the new facility, and participants celebrated with grateful Felemea residents.

Similarly, earlier this year, on Micronesia's Fefen Island, where Seacology had funded a community hall and cleanwater system in 2010, Typhoon Maysak upended several of the large water tanks and caused minor damage to the building. With a small maintenance grant from Seacology, the Onongoch community was able to fix the building. And they're still protecting a plot of neighboring forest reserve.





A project partner hauls cement to help repair our project site on Fefen Island, in Chuuk, Micronesia.

This year in Jamaica, Seacology made a grant to add a new roof on the field office built from a used shipping container there in 2011. This improvement allows rangers to remain near the protected area and keep a constant watch for poachers. With such enforcement, the no-take Oracabessa Bay Fish Sanctuary has become an overwhelming success—surveys show stunning increases in coral cover, fish density, and biomass, and corresponding decreases in harmful macroalgae.

So in short, after helping an island village get its first solar power, clean water, or kindergarten, we don't walk away. The communities we're privileged to work with keep their end of the bargain; Seacology does, too.



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Help Islands Year-Round

This spring, Seacology launched Island Stewards, our new monthly giving program. For as little as \$10 a month, you can help keep Seacology's work going strong throughout the year. Island Stewards will receive special recognition in future annual reports and a unique gift from one of our project sites for each year of membership. For more information and to sign up, visit seacology.org/islandstewards or call (510) 559-3505.

From the Chair

Dear friends,

Early in my career as an ethnobotanist, Barbara and I spent a year with our young children living in a remote village in the Samoan islands. There I apprenticed with Epenesa Mauigoa and Pela Lilo, both of whom were extraordinarily gifted traditional healers. Although their formal education had been limited as they grew up, I was astonished at their encyclopedic knowledge of Samoan rain forest plants and how to use them to heal. Both women were also extraordinarily gracious and deeply supportive of my efforts to learn and record the ethnopharmacopoeia of Samoa.

Epenesa and Pela have long since passed away, but I thought of them last month at the Seacology Prize Ceremony when we heard from Lakshmi Moorthy, the 2015 Seacology Prize winner. Lakshmi came from a remote village in southern India. She told us that her village did not have a school, so she never had an



Paul Cox with Samoan healer Fulole Matagi

opportunity to attend. Instead, she learned from her mother how to harvest marine algae in the nearby lagoon. She continued gathering seaweeds through adulthood and marriage. She then noticed that the seaweeds were not regenerating and deduced that the decline was due to overharvesting from the many female seaweed collectors. On her own initiative she organized the women in her village to help protect the marine resource, and then reached out to nearby villages. Her conservation collective now numbers 1,200. These Gulf of Mannar seaweed collectors have worked closely with government authorities to enforce harvesting bans during certain times, which remarkably follow lunar cycles. At their request, the women are provided with

biometric ID cards from the government, and help safeguard their precious resources.

We were all deeply touched when Lakshmi told us that she had established an elementary school in her home village so that the children can have the opportunities she never had. She told us of her dream to establish a high school there as well.

Similar women-directed conservation activities occur on the island of Sri Lanka. In 2001-2002, Seacology established a mangrove conservation program in Kiralakele village, including a handicraft store which sells fruit, juice, and honey, as well as locally made handicrafts produced by young women who have dropped out of school. This program has been so successful that the government of Sri Lanka recently signed an agreement with Seacology to protect all of the mangroves in Sri Lanka if Seacology in return provides similar assistance to impoverished women. The resultant \$3.4 million project will allow Seacology to make microloans through our partner in Sri Lanka, Sudeesa, to 15,000 impoverished women throughout coastal areas there. Seacology Board members and Fellows have donated \$1.5 million towards this project. Last month we announced an additional generous gift of \$1 million for the Sri Lanka project made by an anonymous donor, which brings us within reach of completing this historic project.

My mother was a scientist. She had been hired from her job as a waitress, and was trained by Dr. Vern Bressler and other federal scientists to become one of the top fish histologists in the world. My early childhood memories include visiting her laboratory and having her teach me how to use the microscope. She used her knowledge to help conserve fish species throughout the United States. It is a thrill for me now to see leadership of other remarkable women in conservation initiatives throughout the world.

Thank you indeed for your gifts and support for Seacology and this remarkable initiative in Sri Lanka, which brings hope for impoverished villagers and sets a model for national conservation initiatives that will help guide our planet into the future.

Cordially,

Paul Alan Cox, Ph.D. Chair, Seacology Board of Directors



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SRI LANKA UPDATE

Seacology's largest-ever project, launched this spring to protect all of Sri Lanka's mangrove ecosystems, has already made stunning progress toward achieving its ambitious goal.

t's been only a few months since we launched the Sri Lanka Mangrove Conservation Project, Seacology's first nationwide initiative and the largest in our history. But that effort has already made incredible progress.

The project is multifaceted, involving both protection of the nation's thousands of acres of existing mangrove habitat and replanting of areas where they have been cleared. We've seen remarkable achievements on both fronts. The government has agreed to demarcate more than 20,000 acres of mangroves, and pledged the aid of the armed forces in replanting the island's coastline, much of which was leveled in the civil war that ended in 2009. Three large nurseries have been established to raise hundreds of thousands of seedlings that will be transplanted to degraded habitat. And through our partner organization, Sudeesa, we have increased the availability of job training for thousands of women around the country who will in turn be assisting us in the conservation effort.

Of course doing anything at this scale this comes with a price tag. While the project is designed to be astoundingly efficient (the budget for the work that will span an entire nation's coastline is only about \$3.4 million), it's not an insignificant amount for a small NGO like Seacology.



Sri Lankans plant mangrove seedlings at the Seacology-funded nursery in Mundalama, one of three such facilities established by our project.

Thankfully, we're now a lot closer to our goal. In October, we received news that a longtime donor who wishes to remain anonymous is pledging a million dollars to support our work in Sri Lanka—part of an even larger gift to an endowment that will ensure our long-term success. With this commitment, the Sri Lanka Mangrove Conservation Project is only \$900,000 from its five-year fundraising target. With your continuing support, we can finish this first-of-its kind project and set a powerful example for conservation of mangroves around the world.

SEACOLOGY PRIZE

Our 2015 recipient, Lakshmi Moorthy, struck a remarkable deal for both her community and the environment, exemplifying the win-win conservation model we strive for.

hen asked how she planned to spend the \$10,000 award that accompanies the Seacology Prize, Lakshmi Moorthy told us she plans to defer to the other members of the Gulf of Mannar Women Seaweed Collectors Federation—the group she helped found. This selfless and collaborative attitude is one of the qualities that led to our election of the gregarious, self-educated conservationist and community leader for our organization's highest honor.

Lakshmi grew up on Rameswaram Island in the Gulf of Mannar, the daughter of a seaweed harvester, a trade she herself began at just seven years old. It became her vocation until in 2002, when the government declared the area a national park and banned seaweed harvesting outright. Lakshmi and the women

of her community were out of a job. Furthermore, the government's action created a black market for resources in the gulf, including the seaweed that is used in everything from ice cream to nutritional supplements. Widespread poaching ensued.

Lakshmi's response exemplified the Seacology model. Organizing her colleagues into a federation, she challenged the government and lobbied for a compromise. After much negotiation, the parties agreed to a sanctioned harvesting period, which allows the seaweed to replenish itself and stabilizes both the supply of the resource and the women's income. Using her new political clout, Lakshmi has also helped her village establish its first primary school. After winning the Seacology Prize, she aims to direct some of that funding attention to furthering educational opportunities for local children.

"We should have good schools so that children from fisher families get more opportunities and not need to concentrate on fishing...so we can reduce the pressure on the sea to provide our living," she explained in her address at the

Seacology Prize Ceremony.

If you missed the event, or would like to see the highlights again, head over to **seacology.org/prize**, where we've posted our profile video of Lakshmi, her moving acceptance speech, and dozens of photos from her visit to America.



Lakshmi Moorthy and Seacology Vice Chair and Seacology Prize underwriter Ken Murdock at the Prize Ceremony

PROJECT UPDATES

With dozens of active projects around the world, things are happening all the time. Here are just a few highlights of the past several months.

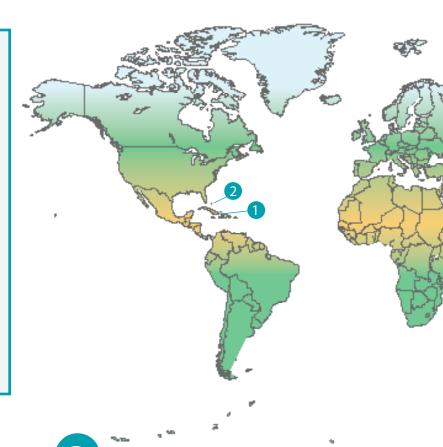
1



CARACOL BAY, HAITI

Protection of biodiversity through education and training, sustainable livelihood initiatives, community-based park ranger training, and mangrove reforestation/rehabilitation

Two nurseries have been established—one for mangroves, one for fruit trees—and now contain 24,000 seedlings. Ten beehives have been set up as part of the development of mangrove-linked apiculture. Four people have been selected to receive training as park rangers, and meetings have been held to educate local residents and other stakeholders about Haiti's system of marine managed areas.



5



SAN SALVADOR ISLAND, BAHAMAS

Headstarting facility for endangered, endemic iguana

Despite significant damage across the Bahamas after Hurricane Joaquin, our headstarting facility designed to shield young San Salvador rock iguanas functioned as intended. All of its reptilian residents are unharmed and accounted for.

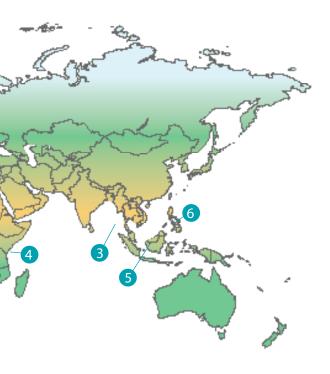


MIDDLE ANDAMAN ISLAND, INDIA

Crafts and women's center, in exchange for protection of a 5.8-square-kilometer (1,433-acre) mangrove forest and estuarine land for a minimum of 10 years

The center's foundation is complete, and construction will resume this winter after pausing during the monsoon season. The structure is scheduled to be finished by January.

5





BORNEO, INDONESIA

Nut oil processing machine, communications equipment, and construction of a small building, in support of conservation of 247 acres of lowland forest for 10 years. This is one of two new projects that is benefitting from Seacology's Save an Acre program (seacology.org/saveanacre).

The building that will house the nut oil processing machine is almost finished, and the community members are now setting up the machine.

4



PATE AND WASINI ISLANDS, KENYA

Sustainable fishing program using modified traditional fish traps with escape gaps, in support of a 1,532-acre sustainable fishing area

This project is now complete, with the last of the traps delivered to the islands' artisanal fishing community. 2014 Seacology Prize winner' Professor' Ali Shaibu Shekue (pictured at right) handed over some of the devices, which help fishermen avoid harvesting juvenile reef fish.

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SITIO LAYAG, SIBUYAN ISLAND, PHILIPPINESSolar lighting units in support of a 2,471-acre

watershed forest

More than 100 solar power units have been installed in households in the community, allowing meals to be prepared and children to study at night.

New Projects

Dugongs and manta rays are among the species protected by our seven newest projects, already under way. For details on all of our projects, visit seacology.org/projects.

Country	Island(s)	Community Benefit	Environmental Benefit
BELIZE	[various]	Construction of housing for paying volunteers	Continued protection of three protected areas totaling 162,000 acres
INDIA	Berhampur	Construction of a solar-powered multipurpose community center	Planting 10,000 mangrove and other trees, protecting 20 acres of Chilika lagoon, and conducting environmental education for 10 years
INDONESIA	Solor	Construction of an ecotourism and community center	Permanent ban on hunting oceanic manta rays
KENYA	Wasini	Rehabilitation of Beach Management Unit office and construction of alternative livelihood workshop, tools and training	Protection of the 741-acre Mkwiro Marine Co- Management Area
MADAGASCAR	Madagascar	Ecotourism center and latrines, eco-camp, and improvements to mangrove walk	Protection of 988 intact acres of mangrove forest for 30 years
MOZAMBIQUE	Bazaruto Archipelago	Development of alternative livelihood opportunities	Protection of marine habitat and biodiversity, including endangered dugongs
PAPUA NEW GUINEA	New Guinea	Construction of multipurpose community center	Protection of a 1,400-acre wildlife-management area and six small islands for 20 years

Join Seacology on one of our exciting trips! Upcoming Travel

Join Seacology on one of our exciting trips!
Find more information at seacology.org/travel

Nicaragua January 8-16, 2016

In our first-ever expedition to Nicaragua, we will visit a Seacology project on one of the largest and most beautiful freshwater lake islands in the world, Isla Ometepe. We will also visit a turtle reserve on the Pacific coast and stay in some of the finest eco-resorts in Nicaragua, which is becoming a popular tourist destination.



Argentina February 14-25, 2016

Join us for Seacology's first-ever trip to Argentina! We will traverse the country, from Iguazu Falls on the Brazilian border to the southern tip at Tierra del Fuego, where guests will visit a Seacology project site that helps protect migratory bird habitat.



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*Seacology would also like to thank the members of our Board of Directors for their ongoing generous contributions to the organization.

Four new members of our staff and field team

Seacology welcomes...

Liz Gregg

Development Associate



Liz joined Seacology as the Development Associate in 2015. She grew up in the Sierra Nevada Mountains but over the years has grown equally

fascinated with tropical ecosystems and indigenous cultures. Liz has worked as both an archaeologist in the Hawaiian Islands and as a botanist in the Stanislaus National Forest. She has a BA in botany from UC Santa Cruz and a MS in interdisciplinary ecology from the University of Florida. Her master's research focused on agroforestry in native Shipibo communities in the Peruvian Amazon. She has worked in development for an NGO in Belize, as well as locally here in the East Bay Area. In her free time Liz enjoys gardening, hiking, tennis, cooking, writing and traveling.

Enrique Michaud

Peru Field Representative



Enrique is an expert on South American camelids and other wildlife who has traveled widely in Peru, working with rural communities and

learning their traditional knowledge. Working in the field for 15 years, he has done work in the mountains, rainforest, and coastal hills, searching for guanacos (Lama guanicoe), and leading the rural development program of OIKOS, a nonprofit conservation organization in Peru. Enrique graduated from the Veterinary School of San Marcos National University in Peru and now leads postgraduate shortterm courses there in wildlife conservation and biodiversity management. He also teaches about indigenous ancestral knowledge, adaptation to climate change, and sustainable conservation for rural communities.

joined Seacology in recent months.

Pettine Simpson Fiji Field Representative

Lana Shapiro



Pettine Simpson was born and raised on a copra plantation where she still lives, just outside the small township of Savusavu on Vanua Levu Island.

bordering the ocean. She has a passion for both the land and the sea and is an ardent protector of both. She is an entrepreneur and administrator with experience in both government and the private sector. She is the only woman ever elected to the Savusavu town council, where she led initiatives to improve land use and protect the environment.

Albert Williams

Vanuatu Field Representative



Albert has been an advocate for good environmental management for many years, while working in Vanuatu's private sector, as a public

official, and with nonprofit organizations. He has held several government posts, including Acting Director General of the Ministry of Climate Change and Director of the Department of Environmental Protection and Conservation. Albert has worked on biodiversity rapid assessments to identify significant biological resources, and has helped formulate environmental legislation and regulations. He holds a bachelor's degree in environmental health from the University of the South Pacific in Fiji, and postgraduate diplomas in applied epidemiology and health research. He has a special interest in agribusiness and animal husbandry.



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In 2015, Seacology helped Sri Lanka become the first nation in the world to comprehensively protect all of its mangrove habitats.

Learn more at seacology.org/srilankamangroves.



Seacology helps protect island habitats and local communities by offering villages a unique deal: if they agree to create or enforce a forest or marine reserve, we'll provide funds for something the village needs, like a schoolhouse or health clinic.