



Mangroves on the world stage

Sri Lanka mangrove project receives international attention for innovative climate strategy

For years, Seacology has been stressing the importance of protecting mangrove forests—and it feels like the world is finally noticing. At the end of 2018, the United Nations awarded Seacology a prestigious “Momentum for Change” award for our project in Sri Lanka, which aims to conserve all of that nation’s mangrove forests.

Momentum for Change awards promote innovative strategies for dealing with the climate crisis. That’s what made the UN pay attention to our mangrove program in Sri Lanka, which incentivizes Sri Lankan communities to protect these carbon-sequestering, tsunami-blocking trees by offering poor women skills training and microloans. Seacology was one of only 15 recipients of the award from around the world, and one of four in the Planetary Health category.

One consequence of this honor was that Seacology was invited to the annual United Nations Climate Change Conference, or Conference Of Parties (COP). Diplomats, nongovernmental organizations, business leaders, and activist groups attend these gatherings, which have become the world’s most prominent venue to present the latest findings in climate science and to negotiate international agreements to tackle climate change. The 2018 meeting, called COP24, took place in Poland.



Top: Women plant mangroves in Sri Lanka’s Kalpitiya Lagoon.
Above: Seacology’s Karen Peterson discusses the Sri Lanka Mangrove Conservation project at COP24 in Poland.

“It was thrilling to be surrounded by thought leaders from around the world, all gathered in the name of tackling our planet’s most pressing challenge,” said Karen Peterson, Seacology’s Senior Manager for Special Initiatives, who oversees the Sri Lanka project and represented Seacology at COP24. “To have the program recognized among other groundbreaking initiatives in the Planetary Health category was wonderful recognition of the real impact our project is having on coastal habitats and communities.”

Karen addressed conference attendees about the myriad environmental benefits of mangrove forests. She explained how our project is based on the recognition that coastal communities not only have the most to lose by the destruction of these ecosystems, but also represent the most important

[COP24](#) Continued on page 7

IN THIS ISSUE

- Letter from the Chair 2
- People 2
- Dominican mangroves 3
- Borneo’s rainforest 4
- Project updates 5
- New projects 6
- Seacology supporters 7
- Solidarity with Sri Lanka 7



2019 Seacology Prize Ceremony: Save the date

On **Thursday, October 3**, we will present the Seacology Prize, our organization’s highest honor, to an exceptional conservation leader who has worked to preserve island habitats and cultures. The always inspiring award ceremony will be held at the David Brower Center in downtown Berkeley, California.

As always, the Seacology Prize Ceremony is free and open to the public. We’ll announce more details in the coming months at seacology.org/prize and on social media.

Donate with confidence

At Seacology, we pride ourselves on being careful stewards not only of the environment, but also of the generous gifts that make our work possible. Seacology recently earned GuideStar’s “Platinum Seal of Transparency” for publicly sharing financials, progress, and results, year after year.

This endorsement complements another top rating from Charity Navigator. Seacology earned four stars—its highest rating—meaning our work “exceeds industry standards and outperforms most charities in its cause.”

From the Chair

Dear friends,

In a remarkable evolutionary convergence between plants and people, many mangroves throughout the world have developed the habit of giving live birth: Seeds germinate while still in the trees, so the unit of dispersal dropped into seawater is the entire seedling, which floats. Paddling a canoe through a forest of *Rhizophora mucronata* in Sri Lanka or *Rhizophora mangle* in the Dominican Republic, one feels hushed—as if entering a hospital nursery—by seeing all of the baby mangrove trees hanging from their mothers. Just like human children enjoy standing on stilts, young mangrove trees, once established, immediately



Propagules hang from a mangrove tree in Sri Lanka.

start growing stilt roots into the estuarine mud, allowing them to stand against the buffeting of waves. Some mangrove species such as *Bruguiera gymnorhiza* also share our love of birds; as the beak of a bird probes for nectar in the nondescript flowers, an explosive pop ensures that the pollen will be placed on the bird's head to be carried to the next plant. Mangroves also love crabs; their stilt-like roots provide a tangled, but safe nursery for many types of shellfish and juvenile fishes.

Island villages that protect their mangroves often escape destruction from the waves and wind of tsunamis, while those that denude these areas are directly exposed to the force of the giant waves. Another ecological service provided by mangroves is their sequestration of carbon. Second only to submerged seagrasses,

mangroves sequester more carbon dioxide than any other form of vegetation.

Unfortunately, mangroves and seagrasses are among the most endangered vegetation types in the world. If perhaps the most visible effort one can personally make to fight global warming is to plant a tree, planting or protecting a mangrove may be the most effective.

The United Nations, recognizing the tremendous positive impact that mangrove conservation has on climate change, last October chose Seacology to receive a "Momentum for Change" award. I was very proud to be in New York City to see Seacology Director Duane Silverstein accept this award on behalf of our organization—and indeed, on behalf of all of you.

In this newsletter, you will read how Seacology's Karen Peterson presented our work on mangroves in Sri Lanka to the United Nations Climate Change Conference. You will also read about Seacology's efforts to foster mangrove conservation half a world away in the Dominican Republic. These efforts simply could not have been launched without your support.

Cordially,

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



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Seacology welcomes...



Crystal Vance Guerra *Honduras Field Representative*

Crystal Vance Guerra is a historian, journalist, and organizer who has found her niche in the environmental conservation work taking place in Honduras. She is a Chicago native, with roots in Mexico, who has worked on Honduras' Bay Islands for three years in environmental education, co-managing projects and communications. She is a graduate of Brown University.

DOMINICAN REPUBLIC

Seacology's crowdfunding campaign will bolster efforts to protect sensitive mangrove habitats through sustainable tourism



Grupo Jaragua

Protecting mangroves in the Dominican Republic is a way to both tackle climate change (mangroves sequester much more carbon than do other types of habitats) and improve conditions in DR communities. Seacology has launched three projects with established local NGOs to protect key mangrove habitats through ecotourism. Now we're inviting our supporters to directly support these important projects.

On Earth Day, Seacology launched a crowdfunding campaign to expand our projects in the Dominican Republic. The campaign will let us help our partner organizations to protect mangroves in three parts of the country:

- At **Samaná Bay**, we're working with 2018 Seacology Prize winner Patricia Lamelas on ecotourism. Seacology funded a boardwalk through a mangrove forest for birdwatching and other ecotourism activities. The crowdfunding campaign will let us fund a visitors' center and a bridge, for better access during the wet season.



Top: A flamingo takes flight at Oviedo Lagoon. **Above left:** A class of local students visits the mangrove boardwalk at Samaná Bay. **Above right:** Visitors explore the mangrove forests of Montecristi Province in Seacology-funded kayaks.



- In **Montecristi Province**, Seacology is supporting a nascent kayak tourism operation staffed by local teenagers, who receive environmental education, guide training, and sustainable employment. The additional money we raise will buy more life vests and a trailer for transporting the kayaks.

- At **Oviedo Lagoon**, part of Jaragua National Park, our project helped upgrade boats used for ecotourism and strengthened

enforcement of environmental regulations. Additional funds will go toward buying life vests and producing waterproof wildlife-identification materials, to help guides educate guests about the many birds and other animals in the area.

Visit seacology.org/ecotourism to learn more about these projects, watch a short video about our work in the Dominican Republic, and support this important campaign.

BORNEO'S RAINFOREST

Seacology project in remote Malaysian village gives local people tools to resist the devastation of the palm oil industry

By **Chris Wright**
Malaysia Field Representative

“**T**his tree is full of spirits,” said Najib, as we hummed downstream, carving our way just above the water’s surface, in an elongated, carved-wood boat no bigger than your average kayak. In fact, I can remember my father and myself falling into rivers from plastic kayaks that were probably just a little bigger.

This boat was made by Najib’s father, Ramsa, who that day, was carving a new boat for their annual race down the river. He is the leader of Dagat Village, and carries both the love of nature and his skills as a carpenter hand in hand. In fact, he’s lost half of his two middle fingers to his carpentry. When you meet him, he’ll tell you his favorite joke: that when he signals for three kilograms of fish, they only give him 2.5. He’s the one who taught Najib about this tree.

The tree—a six-foot-wide giant—stood like an old man in traffic. Unfazed by our engine’s buzz, unmoved in the wind. Its upper branches fanned out in a mushroom-like storm cloud of green shade over the river’s edge. It had stood like that for generations, a home for hornbills and countless other birds. Today, it staged a game of monkey-tag for an extended family of macaques.

For the Tidung people of Northeastern Borneo, these



Above: Najib leads Seacology representatives through the rainforest around Dagat Village.

Right: Dagat residents in front of the community’s new swiftlet huts.



intimate scenes of both common and endangered animals rarely make the selfie folder, let alone Instagram. It is an everyday interaction, and one that has traditionally always been peaceful, but for a few tumultuous moments in their history.

During what the older people refer to simply as “the war,” the Japanese came with big plans, planes, and cruelty. For three years during World War II, Japan ruled over Northern Borneo, forcing many Tidung people to flee their ancestral homes, but prompting some of them to become heroes.

“I want to show you something,” said Patir, as I walked past his house in Dagat. He went inside and came back onto the veranda with a small framed photo.

“My grandfather helped save some of the soldiers, and the

military gave him this.” It was an official plaque of gratitude from the Australian military, a medal and a black and white image showing a small Malaysian man, dressed in traditional formality, next to a group of moustached military men from Australia, close to twice his size.

His grandfather had saved one of the six lone survivors from the infamous “Sandakan Death March,” and this photo was one of few ornaments inside the raised plywood house.

As bad as the war was, it perhaps wasn’t as disrupting as the modern expansion of oil palm has been. This all-consuming mono-crop has spread across once pristine wildlife sanctuaries, full of trees like the one Najib pointed out from the boat.

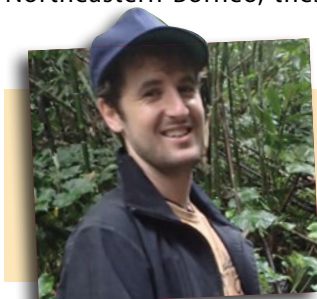
These days, getting to Dagat from the capital, Kota Kinabalu involves a six-hour drive, across Northern Borneo along the one- or two-lane highway that crosses the mountain ranges, up and down a snake’s tail of turns. From there, the road slows. As you exit the highway, you enter a rocky dirt track, pounded

daily by three-tonne trucks hauling mounds of oil palm bunches. Their destination: the refineries, belching white smoke, that process the oily fruit and send its oil out to be added to everything from Doritos to toothpaste.

Bumping down that road to Dagat, you’ll see patches of virgin forest within the Tabin Wildlife reserve. In those patches are elephants—once rarely seen, but now, as their habitat shrinks, they are closed into small corridors of forest by the river. You’ll also see birds that will make you question God’s creation, with upside-down beaks and songs that the locals compare to chainsaws.

Then, after drumming your wheels through the maze of palm oil trees and crawling past dozens of overloaded trucks, you’ll finally arrive at Dagat. There’s a small row of raised, wooden houses beside the river, with old men making single-carry boats, and young ones lifting prawn traps (marked by floating soda bottle markers) from the river to see what’s for dinner. The traps, woven by women whose strong hands would make even a rock-climber’s fingers wilt, provide the main food source and income in Dagat these days.

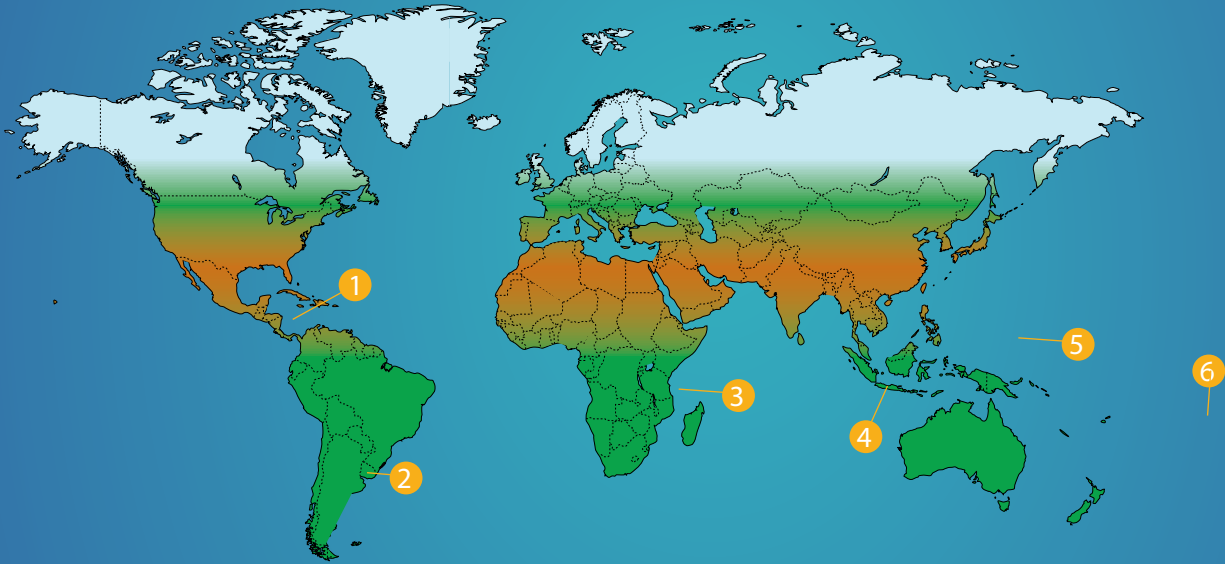
Our project, seeking to build three swiftlet shelters so that the community can harvest the birds’ nests and sell them to Chinese traders, will be a small boost to that economy. It is being led by Najib’s generation, but built by all. It will be a small step that we hope will bridge the gap between Najib and his father’s generation, and one that will help this community continue its tradition of living with and protecting the forest.



Chris Wright oversees Seacology’s projects in Malaysia, where he has lived for the past eight years. Check out our video interview with him at seacology.org/fieldreps for more discussion of our work there.

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 PROVIDENCIA ISLAND, COLOMBIA

Campaign to promote awareness of parrotfish and work toward a ban on their harvest

A successful crowdfunding campaign last spring made this project possible. Our partner on the island, Fundación Providence, is working with the local fishing community, restaurants, media outlets, schools, and other stakeholders to educate the public on the importance of parrotfish for the health of Providencia's reefs.



2 NUEVO BERLIN, URUGUAY

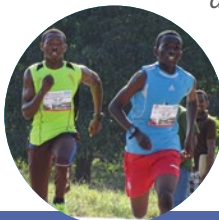
Mapping of invasive trees on riverine islands and environmental education, in exchange for honey-extracting and GPS equipment

Along with the community of beekeepers that keep their hives on these uninhabited islands, Seacology is helping to eliminate invasive plants that are disrupting the habitat for indigenous species. The beekeepers, who know the islands better than anyone, have developed a comprehensive map for the rangers who will carry out the removal effort.

3 KIWENGWA INDIGENOUS FOREST, UNGUJA ISLAND, ZANZIBAR, TANZANIA

Conservation of 8,213 acres of forest for 20 years in exchange for community training center, signage, environmental education, and apiculture

Our first project in Tanzania in five years officially kicked off with a footrace through the area that will be protected. Construction of the community center is nearly complete.



4 PANTAI BAHAGIA VILLAGE, JAVA, INDONESIA

Protection of 50 acres of mangroves plus replanting of 197 acres for 15 years, in exchange for community and mangrove education center and water storage tanks

This project is now complete. Since our partnership with this low-lying, flood-prone village began, public health has improved measurably, and thousands of mangrove propagules have been planted along the shore.



5 PEIDIE VILLAGE, POHNPEI, FEDERATED STATES OF MICRONESIA

Protection of 79-acre mangrove area for 50 years in exchange for repairs and upgrades to basketball court area

The renovation of the village's recreational facilities is complete. The basketball court area was improved, restrooms have been installed, concrete bleacher-style seating with roofing has been built, and fencing repaired. The mangrove area adjacent to the village is being protected.



6 MANGAIA ISLAND, COOK ISLANDS

Protection of 4,500 acres of forest habitat of the Mangaia kingfisher for 15 years, in exchange for refurbishing school building, purchase of tools and equipment for skilled trades courses

Most of the construction work on the school building is now complete; all that remains to be done is some wiring and painting. The kingfisher habitat around the island is being well taken care of, and the effort is supported by island leaders.

NEW PROJECTS

In February, Seacology launched ten new projects. For details on all of our work, past and present, visit seacology.org/projects.

Country	Location	Environmental benefit	Community benefit
Fiji	Korolevu Village, Vanua Levu	Protection of 1,939 acres of forest and a 900-acre mangrove and marine sanctuary for 15 years	New community hall
Indonesia	Mandalamekar Village, Java	Protecting and replanting 390 acres of rainforest for 15 years	Bamboo processing facility to promote sustainable income
Jamaica	Oracabessa Bay	Increased enforcement of fish sanctuary regulations	Floating dock
Kenya	Giriama (Robinson) Island	Conservation of 198 acres of mangrove forest in perpetuity	Water cistern, equipment for the Mareneni Beach Management Unit, mangrove replanting
Mexico	Natividad Island	Removal of metal waste and restoration of bird nesting area	Support for the community's low-impact tourism effort
Malaysia	Kolosunan Village, Borneo	Protection of 4,032-acre watershed catchment area for 15 years	Swiftlet hut to provide sustainable income
Malaysia	Tampasak Village, Borneo	Protection of 833-acre forest for 15 years	Gravity-fed water system
Philippines	Tingloy Municipality, Marikaban Island	New 50-acre marine protected area	Nature Conservation Center
Thailand	Libong Island	Protection of 1,000-acre dugong seagrass habitat and 26 acres of feeding grounds for migratory birds for 10 years	Environmental education and cultural center
Tonga	Toloa Rainforest Reserve, Tongatapu	Protection and restoration of 52 acres of the Toloa Rainforest Reserve for 20 years	Information and Education Center



Since 1991, Seacology has launched

312

projects in

60

countries, protecting

1.4 MILLION

acres of island habitat

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** In memoriam*

Seacology is fortunate to receive many gifts under \$2,500. Space limitations prevent us from listing the name of each donor, but we deeply appreciate every contribution. Each gift we receive is important to our efforts to protect the world's islands. In 2018, all Seacology board members made generous personal gifts. Board contributions represent a significant portion of Seacology's total fundraising, and we are most grateful for the generosity and leadership of each Seacology board member. We are also grateful for the support of the many foundation and corporate donors who support our work.

COP24 continued from page 1

partners in the struggle to save them.

While Seacology's five-year Sri Lanka project will end in 2020, recognition of the importance of mangroves and other coastal wetlands in the battle against climate change continues to grow. Sri Lanka now chairs a newly created body of the Commonwealth of Nations to advise on mangrove protection. In March, Sri Lanka's president held up his country's efforts to protect its mangroves as a pillar of its environmental leadership.

Our hearts are heavy with the devastating news from Sri Lanka of terrorist attacks on Easter Sunday. The senseless attacks as worshipers gathered for Easter services, as well as at hotels where families and friends gathered to share a meal, have befallen a nation that has seen far too much tragedy in the past decades. As the nation is home to Seacology's largest-ever project, the Sri Lanka Mangrove Conservation Program (SLMCP), we immediately reached out to our project partner, Sudeesa. We are incredibly relieved to report that Sudeesa staff members are all safe. We are still awaiting information regarding whether

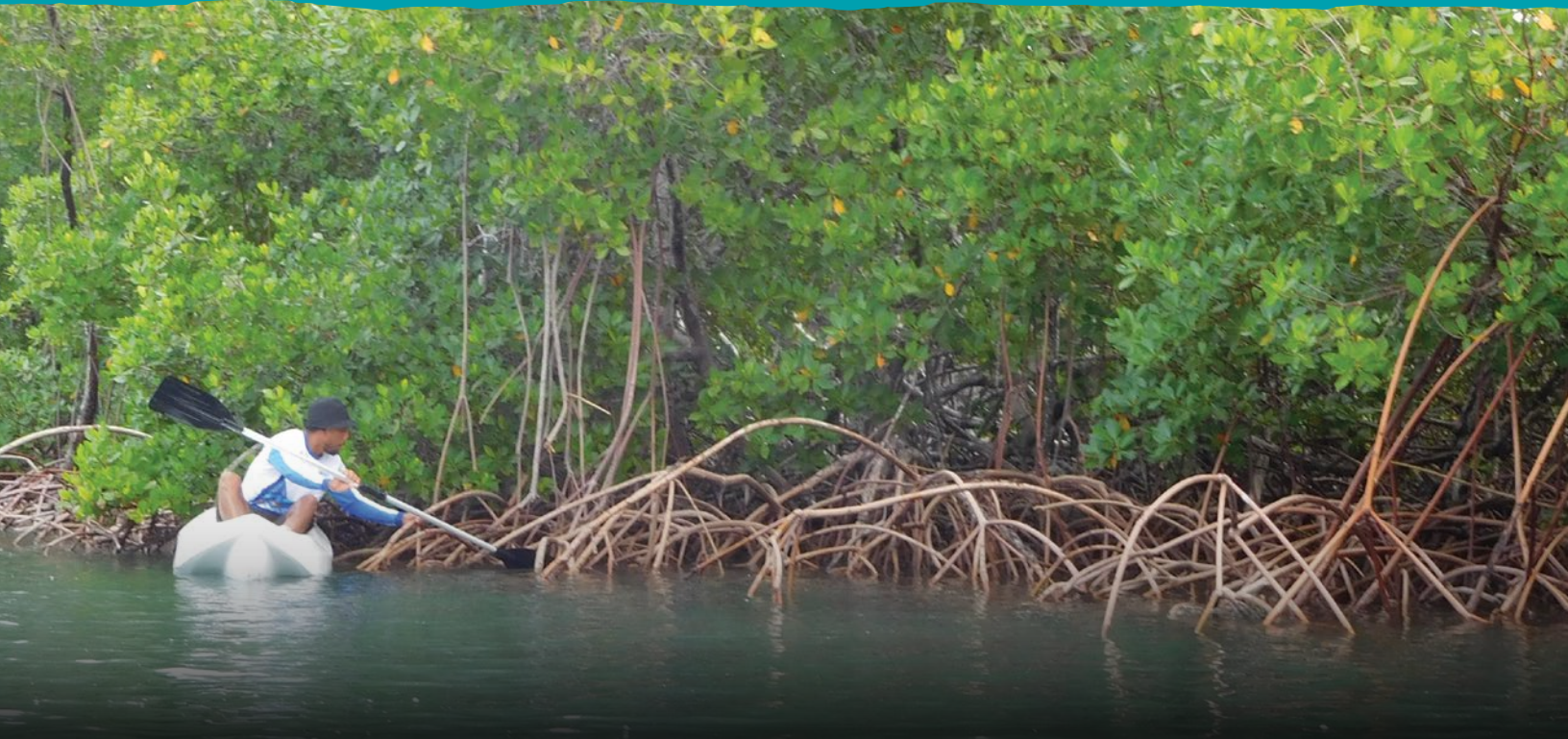
any of our Community Beneficiary Organization members (the thousands of women and youth who are engaged in the program's livelihood and mangrove conservation activities) were affected.

Seacology's deep connection to Sri Lanka's people and beautiful ecosystems remains stronger than ever. Now in our final year of the SLMCP, we continue to work closely with Sudeesa to protect the country's mangrove ecosystems, and strengthen the resilience of coastal communities around the island.

As our hearts ache for those affected, we stand strong with the people of Sri Lanka.



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Join our crowdfunding campaign to protect mangroves in the Dominican Republic! [page 3](#)