Seacology

Saving the world...one island at a time.

Spring Edition

April 2002

In this Issue:

Seacology Board of Directors Approves New Island Projects

Lake Tiriara on the island of Mangaia, Cook Islands, where Seacology is supporting the construction of a boardwalk, public restroom and signage in exchange for the village's protection of the lake and shoreline. Here, local community members work on a traditional reed raft. In the background are Lake Tiriara's cliffs and caves.

The following projects were approved by Seacology's board of directors at their November 2001 meeting:

COOK ISLANDS - Preservation of Lake Tiriara on the island of Mangaia. At an estimated age of 18 million years, Mangaia is thought to be one of the oldest islands in the Pacific. Mangaia's most notable geological feature is a series of concentric raised coral reefs called *makatea*, which form cliffs as high as 200 feet around the island. Lake Tiriara is located on the southern part of the island and opens into a cave in the *makatea*. The biological diversity of the lake area, home to rare and endangered bird and plant species, is at risk due to poor agricultural practices and overall lack of proper management of the island's environment. Seacology is supporting the construction of a boardwalk, public restroom and signage in exchange for the village's agreement to permanently ban pesticides, dumping, tethering of livestock and construction within 50 meters of the shoreline.*

FIJI - Purchase of a boat in exchange for the establishment of a no-take fishing reserve. Navatu Village is located on Vanua Levu, Fiji's second largest island. The village consists of two *mataqali* (tribes) and has a population of 160. Navatu has title to one of the largest fishing rights areas in Vanua Levu, including the area surrounding 110-acre Namena Island, home to the largest hawksbill turtle nesting area in Fiji. Namena's reef ecosystem, known for its world-class diving, is threatened by overfishing, particularly the overharvesting of sea cucumbers. Seacology is providing the village with a 25-foot boat for patrolling the new reserve in exchange for Navatu Village's 10-year ban on fishing and sea cucumber harvesting in their 5.6 square mile fishing rights area.

FIJI - Construction of a community hall and water tank construction in exchange for forest and flying fox preservation. Waibalavu Village is located 80 miles from the capital city of Suva on Fiji's largest island, Viti Levu. It has a population of 160 composed of three tribes. Seacology is assisting the village in the construction of a badly needed community hall and water supply system. In return, the village has agreed to protect 792 acres of pristine rainforest, as well as a mountain cave that is home to a colony of *bekabeka* (flying foxes).

INDONESIA - Construction of a Community Coastal Resource Centre. The island of Sulawesi is defined by the longest continuous coastline in all of Indonesia, exceeding that of the continental United States. As such, a significant percentage of island residents are highly dependent on the naturally rich marine resources for their survival and

Continued on page 6

**Financial support for asterisked projects generously provided by the Nu Skin Enterprises Force for Good Foundation.*

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Letter from the Chairman

One of the joys of watching Seacology develop through the years has been the pleasure at proving that a small not-for-profit organization really can make difference without a large staff, extensive bureaucracy, or a large fund-raising machine. From its inception, Seacology has been focused on executing its mission of protecting island habitats and cultures throughout the world, with a minimum of red tape.

The reason for this unusual approach to philanthropy is both historical and philosophical. The idea of Seacology began in 1989 when the Falealupo villagers of Samoa faced destruction of their 30,000-acre rain forest. The bulldozers and chain saws of the logging company had arrived, and were busy cutting down the forest. My family and colleagues who were there with me realized that there was not time to forward traditional grant applications to established foundations. Furthermore, the solution we proposed to the logging problem was radical: we offered to pay for and build a needed village school in order to save the rain forest. Time was not on our side; Verne and Marion Read graciously agreed to make interest payments on the notes we signed to assume the village debt to the loggers, but we needed to find the principal elsewhere. In desperation, personal homes were placed on the block, savings accounts emptied, but we still feared we would come up short until Ken Murdock (now Seacology's president) and Rex Maughan (who later formed the Robert Louis Stevenson Foundation) stepped up with major donations from their businesses. In a matter of weeks, I returned to Samoa with $85,000 in negotiable instruments tucked inside of my rucksack to pay off the loggers. As we stood with the villagers outside the logging company office and they cheered, it was one of the best days of my life. Soon funds from many other donors as well as corporate gifts from sources such as Nu Skin's Force For Good campaign began to supplement our own personal contributions, and Seacology was launched.

Some well-intended colleagues told me that Seacology with a tiny staff and a minimum of administrative expense could never make it, but we have shown that having an intense focus on mission allows Seacology to succeed. Because we are small we can move quickly to help island peoples, particularly those who might be put off by forms, regulations and rigmarole in languages other than their own. And Seacology can precisely inject funds in a way that every single penny is highly leveraged to produce a conservation outcome.

Throughout the world, islanders are discovering that Seacology is here to help them protect their environments and cultures on their own terms. Because of good people like you, Seacology projects range from the Arctic islands to Madagascar, and we are together making a difference. Thank you so much for helping Seacology to continue to save the world, one island village at a time.

Paul Alan Cox
Chairman

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Seacology is the world's premier nonprofit environmental organization whose sole and unique purpose is to preserve the environments and cultures of islands throughout the globe. From Aitutaki in the South Pacific to Zanzibar off the coast of Africa, from islands in the Arctic Circle to the tropical islands of the Caribbean, from the Maldives to Micronesia and from Polynesia to the Pribilofs, Seacology launches projects to help preserve island ecosystems and cultures.

Anuradha Wickramasinghe on Receiving the 2001 Seacology Prize

Editor's note: On the evening of November 30, 2001, Seacology's board of directors, staff and others gathered at the National Tropical Botanical Garden on the Hawaiian island of Kauai to honor 2001 Seacology Prize recipient Anuradha Wickramasinghe of Sri Lanka. The Prize is awarded annually to an indigenous islander for exceptional achievement in preserving the environment and culture of any of the world's 100,000-plus islands. Anuradha was awarded the $5,000 Prize for his outstanding efforts in mangrove conservation. The Seacology Prize is generously underwritten by Seacology president Ken Murdock in memory of his mother, Lalovi Fish Murdock. Following are the comments made by Anuradha at the November 30 ceremony:

Mr. Chairmen, the president, the board of directors, the executive director and staff of Seacology, ladies and gentlemen:

On behalf of the people of Sri Lanka and especially the small fisher folk of Sri Lanka, it's a great privilege to convey my deepest gratitude to Seacology for awarding me the Seacology Prize 2001.

Sri Lanka is a tiny island nation in the Indian Ocean that is immensely rich in biodiversity in coastal resources including mangroves, coral reefs and associated fauna and flora. As Sri Lankans, we maintain a great tradition to nurture and preserve our coastal resources. No fisher folk in our island are engaged in destructive activities to denude the coastal resources. We love mangroves, we love coral reefs and we love the ocean and the sea because we know that our lives are dependent on these resources.

Our people, the fisher folk, sacrifice their lives to protect the mangroves and the affiliated resources for the benefit of the future generation of the country. Our fisher folk always believe that the coastal resources belong to the future generation. Therefore, the fisher folk have a very practical dynamism to protect these inherited resources.

Seacology has deeply encouraged us and valued our sweat and toil in the conservation of coastal resources. Through the esteemed support of Seacology we have been inspired and encouraged to maintain our conservation tradition further and we appreciate the unique honour granted to my people, my country and me.

Thank you very much.

2001 Seacology Prize recipient Anuradha Wickramasinghe of Sri Lanka with Seacology's Fijian representative Saula Vodonaivalu, Jr. of Fiji at the ceremony on Kauai.

Micro-Hydro System Powers Sarawak Village

By Wick Pancoast, The Borneo Project

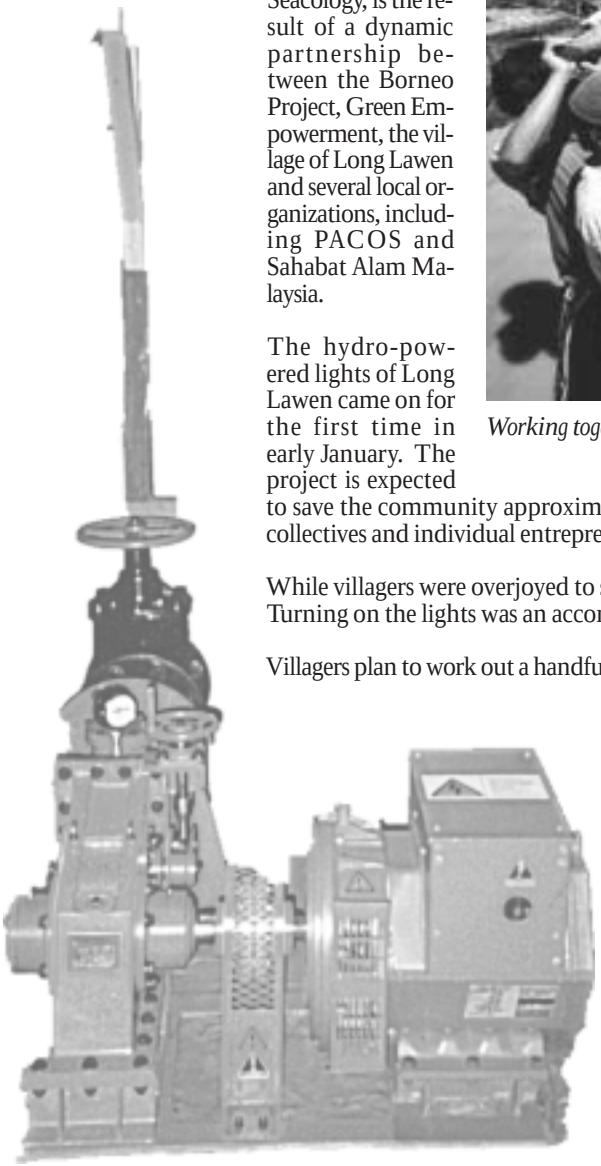
After three years of training, volunteer coordination, fundraising, community organizing and hard work, the first community-owned and operated micro-hydro system in Sarawak, Malaysia is now up and running in Long Lawen. The 9.6-kilowatt generator, which derives power from a small nearby river, is designed to provide the community with clean, quiet, and renewable electricity for lights, small appliances and agricultural processing. The project, funded in part by Seacology, is the result of a dynamic partnership between the Borneo Project, Green Empowerment, the village of Long Lawen and several local organizations, including PACOS and Sahabat Alam Malaysia.

Working together, villagers from Long Lawen haul the turbo generator across the Selau River to the powerhouse.

The hydro-powered lights of Long Lawen came on for the first time in early January. The project is expected to save the community approximately $4,000 a year on fuel costs, and will also open up new business opportunities for village collectives and individual entrepreneurs.

While villagers were overjoyed to see the fruits of their labors, they are quick to admit that much of the hard work is still to come. Turning on the lights was an accomplishment. But managing and maintaining the system will remain an enduring challenge.

Villagers plan to work out a handful of technical issues before a formal commissioning ceremony in April or May. "This micro-hydro is new to our people," said Ali Siting, a leader of the Community Management Team. "We want to feel confident with our system before we invite many people to see it. When they come, we want to explain exactly how we manage this and that. We still have much work to do."



This micro-hydro unit is providing clean, environmentally benign electricity to the village of Long Lawen.

In late January, Long Lawen residents turned their focus to the environment around the hydro system to develop a watershed management plan. Through a community mapping workshop, villagers agreed that the watershed above the hydro system must be protected at all costs. Teams from the village surveyed and marked the extent of the watershed boundary with the intention of showing the maps to local timber companies and government agencies.

The Borneo Project and Green Empowerment are committed to ensure the long-term success of the micro-hydro program in Borneo. A vital step is the transference of skills to local leaders. One local technician, Adrian Lasimbang from PACOS, has emerged as a key leader. Already Adrian has identified several future hydro sites in Sabah. As part of its Community Energy Network, Green Empowerment will also conduct a regional training on site selection and civil design in Sabah later this year.

What started as a dream three years ago now provides 400 people with clean, renewable electricity. Everyone involved along the way provided some unique and vital contribution to the project's success. The Borneo Project and Green Empowerment look forward to building on this success in the coming years.

Report from Surgical Mission to Samar Island, the Philippines

Editor's note: To protect the critically threatened natural resources of Samar Island, the Philippine government, along with the Global Environmental Facility and the United Nations Development Program, has launched the Samar Island Biodiversity Program. It is the goal of the biodiversity program to establish the Samar Island Natural Park, an 857,000-acre protected area. Due to widespread poverty many residents of Samar cannot afford basic surgical procedures. Seacology underwrote an all-volunteer surgical mission to Samar by the Society of Philippine Surgeons in America in December 2001 as a means of thanking Samar islanders for setting aside such a large protected area for the benefit of the environment. This project was funded with the generous support of the Nu Skin Enterprises Force for Good Foundation. Here, Dr. Manuel A. Cacdac, past president of the Society of Philippine Surgeons in America and team leader of the surgical mission, writes about the society's successful trip to Samar Island.

In spite of the fears and apprehensions from the September 11th catastrophe, members of the Society of Philippine Surgeons in America, joined by members of Physicians for Peace, Inc., proceeded with their intended surgical mission to Catbalogan City, Samar Island, Philippines. The group, headed by Drs. Pacifico Dorado, Rolando Mendiola and myself, was joined by a surgical team composed of medical professionals hailing from Wisconsin, California, Texas, Indiana, Delaware and Ohio.

Our team left Manila on December 9, 2001 and flew to Tacloban City, where we were picked up then transported on a four-hour trip to Catbalogan City, Samar Island. Sunday afternoon was spent opening boxes of medical supplies, equipment and medications, screening patients and organizing logistics. Surgeries were performed from December 10th through 15th. A total of 229 surgeries were performed, including 25 cataract operations performed by two ophthalmologists who joined our mission, Dr. Boots Ampatin of Catbalogan City and Dr. Gil Mutya of Tacloban City. A total of 72 major surgeries were done, including emergency laparotomies, emergency appendectomies and Cesarean sections. We also saw at least 50 consultations. There were no mortalities or any significant morbidity.

Dr. Cacdac, left, with a young patient on Samar Island.

One evening was highlighted by a presentation of the Samar Island Biodiversity Program, which was very informative for all who attended.

It is very nice and very rare when impoverished islanders can receive such an immediate, tangible benefit for making important sacrifices on behalf of the environment. The Society of Philippine Surgeons in America expresses its gratitude to Seacology for making this surgical mission possible. As well, we would like to thank the numerous other organizations and individuals who helped to make this successful project a reality.

FACTS about Samar Island, The Philippines:

- *Samar is the third largest island in the Philippine Archipelago, with a total land area of 1.348 million hectares (one hectare equals 2.5 acres).*
- *The island is a rich repository of biodiversity, with 2,400 species of flowering plants, including 406 endemic species, 40 species of which are found only on the island.*
- *One hundred and ninety seven bird species have been recorded on Samar, including 50 Philippine endemics, such as the highly threatened Philippine Eagle (pictured left). Samar Island has one of the highest known populations of the Philippine Eagle (also known as the Monkey-Eating Eagle) in the archipelago.*
- *Samar Island has the largest extant, unfragmented tracts of lowland tropical rainforest in the country, consisting of 360,000 hectares. However, the island has suffered significant ecological degradation over the years. Over 60 percent of the island's original forest has been lost to agriculture or converted to grasslands since the 1950s.*
- *The Samar Island Biodiversity Project is working to establish the Samar Island Natural Park, which will protect a core area of 347,000 hectares of natural forest and about 123,000 hectares of buffer zone.*

SEACOLOGY'S NEW ISLAND PROJECTS - Continued from page 1

livelihood. However, Sulawesi's coastal marine ecosystems have sustained significant degradation due to unchecked resource extraction and development pressures. Seacology is assisting the local organization Kelola and the Mangrove Action Project in constructing a Community Coastal Resource Centre. Based on the success of a similar Seacology project in Sri Lanka, the new center will be a mangrove demonstration site, environmental education center, and a meeting place for villagers and local organizations.

MADAGASCAR - Establishment of a national park. Mt. Angavokely is situated 22 kilometers east of the capital city of Antananarivo. It is one of the last remaining relicts of high-altitude rainforest in all of Madagascar, and is home to over 120 species of rare and endangered orchids. The forest is an important watershed for three local communities. Seacology is working with the Malagasy environmental organization ARCVERT to establish a 695-hectare national park to preserve one of the last remaining tracts of high-altitude forest left in Madagascar and protect the area's orchid species, as well as provide recreational opportunities to Antananarivo residents.*

One of the 120 species of rare and endangered orchids found on Madagascar's Mt. Angavokeley, where Seacology is assisting in the creation of a new park.

Kimbe Bay, Papua New Guinea, where Seacology is assisting local communities in the establishment of "no-take" coral reef zones.

MADEIRA - Re-establishment of endemic plant communities. The North Atlantic island of Madeira, which was first settled in the 15th century, has about 250,000 inhabitants. Deforestation caused by livestock grazing has led to serious flooding problems, and desertification and invasive species are an ever-growing threat to the island. To address the problems of erosion and loss of diversity, the 1,000-hectare Ecological Park of Funchal was established in 1994 in the mountains high above the capital city of Funchal. Seacology is providing support for the reforestation of the park's highest mountain, Pico de Arreiro. The project will be carried out by a small local organization Associaçao de Amigos, which engages local street children and orphans in tree plantings and other ecological activities.*

PAPUA NEW GUINEA - Demarcation of "no-take" coral reef zones. Kimbe Bay on the island of West New Britain is famous for its natural beauty and high marine biodiversity. This area is a focus of work by Mahonia Na Dari, a well-respected local NGO that has worked together with island communities to establish and run their own locally managed marine areas. Within Kimbe Bay is Settin Bay, the location of four villages who have set aside "no-take" zones to protect critical areas of their inshore reef. Seacology is assisting these communities by providing demarcation buoys, a community-based monitoring program and community awareness materials to help educate surrounding villages on the purpose and function of the no-take areas.

USA - Nesting boxes for threatened auklet species. Rhinoceros Auklets are a crevice/burrow nesting marine bird that was once plentiful in California, but most of the breeding population had disappeared by the late 1800s. After designation of Northern California's Farallon Islands as a National Wildlife Refuge in 1970s, populations began to recover. Presently the Farallon Islands, Año Nuevo Island and Castle Rock in Northern California provide habitat for approximately 96 percent of the California breeding populations, totaling no more than 2,000 birds. Since 1976 the Point Reyes Bird Observatory has deployed over 500 Auklet nesting boxes on Southeast Farallon and Año Nuevo Islands. Both species have readily occupied boxes, and valuable information on population dynamics has been gained. Seacology is providing the funding for the construction and installation of 65 additional nesting boxes.

Children help plant trees on Pico de Arreiro in the Ecological Park of Funchal, Madeira.

Seacology Project Update: Babeldaob Island, Palau

Last year Seacology worked with the Palau Conservation Society and local villagers to establish the Ngemai marine reserve. This project was so successful that it has inspired other villages to establish their own no-take marine reserves to allow the coral reefs and fish populations to regenerate. Seacology and PCS worked with the village of Ollei to establish the Ebiil Marine Conservation Area, in one of the most important fish aggregation sites in all of Palau. Members of a Seacology expedition recently visited the Ebiil Conservation area and were feted in true island style and presented with a traditional Palauan storyboard at remote Ollei village. Pictured left to right are Seacology board members Shari Sant Plummer and Ken Murdock, executive director Duane Silverstein, the Vice-President of Palau Sandra Sumang Pierantozzi, Governor Tobias Aguon of Ngarachelong State and Chief Urong Victor Joseph. *Photo credit Paul Gabbert.*

January 17, 2002

Dear Duane:

You're very kind with your comments, but the pleasure was entirely mine and I really enjoyed the trip with the Seacology group. I don't often get the chance to do the environmental trips around Palau and this was pure enjoyment. I am also an ardent believer that Palau's wonderful natural environment should be preserved for all generations to come, and we sincerely thank you and the Seacology group for your help in making this a reality.

Best regards to all,
Sandra S. Pierantozzi
Vice President
Minister of Health
Republic of Palau

Seacology Project Update: Protecting Endangered Plant Species on Guadalupe Island, Mexico

By Bradford Keitt, Island Conservation and Ecology Group (ICEG)

Guadalupe Island is a remote outpost off the Pacific coast of Mexico. Home to a small fishing community and a Navy communications station, the island is a quiet place where time is measured by the turning of the tides and the monthly Navy supply ship. Guadalupe is probably best known as the last refuge of the Northern Elephant Seal and Guadalupe Fur Seal - species that were thought to be extinct due to sealing until the remnant colonies on Guadalupe Island were discovered in the mid 1900s. Less well known are the numerous endemic plant species that are on the verge of extinction due to another activity of 18th century sealers - the introduction of goats to supply their sailing ships with meat. Since the goats were introduced in the 1850s, they have multiplied rapidly. Tree seedlings are quickly browsed by the goats, and the once-vast forests of endemic cypress, pine, oak and juniper trees are now reduced to a few stragglers and any seedlings are quickly browsed by hungry goats. These species are now restricted to areas out of the reach of goats, such as steep cliff faces. Thanks to a generous grant from Seacology, all of this is beginning to change.

In June of 2001 members of the ICEG visited Guadalupe Island in order to plan the creation of 14 goat-proof fences around sensitive plant species. During this trip they discovered populations of two native plant species not seen in over 100 years and presumed extinct. Local ranchers transported thousands of pounds of materials to the goat exclosure locations and built nearly 2 kilometers of fencing. By January 2002 the benefits of these fenced exclosures were already visible - there were 47 new Guadalupe Island pine seedlings within the fences. With only about 200 adult trees remaining on the island, these 47 seedlings may well represent the future of this species.

One of the 47 pine seedlings found inside the fenced exclosures. If these trees survive they will possibly become the first trees to mature on the island in over 100 years.

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NEW – Donate On-Line to Seacology Via Secure Server!

We are pleased to announce that supporters of Seacology's work to preserve the environments and cultures of islands throughout the world can now make an on-line donation with a VISA or MasterCard. Just visit www.seacology.org and click on "Donate Now."

Shortly after our secure server was up and running, we received our first on-line donation from Didrik and Viktoria of Luxembourg. After contributing, they wrote the following via email:

"Nice surprise for us to be the 'on-line donation pioneers,' hope that many will follow for years to come. That evening I was updating some contact info in the computer, and on our desk was a Christmas card and photo from the Cox family. Thinking of all the good Dr. Paul Cox has done for us and in our home country Iceland, I decided to visit your web site. Reading about all the great projects you are involved with is very impressive. Thanks for your involvement and contribution in improving people's lives around the world. The on-line donation feature makes contributions so simple and convenient. Keep up the good work!"

One of the Seacology-funded demarcation buoys at the Ebiil Channel Marine Reserve, Palau.

Become a Seacology Donor

You can help Seacology protect the environments and cultures of islands throughout the world.

Yes! I would like to help save the world's islands with the following donation: _____

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All donations are tax-deductible. Seacology works with a very small staff with no red tape or bureaucracy; a portion of your donation will go towards modest yet essential administrative expenses. If you would prefer 100 percent of your donation to go toward island projects, please check here:___

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