

No Island

Developing alternative strategies for preserving Papua New Guinea's Rainforest



For the past five centuries, the vast majority of plant and animal extinctions on our planet have taken place on islands, which by their very nature had remained isolated for countless millennia. Over time, advances in transportation and communication have led to increased contact with the outside world. The introduction of non-native species such as goats, pigs, rats, and snakes on many islands has resulted in environmental destruction and the eradication of native species. The unprecedented rate of species extinctions on islands, has been, according to Peter J. Bryant of the University of California, Irvine, "one of the swiftest and most profound biological catastrophes in the history of the Earth." For islands with indigenous populations, erosion of natural assets as a result of exposure to the outside world is further compounded by a loss of cultural identity.

As the world's second largest island, New Guinea is particularly rich in biodiversity, much of it within its rainforest areas, which rank third in terms of size after the Amazon and Central Africa. The island, which is divided in two—Irian Jaya occupies the western half, Papua New Guinea, the eastern half—is also rich in its cultural and linguistic diversity. More than ten percent of the world's known languages are spoken here, and only here. Much of the linguistic diversity has developed as a result of the region's extraordinary terrain, particularly in the Highlands of the island's interior, where large mountain peaks have kept remote villages isolated, thus preserving local customs and languages. Beyond geographical isolation of individual cultural groups, New Guinea has also been one of the last regions to feel the impact of Western culture in the ongoing process of globalization. The first-known encounter between Western society and islanders living in the Highlands took place in the 1930s, when gold miners ventured into what at the time was thought to be unoccupied land, only to find more than one million people living in the island's interior. The miners' surprise was equal to that of the local residents, who had never come into contact with outsiders.

Today, however, New Guinea's natural and cultural resources are among the most threatened on our planet. In the past century alone, some 330,000 square kilometers of the island's rainforests have been lost to logging. An additional 1,600 square kilometers are harvested each year—a trend that continues unabated. Timber companies have been quick to promise remote villages all manner of benefits in exchange for logging rights, benefits that seldom materialize after the damage is done.

Unless measures are taken to stem the loss, the island's resources and its distinct cultures are sure to vanish within a few



A member of the Kasua tribe, facing page, participates in a sing-sing to welcome the Seacology group to Musala, Papua New Guinea. Photograph courtesy Jon Stansbury. The festivities celebrated the completion of a Seacology-funded community center in the village. Photograph courtesy Duane Silverstein

is an Island Anymore

By Duane Silverstein

decades. It is for this reason that our organization, Seacology, an NGO dedicated to preserving marine and terrestrial island environments through economic incentives, chose the remote village of Musala, home to some 400 Kasua tribes people, in Papua New Guinea as the subject of one of our most recent environmental projects.

Founded a decade ago, Seacology has worked with local partners around the globe to preserve 1,716,014 acres of coral-reef and other marine habitats, 65,915 acres of terrestrial habitat; built 67 schools, community centers, and water delivery systems; and funded 24 scholarships and medical delivery programs on islands in 39 nations. Seacology develops and funds “win-win” projects where islanders receive benefits such as a school, community center, medical clinic, or water treatment

system, as well as training in environmentally responsible natural resource management, in exchange for making an important concession on behalf of the environment—typically the establishment of a new marine or forest reserve.

To ensure that sponsored projects are carried out in a manner that is both low-impact and in concert with traditional ways of life, Seacology forges bonds with local agencies in a given area, who are then charged with carrying out the work and managing each project longer term. For the Musala initiative, Seacology joined forces with the Kasua Orogo Resource-holders Association (KORA) and World Wildlife Fund-Kikori.

The Kasua, who have strong spiritual ties to the forest, were in need of a community center, where they could hold meetings, host important events, and, perhaps most important,



Remote even by PNG standards, Musala

learn alternative ways to earn a sustainable income from their area without selling the logging rights to their forest.

In exchange for a commitment to protect more than 800 square kilometers of pristine rainforest, Seacology would provide the funding to construct community centers in Musala and two neighboring villages. These centers, which would take several months to build, are to be used to train villagers in sustainable income-generating projects such as growing vanilla and raising butterflies.

While building supplies have been provided by Seacology, construction has been carried out by volunteers from the community, ensuring full local ownership and support. The total price for all three centers, along with the necessary supplies to begin vanilla farming, is \$23,000, which is typical of the low cost/high impact projects Seacology launches on islands across the globe.

Until recently, we at Seacology had been following the progress of the Musala project remotely, working to channel funds and equipment to the right sources, yet we had not had a chance to see the results of our work in the village. That opportunity finally presented itself this past September, when several members of our board and I traveled to Papua New Guinea (PNG).

Although Musala is little more than a one hour flight in a Twin Otter from Ambua in the Southern Highlands, where we had made our basecamp, reaching the village's unpaved airstrip is often challenging for even the most seasoned bush pilots, due to the region's rough terrain, dense cloud forests, and non-existent navigation aids. Remote even by PNG standards, Musala has been visited by very few Westerners other than the occasional missionary or scientist—and now us.

As we neared Musala, the cloud cover had become so thick our visibility dropped to zero. The pilot made a steep leftward descending spiral in an attempt to get below the clouds and find the landing strip, which set off the stall warning and set all our nerves on end. He then opened the cockpit window and leaned out to try to spot the landing strip.

Despite the pilot's best efforts, we did not spy the airstrip, and were forced to head back to Ambua in hope of better luck tomorrow.

The following day, much to my surprise, every member of the Seacology expedition team signed on for the second flight. We boarded the plane only to encounter dense cloud cover once again. This time, however, our intrepid pilots were able to punch through the clouds, finding the Musala airstrip and bringing us safely in.

Despite our delayed arrival, the sound of our airplane landing attracted hundreds of villagers, who seemed as delighted

as they were surprised to see us. Enroute to the village, we passed a home on stilts with a large verandah upon which sat some two dozen children curious yet wary of our party. As we approached the village, we were joined by two local people who have played an instrumental role in this project: Sam Moko, the community outreach coordinator for WWF Kikori; and Patrick Pate, a very charismatic young conservation leader of Musala.

Upon arrival in the village center, we were greeted with welcoming comments from the leaders of Musala. It was now our turn to respond and the honor fell to Seacology board member Larry Barels, who thanked the people for working so tirelessly to save their rainforest. As his comments were translated first into pidgin (the lingua franca of PNG) and then into the local Musala language, women began to dance, trilling and cheering around him.

After our tour of the new center, the *singsing*, or traditional cultural celebration, began. Several women started the festivities off with a singing and dancing performance called a *sosoma*. The whole village gathered to watch. Much to everyone's surprise, Seacology fellow Richard Lemon and I decided to join the line of women dancers, doing our best to imitate their singing and dance steps. The dancers could hardly contain their glee at our participation, and waves of laughter issued from the villagers at what they must have viewed as our inept but heartfelt performance. While we were dancing, an incredibly impressive group of 50 men with brilliantly painted faces and large striking headdresses approached, marching and chanting and beating drums. The men, who were all holding spears,

proceeded to run in circles around the new resource center. I along with several members of the Seacology group could not resist joining them as well.

As the singing continued, we accompanied Patrick Pate to his home and adjoining butterfly farm where he had planted flowers and trees to attract some of PNG's beautiful butterflies. This farm will have very minimal impact on the environment, will provide ongoing income, and will give the village an incentive to preserve its trees rather than selling logging rights to a timber company.

We then returned to the village center where we were presented with gifts of handmade bilum bags, arrows, and traditional stone weapons—signs of the newfound friendships that we had made. We must, however, take off well before nightfall. The whole village accompanied us on our twenty-minute walk back to the airstrip. They surrounded us with singing, chanting, and cheering. It was one of the most memorable moments of our lives.

As the plane taxied down the runway, our hosts lined up to wave goodbye. We came as strangers, yet, despite our widely different cultures, customs, and languages, we left as friends, united in our resolve to save what remains of a once pristine and priceless landscape. ■

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The Seacology expedition team and Kasua tribes people gather at the Musala airstrip, facing page.

Author Duane Silverstein is fifth from the left in the front row. A Kasua warrior, right, wears full dress for the celebration.

Photograph courtesy Shari Sant Plummer.

