New Center Opens

The inspiration for the Center for Amazon Community Ecology probably arose in 1993 on a half-hour long dugout canoe ride that delivered me to a Tembé Indian village along the bank of the Guamá River in the eastern Brazilian Amazon. The paddler had reddish streaks across his cheeks and wore a t-shirt, shorts, flip-flops, and a feathered headdress. The few words he spoke to me were in Portuguese. It didn’t take long to realize I had to try to put my assumptions aside if I was going to have any hope of learning with these people and support their efforts to conserve their threatened forest and way of life.

During the days that followed, I was guided through the forest and introduced to trees with exotic names such as açaí, copaiba, breu, and andiroba. The Tembé harvested fruit, resins, oils, and fibers from these and other plants for dozens of foods, medicines and construction materials. They welcomed my interest in these trees, but they most wanted assistance to stop the chopping and burning of their forest by a growing legion of loggers, colonists and ranchers who had invaded their reserve. The pressure for land in the expanding Amazon frontier was and still is intense, and the government seemed ill equipped and little inclined to resolve this conflict in the Indians’ favor.

One night my hosts welcomed me to participate in a traditional dance. As I drifted to sleep to the undulating rhythms of maracas and a chant about a giant macaw, I knew I had found a people and place that could absorb much of my desire to make a difference in the Amazon. I just didn’t know how to start. As I was leaving the reserve, a simple event gave me the idea I would find out. A Tembé woman showed me a small assortment of handicrafts she had made from shells covering tucumã palm tree nuts. I traded my last bag of rice for a simple lustrous dark brown ring that lasted twelve years. I wondered if products such as these could help provide a new future for the Amazon.

Fourteen years after that first canoe ride with the Tembé, the Amazon still grabs my imagination. Working for its conservation is even more pressing now than several decades ago when thousands of fires in the summer made regular headlines.

The Amazon is the largest intact region of tropical forest in the world, and as such the greatest concentration of biological diversity. The Amazon River system has an estimated 3,000 species of fish, about 2,000 of which are different types of catfish. Destroying Amazon forest aggravates global warming, drives plants to extinction, and propels traditional peoples toward poverty and oblivion.

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Peanut-head Bug
A.K.A. Alligator Bug

With a head shaped like an unshelled peanut or an alligator’s snout and markings on its wings that look like large eyes, this insect’s fearsome reputation in Amazonian lore has frightened away many humans.

“A few years ago, a staff member of a research station near Iquitos, Peru beckoned me over to a tree,” said Dr. Campbell Plowden, founder of the Center for Amazon Ecology. “I immediately marveled at the sight of a four inch long bug with a peanut shaped head whose mottled body almost blended in perfectly with grayish bark underneath. As I approached it with my camera, my guide warned me not to get too close because this bug could be lethal – men had died when it pierced them in the chest. It was not clear if their death had been caused by a mortal wound or a fatal disease.”

Actually, the peanut-head can’t bite. With its straw-like mouth, this insect, which is a type of butterfly, sucks juices from plants. Its curious appearance is part of a complex anti-predator scheme. Scientists think the “alligator snout” may be an imitation of a lizard’s head, which would deter predators that don’t eat lizards. The large “eyes” on the insect’s wings imitate the eyes of a predator.
Amazon Forests Often Worth More Standing Than Cut

Individual efforts to protect the Amazon region may seem like just a drop in the bucket, but innovative initiatives on a local level, even small projects, can achieve a positive impact, said Patricia Shanley, ethnobotanist at The Center for International Forestry Research (CIFOR). When Shanley first began doing ethnobotanical work in the Amazon, identifying plant species and learning about their many uses from native people, the local communities had a question for her. They wanted to know whether their forests were worth more standing or cut.

The communities that initially approached Shanley were often selling their trees for a few dollars. They were cash poor and didn’t know the market value of their timber, fruits and medicinal oils. Shanley explained, “There’s always a sick child, a poor manioc season, a good reason to sell. There are many loggers, many ranchers, lots of pressure. Money is paid cash in hand.” “Pressures from logging and ranching often reach a level that is difficult for rural communities to resist,” Shanley said. “Lack of social organization makes it challenging to come up with effective options.” Shanley’s work set out to generate data on the economic value of their trees, cut and sold as timber or standing and used for their fruits, fibers, game and medicines. That question gave birth to her work. However, Shanley cautioned that efforts to protect the Amazon must be tempered with the realization that local communities have a right to make decisions about their own land, just like communities in more developed nations do.

“Fruit Trees and Useful Plants in the Lives of Amazonians,” which Shanley co-edited, compares the worth of trees sold as timber to their worth as a source of products. “We wanted to give people an idea of, ‘if you cut, here’s what kind of trees you might want to cut and how many,’” Shanley said. “It is about how you go about the process of negotiation with loggers, not if- that is very unlikely. People aren’t going to say no to the loggers, but the rules of the game can change.”

Widely known as the “Fruit Book”, it is written in Portuguese and contains a wealth of illustrations in order to make it more (continued on page 6)
New “Superfood” Helps Amazon

Drink a smoothie made with the newest “superfood,” açai, and you will not only be fighting premature aging but helping traditional peoples in the Amazon to preserve their forest homelands.

“We want to prove the case for sustainable development in the Amazon,” said Ryan Black, CEO of Sambazon, the leading global supplier of açai berries. Black founded Sambazon in 2000 after learning about the fruit on a surfing trip in Brazil.

Açai (pronounced ah-sigh-EE) contains 10 to 30 times the antioxidants found in red wine. It packs plenty of vitamin A, vitamin C, omega-6 and omega-9 fatty acids. It also happens to taste like berries with a hint of chocolate.

The açai palm tree (Euterpe oleracea) is native to the Amazon River Basin where it readily grows in wet areas. While some riverside people plant it near their homes, many communities harvest the fruit from dense wild stands as an abundant local food. When communities have access to a good market, harvesting wild açai can also provide an economic incentive to preserve the surrounding forest. All of Sambazon’s fruits are wild harvested, said Black.

Açai is a rapidly renewable resource in the Amazon. Since the palms can produce several crops of fruits each year, local people can potentially harvest it for generations without destroying the ecosystem. This contrasts with the harsh impact of harvesting hearts of palm from the same species where overzealous cutting of young açai stems has damaged many stands, said Dr. Campbell Plowden, founder of The Center for Amazon Community Ecology. The fruit harvest is also easier to manage than logging since some timber trees take hundreds of years to mature, and the operation often causes significant damage to the forest.

Sambazon is conducting a study in cooperation with several research institutions and local non-governmental organizations (NGOs) that will measure the effects of its harvesting techniques on the ecosystem and in the community. A key focus of the study is measuring effects of an increased number of açai plants on the biodiversity of the region, said Black. It is also researching ways to convert açai byproducts into a biofuel.

“Indigenous families can make more money harvesting açai than cutting down trees or working with animal trades,” said Black. The company purchases the organic fruit from low-income, indigenous families in Brazil. The families form co-ops, and a local NGO (continued on page 7)
Fortunately there are many conservation and human rights groups working hard to study the problems and look for solutions to the environmental and social challenges in the Amazon. Various organizations help create new protected areas, fight illegal logging, slow the flow of aid money that finances unsustainable development projects, and work with indigenous communities to map their resources. The logical question then is: what positive role can yet another group play in this dynamic? The answer is simple. The efforts to date are still way too small in relation to the enormity of the problems and the size of the region. Some challenges need to be confronted at a national and global scale. Inspiration and solutions, however, often arise with sharp focus on one plant, one family, or one community. Whatever can be done to mobilize more media, governmental, business, and citizen concern for the Amazon forest and its people should be done.

The core of the Center for Amazon Community Ecology’s mission is to increase the understanding of the Amazon environment and support traditional communities wishing to promote local sustainable development and forest conservation. One way the Tembé and many other communities are approaching these dual objectives is to expand their use and marketing of non-timber forest products (NTFPs). This strategy has numerous potential benefits and many ecological, social and economic challenges. The Center will focus most of its efforts on studying the ecology, management and marketing of these plants. It also plans to assist communities to develop sustainable ways of harvesting NTFPs for everyday use and sometimes for sale to support families and local development. When these communities are strong, they are better able to defend their forest, culture and livelihood.

The Center is organizing its activities into the areas of research, community support, and education and outreach. The first research project, which began in the summer of 2006 with the Institute for Amazon Investigation (IIAP), is focusing on the ecology and sustainable harvest of copal tree resin in the northern Peruvian Amazon. This aromatic resin is mostly used to caulk wooden boats and make incense. This fascinating product results from the attack of host trees by several newly discovered species of bark-boring weevils. The resin is also key to the lives of various flies, ants, assassin bugs and important rainforest bee pollinators. The project aims to incorporate a better understanding of the complex ecology of this resin as it develops harvesting and marketing methods that will preserve it as a subsistence and economic resource for many Amazon communities. Details of this research and other projects being considered can be viewed in the Program section of the Center’s website: www.amazonecology.org.

The mission of this newsletter, Amazon Connections, is to help people learn about the Center’s work as well as animals, plants, products and people connected to the Amazon forest. We welcome your support of the Center and this publication and hope you will find it an important source of information, insight and inspiration. Many thanks to Vanessa Baker for writing and editing this first issue, Maria-Teresa Grinneby for creating our website, Kathleen Weaver for legal assistance, John Hatten for computer trouble shooting, Sheri and Dayton Coles for critical financial support, and to all Center directors, advisors and other volunteers who have given their time to launch this endeavor.

Campbell Plowden
Center for Amazon Community Ecology
Founder and President
Collaborators in Shanley’s work include forest dwellers who are pressing for greater accountability on the part of researchers. Gloria Gaia, a forest midwife and women’s rights activist who resisted loggers for 20 years, helped Shanley write and disseminate the “Fruit Book”. Gaia raised her children and grandchildren in the forest, using local medicines and wanted to contribute this valuable knowledge to the book. After the book was published, Gaia began conducting her own workshops to share the information to other local people in a way they could understand. “I commend her for her initiative and commitment. Alone, without funding, she makes her way by bus, foot and canoe to conduct workshops in conflict ridden regions,” Shanley said. “She has been threatened by ranchers but she persists. Having lived the situation she wants to help prevent the impoverishment of others”

Throughout a decade of work together, Gaia and Shanley have met many obstacles. Gaia said, “We work in a region dominated by timber and ranching industries and confront a scientific community bent on publishing for the elite.” However, Shanley noted recent winds of change. The Brazilian government shows increasing interest in promoting multiple use forestry and the conservation of nutritional and medicinal species, she said. In 2005, the Fruit Book was honored with an international award for Outstanding Communications given by the World Bank and the Consultative Group on International Agricultural Research. In 2006, Gaia received the inaugural award for Bringing Science to Society given by the Journal of Ecology & Society. Upon hearing the good news, she celebrated by taking a bumpy bus ride, hiking through a forest and crossing muddy streams, to reach the small village of Melanciao to conduct a medicinal plant workshop.

Shanley not only began her research in response to the needs of communities in the Amazon, she actively returns the results to communities in the same region. Through CIFOR and a non-profit organization called People and Plants International (PPI), Shanley and her colleagues conduct hundreds of workshops in the Amazon, using the Fruit Book and others to help educate people about forest management and their land use options. “The purpose of PPI is to build capacity and work with local groups at low cost and at their request,” she said. PPI and CIFOR work with a diverse range of groups in the Amazon, such as the National Council of Rubber Tappers, the national forestry training initiatives and rural literacy programs.

Shanley pointed to an institutional dilemma whereby researchers’ professional status is determined by the quantity of articles they publish. This system is “an ineffective way to catalyze change,” she said. Her frustration grew so great that Shanley and her colleagues at CIFOR and PPI designed a survey to be applied in Africa, Asia and Latin America to find out what is preventing researchers from sharing their work with the communities that stand to benefit from it. When the results come in, Shanley and her colleagues plan to publish them along with innovative ways that researchers have discovered to share their research more broadly.

Shanley said, referring to the local villagers and hunters with whom she first conducted workshops for Amazonian communities. “We decided we’d better make it accessible, put it on paper.” Research is ineffective unless it reaches the right audience, Shanley said. “It’s clear that both researchers and donors are frustrated by lack of impact.”

(continued from page 3) accessible to local people, who are often semi-literate. “We realized that in no way our tiny traveling troupe of three would ever make a difference,” Shanley said.
assists them with complying with USDA Organic Certification guidelines, as well as ensuring that fair trade pricing is enforced.

Under fair trade pricing, Sambazon guarantees that if the market rate for the fruit falls below the cost of production, Sambazon will pay the minimum cost of production. A fair wage is guaranteed when farmers abide by the producer guidelines.

Sambazon also helps the grower co-ops to obtain bank accounts and receive training programs. The training programs teach forest management practices that protect biodiversity as well as proper hygiene while collecting the fruit.

Sambazon began working with four co-ops in the Varzea Eco-Region 147 in the Brazilian Amazon state Amapá. The area was selected by the Brazilian government to benefit from a forest management program involving açai berries after a hydroelectric dam was built in the 1980s that destroyed the local fishing industry, said Black.

Due to increased demand for açai, Sambazon will be able to create the opportunity for 50,000 families to escape poverty, according to its website.

In 2004, Sambazon doubled its sales to $2.5 million and continues to grow.

Sambazon was named a winner of the U.S. State Department’s 2006 Award for Corporate Excellence (ACE).

“Sambazon is an outstanding example of the positive impact that a small company can make to the economy, the environment and the society of its host country,” said Secretary of State Condoleezza Rice at the 2006 ACE Ceremony. “Sambazon was selected for efforts to promote sustainable development in the Brazilian Rainforest, while improving the conditions of indigenous people through creative marketing of the açaí fruit.”

Black said that he feels Sambazon’s biggest success was in setting industry standards for fair trade and sustainability.

“That’s the biggest success we’ve had so far—to set the bar,” said Black. “It’s a domino effect.”

Two other companies Black called “fantastic” are Guayaki, a manufacturer of yerba mate, and Manitoba Harvest, a manufacturer of hemp products. Both companies share Sambazon’s triple-bottom-line philosophy, in which social, environmental and financial outcomes are all key.

However, said Black, “Consumers are still buying [açai] because it tastes good or is good for you, and then they learn secondarily that it is good for the environment.”
AMAZON SUPPORTER FORM

Please fill out and mail to: Center for Amazon Community Ecology
1637 B North Atherton St. #90, State College, PA 16803
OR send information by email to: amazonecology@comcast.net

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