

As I explained, The Nature Conservancy (TNC) hasn't really given us any money, but has given me training on fund-raising strategies, membership development, strategic planning, and general managerial techniques on NGO administration. We do hope, though, that TNC will eventually open a program for El Salvador, including the strengthening of El Imposible. I believe they're analyzing that possibility for the near future.

The Resource Foundation, (TRF) is a foundation dedicated to helping NGOs obtain sustainability by serving as a project intermediary. For instance, we sent TRF an environmental education proposal for \$25,000, and we got a grant from the Texaco Foundation. Of course, this has a cost. It costs \$4,000 to become a member and after the first year you pay \$3,500 annually. We have already recouped the investment. They have gotten us \$30,000 so far, and we continue sending them proposals for projects. This is a resource that we are just beginning to tap. If you want more information about TRF you can write to me through e-mail.

The Latin America Future Foundation has the mission of promoting sustainable development at the hemispheric level. Its president is Yolanda Kakabadse, who is also president of the International Union for the Conservation of Nature (IUCN). We are members of their board, through our chairman, and have become their in-country partners. With this organization, we developed consulting workshops in El Salvador to prepare for the Miami

Summit in 1994 and for the Bolivia Summit on sustainable development in 1996.

They are also presenting a project to the Global Environmental Facility (GEF) that has the title: "Integrating the Conventions on Biodiversity and Climate Changes into Policy Making in Six Countries in Latin America." This is still being negotiated by the FFLA and the World Bank. The countries to benefit from this are Cuba, El Salvador, Ecuador, Bolivia, Paraguay, and Argentina. It's a \$6.3 million project that includes the training of 5 main actors in these countries: NGOs in general, the media, private industrial sector, universities, and government. What is SalvaNATURA going to do in El Salvador? We will play the role of country coordinator. We'll handle the logistics for those workshops and will administer the funds. We hope that by mid-year we will have the response from GEF. This project will give us a big boost. It's a 3-year project and we're very enthused about the opportunity to integrate and divulge both conventions to general audiences in our country.

Another source of funding for projects is the Ministry of Education. SalvaNATURA has initiated a literacy program with the communities inside the park's buffer zone. We administer 45 literacy circles with 12-15 adult members each. Last year we taught 800 adults how to read and write. As most conservation and environmental NGOs end up doing, we have had to become involved with social projects in the buffer zone in order to allevi-

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ate pressure from the surrounding communities.

Finally and most importantly, in regards to the fourth strategy, SalvaNATURA does not have an endowment fund. It's sad, because my organization must live day by day; but then again, this is nothing new to a typical environmental organization. For now, we don't have an endowment that will provide us long-term financial stability. That is, we don't have a trust that will generate interest and that will cover a big part of our operational costs.

What are we doing about this issue this year? Through our Land Purchase Program, we are selling approximately 670 acres located in the buffer zone of El Imposible. We are selling this land to the government. El Imposible belongs to the State, but the surrounding properties that potentially form the core area are private and have to be purchased. These wild lands are crucial for the long-term viability of the park, since most of them are located in the top part of the watershed. This is the main reason we began this program of land purchase. We currently are in negotiations with the State and hope to collect \$350,000 for the land. With an estimated interest rate of 12 % in Salvadorean colones, this amount could generate about \$3,500 per month. This, for you to have an idea, approximately represents the salary of 15 park rangers; 25 park rangers is what is recommended in the El Imposible management plan. An endowment fund is very important for us and we are doing everything within our

power to sell these vital lands.

How are we doing today? Well, we probably are the most important environmental NGO in the country because of our action-orientated work. That is, we don't just yell. We are not simply activists. We do hard work, we get results, and we show it. SalvaNATURA has become an important part of the country's enviro-political debate thanks to its focus on protected area management, avoiding confrontation, and emphasizing the importance of cooperative agreements and alliances. I mentioned the importance of alliances a lot during my presentation. In every sense, this is the key to the success of any organization. After all, we are trying to lead by example and we definitely cannot do the job by ourselves.

Why have we become such an important NGO? Another example is CoAMBIENTE, an umbrella organization that is chaired by SalvaNATURA and has a membership of 19 other environmental NGOs. It's a political environmental front, if you want to put it that way. It is really environmental activism at its finest, but our activism is based on science and research. This is not done only through SalvaNATURA, but through these 19 environmental NGOs. We are still weak, though. The truth is that we are too many NGOs, and none of us has an endowment. But we at least have some power in Salvadoran society. By the way, I was also elected by the 35 most important environmental NGOs of the country to represent them in the National Council for Sustainable

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Development, which is the entity that does the follow-up to the Central American Alliance for Sustainable Development. So, through SalvaNATURA we have a lot of representation, and an editorial column in one of the most important newspapers. So, we're really influencing society through our work and with our opinion.

We also have leadership in protected area management. I have only mentioned one of the national parks where we are working. But we also have one foot in another one of equal importance. It's called Volcanoes National Park. It's the union of 3 volcanoes. It could become the largest natural area of El Salvador: 16,000 acres. Most definitely, this area represents one of the most spectacular scenic sites in the country.

SalvaNATURA's annual budget is now over \$600,000, but if the GEF project comes through, then it will be more than double that amount. There are 60 people hired full-time, including the 25 park rangers from EL Imposible. We have the first long-term management plan for a national park in El Salvador.

We have bird research projects and training of nature guides and park guards. Thanks to the National Fish and Wildlife Foundation, we are finishing an investigation of migratory birds in 5 critical wetlands in El Salvador. We have a second project that just began this week that includes a permanent program of conservation and education regarding migratory birds in El Imposible. It is a 6- to 8-month project that is going to make El

Imposible the best avi-tourism destination in El Salvador.

Finally, we are about to begin a new venture with the Rainforest Alliance. We are going to become the certifying agency for the ECO-O.K. seal in shade-grown coffee plantations. El Salvador, as you know, has coffee as its prime source of income. Also, El Salvador has the majority of shade-grown coffee farms in all of Central America. So, there are a lot of farms to certify. Also, 2 % of our territory has natural forest and not all of it is protected. What then do we have to consider as forest in El Salvador? Our shaded coffee farms, of course! These shaded plantations have attractive biological diversity, especially birds. We will start certifying plantations around El Imposible to enhance potential corridors that connect to Volcanoes National Park.

In broad terms, this is SalvaNATURA. There is an Executive Committee that reports to a Board and of course to a general assembly of members. There are 4 managers right now, the El Imposible projects manager, communications and environmental education manager, the financial and administrative manager, and the fund-raising and membership development manager. Who administers the projects of ECO-O.K. and of the National Fish and Wildlife Foundation? Well, it is my responsibility. Right now, I have to supervise them directly. We are growing for sure. This year the ECO-O.K. program is new, but eventually this program will have its own manager.

"The best way to cultivate a relationship with the donor is by requesting a donation, with a letter, over the phone, or personally."

Following are suggestions and tips about fund-raising that we learned from The Nature Conservancy. The first law of fund-raising: "To get big gifts, a qualified solicitor must ask for an appropriate gift in person." Here are the 10 general rules for raising money: 1) Frequently, the best donor cultivation is solicitation. In other words, the best way to cultivate a relationship with the donor is by requesting a donation with a letter, over the phone, or personally. 2) You must prepare completely for every pitch. One must know exactly what the organization does. 3) You must recognize fear and fight it. Many people who try to raise funds are afraid to ask because they think the donor might think they're not investing the money properly, etc. Not so. You must be sure of what you do. 4) You must be able to sell. You must market the project. You must say: "Let's save the last wildlife refuge." That's the campaign we have for El Imposible. "El Imposible is the last refuge for the animals that once lived all over the country, please help us protect them! It's the most important piece of our national heritage, etc." You must be convincing, of course. 5) You must persist and never give up—stay in your job. You must persevere without offending the donor. Continuity in the position is very helpful. It gives credibility. For instance, my fund-raising manager has been with SalvaNATURA for 3 years already. This gives credibility. Why? Because she's in her post and she is happy. She's going to continue in her job and that is a strong image. This means security for the donors and the members. 6) Keep lots of balls in the

air. You must present options whenever necessary. In other words, if I go with a land purchase proposal and the potential donor tells me "I'm not interested," then I must have something else to propose. 7) You must concentrate on priorities and delegate or decline distractions. 8) If you're not talking to donors, you're not doing your job. The "Chair Test." Any fund-raiser who remains at his desk all day is not doing his job. You must be out on the streets. 9) Exercise to prevent stress problems. Keep your support system strong. This is crucial. I certainly have to do it. It calms me to go out and jog. It clears my mind. I can think more efficiently about what I need to do. 10) Lunch is very important for brainstorming and team building.

Those were the basic rules of fund-raising. In closing, I would like to review 4 elements for requesting big donations. Number one is, do everything possible to obtain a meeting with the potential donor. In other words, you must make sure to get an appointment with the person with the money, in his or her office. You have to go to his office and ask him for the money. Number two: You must take to the meeting a good proposal and promotional material that will sell. From a simple photo album to a video that will promote what you are doing. I'll be honored to present you our first El Imposible video, after 7 years of hard work. I'm going to finish my presentation with it. It's a video about what we do at El Imposible. We believe it will help us sell better, though we have not used it yet.

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"You must ask the donor for a precise amount. You must be specific. 'Would you consider a donation of \$25,000 per year for 3 years to save the Volcanoes National Park?'"

Number three: You have to tell a story with strong selling points "What are we really going to do with your money?" Number four: You must ask the donor for a precise amount. You must be specific. "Would you consider a donation of \$25,000 per year for 3 years to save the Volcanoes National Park?" Some fund-raisers are more aggressive: "I would like you to give us \$25,000 annually for 3 years," instead of "would you consider..." That sometimes makes the difference.

And the last slide in my presentation: the 4 requirements for a good fund-raiser. The first is to clearly identify with the mission of the organization. If you don't have a clear mission, then you should not be out there. What's more, as a fund-raiser, you might put the organization in jeopardy if you send somebody who doesn't have what it takes to ask for money. Two: You must have courage to ask face to face for a specific amount. Three: You must overcome fear. Four: You must have skills in communications and selling.

Well, basically that's all I have for you. I hope I contributed something by sharing some of our secrets. I was really impressed that you invited me, representing El Salvador, to a Panamanian event about conservation issues. But I'm really honored to be here. I truly hope you enjoyed it. Thank you.

Question:

What is your opinion about accepting donations from corporations that pollute the earth?

Answer:

The private sector must pay for damages caused to society and contribute to environmental NGOs. This does not give them justification to wash their image, become "green-washers," but publicity is negotiated. Sometimes they go beyond that, like Phillip Morris did when it gave us \$50,000 per year to buy land. Then they put out some publicity as if it were the event of the year in El Salvador. In other words, they tried to get too much publicity for something that is already expected of them. Their publicity said "We have donated 200 acres for El Imposible." That's not correct, since they gave us the money so that we could buy the land. Anyway, we purchased less than 200 acres with that money. So they handled the publicity according to their wishes and we couldn't do anything about it. Many people questioned us. But we have never had a serious conflict. I think it is a delicate issue, though, and we should demand firmer action from the polluting companies that don't care for the environment and keep on with their "business as usual" polluting practices. We are neither white nor black, we are gray. We must be flexible.

Juan Marco Alvarez is the Executive Director of SalvaNATURA in El Salvador. He has a master's degree in Natural Resource Management from INCAE, Costa Rica. Through SalvaNATURA, he is the chairman of Co-Ambiente, an umbrella organization of 19 NGOs in El Salvador. He is the representative of the environmental NGO sector of the National Council for the Sustainable Development of El Salvador, and is part of the Consulting Council of the newly created Ministry of the Environment and Natural Resources.



Contributions of Scientific Investigation to Ecotourism

George Angehr,

Staff Scientist, Smithsonian Tropical Research Institute

I see that according to the program I am supposed to be talking on "Estudios de los bosques Panamenos." I don't want to disappoint anyone, but I won't be talking on this topic. Instead, I will be talking about scientific information as an attractant for ecotourism, and the experience of the Smithsonian Tropical Research Institute with respect to ecotourism. Over the years, the Smithsonian itself has become something of a tourist attraction here in Panama.

As we've heard in previous talks, Panama has a wealth of resources to attract ecotourists, including rich, easily accessible tropical forests, spectacular coral reefs, and a very diverse cultural heritage. What I'd like to talk about today is another resource that Panama has that is often overlooked, but that can also be a valuable tool for attracting visitors, and that is scientific knowledge. Panama has one of the richest heritages of scientific research in tropical biology of anywhere in the tropics. I'd like to describe first how that heritage is a resource that can be used to attract scientists and students to Panama, in the role of what I might call "scientific tourists," and

secondly, how that heritage also serves as an attraction to the more typical ecotourist.

Panama was the focus of some biological research in the 19th century, in the form of an expedition that came for a brief time, collected a few plants and animals, and then left. The intensity of scientific investigation increased a great deal with the initiation of the Panama Canal construction in 1903. A major problem faced by the Canal builders was the control of mosquito-borne diseases such as malaria and yellow fever. This led to a large influx of biologists, in particular, entomologists.

One of these entomologists was James Zetek, who was employed by the U.S. Department of Agriculture. Zetek came to Panama during the era of Canal construction and stayed for over 40 years. In the 1920s, he became interested in establishing a research station where scientists could conduct biological research on tropical forests under natural conditions. In 1923, he and several other scientists persuaded the Canal Zone governor to set aside Barro Colorado Island, the largest island in Lake Gatun, as a nature preserve.

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Barro Colorado Island had very primitive conditions in 1924. For 2 decades after 1923, the station was run by research organizations including Harvard University, The American Museum of Natural History, and the Smithsonian Institution. It became a world-famous research site and attracted hundreds of visiting researchers. In 1946, the Smithsonian Institution took over sole management of the station.

In the mid-1960s, the Smithsonian expanded its activities in Panama to include a program on marine research, and established marine laboratories on both coasts at Naos and Galeta. At the same time, the organization changed its name to the Smithsonian Tropical Research Institute or STRI. STRI presently has a staff of more than 200, which includes about 30 staff scientists. Today STRI operates a number of facilities, including the Tupper Center and the nearby ANCON facility, which houses STRI's Center for Paleoecology. STRI also continues to operate Barro Colorado Island, which has recently undergone a major modernization program with the construction of new residences and laboratories. For tropical forest studies, STRI also has facilities in Gamboa, which give access to Soberania National Park, as well as a small station in the western highlands near Fortuna. In addition, STRI operates 2 canopy access cranes now in operation at Metropolitan Park and at Fort Sherman. STRI also operates several marine laboratories, in particular Naos Marine Lab on the Pacific coast and Galeta and

San Blas facilities on the Atlantic.

One of the most important results of this long history of scientific research in Panama has been the production of a large amount of information about Panamanian natural history. Over the years, STRI and its predecessors have produced many thousands of publications, and are currently producing them at a rate of more than 250 per year. This foot-tall stack of books represents one year's production of information. Most of this information is highly technical, and one limitation is translating this information for the general public. Scientists get most of their rewards from publishing in technical journals; they don't get many career awards by publishing popular information. But still, some has been produced over the years and these are a few examples. There's a field guide to tropical trees on Pipeline Road which is now out of print, a guide to fishes of the Pacific which was produced by Ross Robertson of the Institute, and a guide to interpretative nature trails at Parque Nacional la Compañía, produced by the Smithsonian staff.

We have a large number of scientific visits from overseas each year, partly because of the availability of world class facilities. Here, researchers have access to well-equipped laboratories close to natural tropical forests and marine environments. However, even more important is the availability of a very strong information base. This is one of the few places in the tropics where researchers can take advantage of information that others may

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have worked on previously. There is already a substantial amount of information known to build on. These scientific visits, at least in economic terms, can be seen as a type of tourism. I'm sure that many of STRI's scientific visitors would object to being called tourists, since they are here to work hard instead of to have a good time, but certainly their effect on the local economy is similar. I'm also sure that Panama's climate plays at least a small role in attracting some scientists from North America and Europe, particularly at this time of year.

Basically, there are 3 types of scientific visitors that come to STRI: 1) independent scientific researchers, 2) students participating in courses, and 3) participants in international scientific conferences. Every year, STRI receives about 400 scientific visitors. In a recent year we received visitors from more than 40 different countries. These visitors include senior scientists from universities and research institutes, graduate students, and technicians employed by senior researchers. These visitors may stay anywhere from a few days to several years.

Our second category of visitors are students from the U.S. or elsewhere who are participating in courses in tropical biology. These courses may last anywhere from a week to several months. Undergraduate students are not a major component of STRI's annual visitation. Traditionally, STRI has concentrated on graduate-level education and has left undergraduate

courses to the Organization of Tropical Studies in Costa Rica. However, STRI does attract 2 or 3 undergraduate courses per year.

Our third category of visitors are those that are brought in by international scientific conferences. Every year, several such conferences are organized by or held at STRI. These can vary tremendously in size and scope. As an example, a few weeks ago STRI hosted a meeting of the International Society of Bryozoologists. This is a pretty esoteric subject. Bryozoans are small, moss-like animals that live in marine environments. But even so, this conference attracted 75 participants. At the other end of the scale, we held the International Coral Reef Congress here in June 1996. This event is held every 4 years, and it had over 1,200 participants from all over the world.

While the absolute number of STRI's scientific visitors is relatively low, their impact is probably relatively high. I don't have specific figures, but STRI's scientific visitors probably stay much longer than the typical tourist, and over the course of the visit probably spend more money. On top of this, a scientific visitor often becomes a more typical tourist during part of his stay, making a few days or weeks holiday in the western highlands or in the San Blas. There's probably significant room for expansion of this type of visitation, particularly with respect to student courses. However, STRI itself probably cannot absorb all of the demand. STRI's facilities often are occupied at close to capacity. There

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would, however, probably be room for expansion for this kind of activity at organizations such as the City of Knowledge.

Beyond this very specialized group of scientific tourists, scientific information also is a strong attraction to more typical tourists as well. I think that when ecotourists visit here, getting accurate and detailed information about what they are seeing it is a valuable part of the experience. Also, people like to feel that they are learning something, even if they are on vacation. It makes them feel more virtuous about the activity. In any case, STRI has become well enough known that the facilities themselves have become tourist attractions. There has been sufficient demand that STRI has had to develop special facilities to accommodate the interest of visitors from the general public. These facilities include visitor centers and nature trails, and these types of resources are frequently not available in many of Panama's national parks. STRI's experience can help serve as a model for development for these kinds of facilities in other locations. While STRI's principal focus is the promotion of scientific research, it does recognize the value of communicating this information to the general public. With this in mind, STRI has developed 2 facilities to accommodate visits by the public—the Barro Colorado Island Visitor Center and the Culebra Marine Education Center.

For more than 20 years, the public has been allowed to visit Barro Colorado Island on certain days of the week. Over time, this

activity has become more and more popular. However, there is an issue of conflict with research activities. Certainly, if you have large tour groups moving along the trails, it can disturb objects of research. To limit this conflict, business by organized groups is confined to 3 days per week. Groups come to the island on the STRI launch from Gamboa. They are met by a trained guide and taken on a walk along a sign post nature trail. Visitors also see a slide show about the island, its history, and ongoing research activities. They are given a cafeteria-style all-you-can-eat lunch, and take the launch back to the mainland in the mid-afternoon. This photo shows one of the groups of tourists being given a lecture by the scientific coordinator as part of the tour. Here is a group along one of the nature trails. This is the original 1924 building which has now been converted into the Barro Colorado Island Visitor Center. These tours are extremely popular and are usually booked up to a year in advance. In general, Barro Colorado receives about 2,000 to 3,000 outside visitors every year, and remember, this is only going on 3 days per week. The Visitors Center was developed specifically to enhance the visitors' experience on the island. The renovation was done with support from Fundación Natura. The building now features lecture space and educational exhibits, as well as a veranda with a scenic lookout over the Panama Canal. The exhibits themselves are called "The Forest Speaks," and are based on studies done on animal communication on Barro Colorado studies of frogs,

monkeys, and insects. Because of limitations on visitation to the island, some of the excess demand is absorbed by a commercial tour operator, Eco Tours. These operators run a tour that does not enter the laboratory area itself. Instead, they go around to the back side of the island where they are given a tour of some of the scenic coves there. They also visit one of the outside peninsulas and a nature trail in that area.

We developed a similar business program at the facilities at Naos Marine Laboratories. It originated through visits to outdoor seawater tanks originally used by the marine researchers. It's very basic, but over the years, people became interested in visiting the site. An artificial tide pool can be used by visiting school groups. But again, in a place like this there is a conflict with research activities. Also, there is the possibility that some fourth grader is going to stick his or her hand into a tank with a moray eel. So in this case, STRI developed a visitor center in order to accommodate the general public as well as educational activities, this time on Culebra the Culebra Marine Education Center.

This is a magnificent location at the mouth of the Panama Canal. It was a former U.S. Defense site. This shows the entrance to the Culebra Marine Education Center. STRI has developed an aquarium there. The island is open to school groups by appointment on weekdays and is open to the general public on afternoons and on weekends. This is a nature walk through the

dry forest on the island. It includes guided walks on the beach to look at tidal organisms. The development of Culebra was sponsored by STRI and the U.S. Department of Defense Legacy Program. This Center is extremely popular and receives something like 70,000 visitors per year. On a typical weekend we see something like 1,000 visitors from the general public.

In conclusion, these examples demonstrate how important scientific knowledge can be as a resource for the development of ecotourism. It is hoped that STRI's experience can provide a valuable model for future tourism development in the area.

George Angehr is an ornithologist based at the Smithsonian Tropical Research Institute. He obtained his B.S. from Cornell University and Ph.D. from the University of Colorado. Dr. Angehr did his thesis research on hummingbirds at the Barro Colorado Island field station. Subsequently, he spent 3 years with the New Zealand Wildlife Service, conducting research on endangered species. He is currently coordinator of STRI's Legacy project conducting surveys of tropical forests and birds on military lands of the Canal Area, and is also carrying out several additional research projects in Panama and Peru.

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ECO-O.K. Agriculture: Conservation and Commerce Working Together

Sabrena Rodriguez,

Program Associate, Rainforest Alliance

Hello, and thank you for inviting me. It's wonderful to be able to talk with you about our certification program, which I think will complement some of the other opportunities addressed during this meeting.

The Rainforest Alliance is an international nonprofit group that seeks socially responsible and economically viable alternatives to deforestation in the tropics. One of the key tools that we use is certification—what we call eco-labeling. It all began with SmartWood, which is a timber certification program accredited by the Forest Stewardship Council, an international governing body that accredits timber certifiers. SmartWood has become very successful and very well known throughout Latin America, the U.S., and Europe. Its success spurred the development of the ECO-O.K. program, a similar program that focuses on agricultural certification as a way to limit pollution, provide jobs in rural areas, and obtain a conservation value from agricultural production.

The Rainforest Alliance works with a network of international and local partners to learn which

industries, particularly agricultural industries, are the most damaging to the environment in tropical ecosystems, and to develop guidelines that minimize the negative impacts of that industry and provide incentives to farmers to make improvements on their farms.

This slide shows a coffee farm in Panama that provides wonderful habitat for migratory songbirds and resident species. Our partner group in Guatemala has developed amazing guidelines for the certification of coffee based on a diverse shade cover and very strict management of agrochemicals. The idea behind what we call “conservation certification” is sustainable development. We realize that's a term that is nearly impossible to define and is heavily debated. But I believe there is agreement that sustainability includes 3 components—a healthy environment, economic viability, and social equity. And that is what we strive to promote in agriculture. We refer to certified farms as well-managed. We don't say that they are sustainable. We believe ECO-O.K. certified farms are well-managed and that they are moving agriculture in a better direction—balancing community

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needs, conservation, and development.

On this slide, we have the alternative to shade-grown coffee. This is a full-sun coffee farm, and many of you have probably seen farms like this here in Panama. A full-sun farm provides relatively little habitat for wildlife, particularly birds. These farms are very agro-intensive; they use high doses of fertilizers, insecticides, and herbicides.

The program developed out of a desire to provide consumers, both national and international, with the opportunity to take action on an important environmental and social issue. We believe that through consumer education we can provide financial incentives to farmers to make better decisions—better for their farms and better for the global community. And given that 80 % of American consumers consider themselves environmentalists, we believe there is truly a market for environmentally friendly, socially equitable agricultural products.

I would like to use the remaining slides to illustrate the 9 principles upon which our certification program is based: The first principle is the protection of natural resources. On any certified farm, there can be no continued deforestation, so farms must remain the same size. This is particularly important on banana plantations, which have a history of deforest-

ing coastal areas. But beyond that, farms must establish biological corridors and reforest areas that are not appropriate for agricultural production, i.e., along streams and near employee housing. And we don't allow hunting, even by little kids who live on the farms. This is part of an educational package that we require of farm managers. Obviously, children don't realize the impacts of this behavior on wildlife, but it is our job to help them appreciate the environment around them. Farmers are in a unique position to demonstrate to children how to protect and utilize our natural resources.

Protection of waterways. This clearly illustrates the proximity between many banana plantations and major waterways throughout Central and South America. We require that water from any certified plantation be treated, removing organic matter that might otherwise find its way into nearby rivers. Removing these pollutants can reduce the impact that these plantations are having, not only downstream from them, but also along the coast and off shore. This is very important for banana plantations.

Protection of soil. Erosion is a major problem. It not only leads to sedimentation of rivers, but it also reduces the soil's fertility. We work with farmers to promote what we consider to be greener alternatives. Here you have a

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farm that is using coffee pulp as a mulch and a compost on the farm. That is one way of recycling a farming by-product, putting it back into use on the farm. It costs the farmer virtually nothing and provides him with a good fertilizer for his crop.

Strict control of agrochemicals. The complete and integrated management of agrochemicals is a very important component, not only from an environmental perspective, but also from a health and safety perspective. It's important to remember that thousands of people work on banana plantations in Central America, their health threatened by overexposure to agrochemicals. It's very important for us to make sure that things are clearly labeled, and that workers have proper training, proper safety gear, and receive regular medical check-ups. We also try to ensure that any agrochemical being applied to the farm is required for the health of the crop.

Waste management. Farms must manage their waste. This slide illustrates a problem that is not uncommon on banana plantations—plastic bags and strings, wasted bananas, and other trash from the farm discarded near roads, streams, and worker housing. We require that all of these plastics be recycled and reused. Some of these plantations come up with some amazingly innovative ways to use these plastics, like making plastic bridges for areas that are muddy. They have remolded the recycled plastic bags into hardened plastic which is laid out on paths within the plantation. This is a way for the

farm to reuse these by-products locally, as opposed to transporting them back into the city.

There are several important social aspects, but one of the most important is the dignity of the workers. There are 3 or 4 areas where we try to focus our attention. One area is housing. Workers must be properly housed. They must be paid a fair wage, consistent with local laws, but we advocate something above the local average.

Certified farms must provide education for farm workers and their families. If they cannot provide education on the farm, they must provide access to local education, either by providing transportation for the students or providing tutors. In the case of coffee farms, much of the work is migratory, so they must provide a teacher on the farm.

The next of our principles is to maintain good community relations. This principle covers relations with families who live on the farm and must be provided basic health and education services. Our certification criteria also covers relations with nearby parks and reserves who may be affected by on-farm management practices. And, the certification covers relations with local communities whose environment would be jeopardized by mismanagement of the land. The idea is to encourage our farmers to have good, open relations with their neighbors, to foster better trust and understanding between these groups.

"Certified farms must provide education for both farm workers and their families. If they cannot provide education on the farm, they must provide access to local education, either by providing transportation for the students or providing tutors on the farm."

Now, to bring this presentation back around to the topic at hand—ecotourism in Panama. Obviously, this program is not going to attract tourists in and of itself. However, very often you find agricultural areas adjacent to important wildlife viewing areas. We feel it is very important to work with farmers to help them improve their farms, not only cosmetically, but also to provide additional habitat for wildlife or buffer zones to national parks. Obviously, tourists would want to see an area like this, which is a shaded, traditional cacao farm in Ecuador. Certified, socio-environmental farms can enhance Panama's plan to develop sustainable communities that attract tourism and provide jobs. It is an ideal coupling, both for communities and for conservation.

This concludes my presentation. I wanted to leave time because I know there were questions about certification earlier during Juan Marcos Alvarez' presentation on SalvaNATURA's work. I'd be happy to answer those now.

Question:

Are there currently any certified farms in Panama?

Answer:

Certainly. There are several certified banana plantations in Panama, owned by a Chiquita brands international subsidiary, CLC-Boca. The slides I showed of a certified farm were taken in Changuinola, on one of the first certified farms in Panama. It is a model farm in many respects. And there is a certified coffee farm in Boquete.

Question:

Are farmers given a premium in the marketplace for certified products?

Answer:

Only recently have we been able to get premium prices for certified farms. We advocate premiums for farmers who are certified, but because we don't directly sell the products, our role is only that of an advocate. Very recently a farmer from Guatemala received a 10 cent per pound premium for the ECO-O.K. label. We try to help farmers with receiving premiums for the products. But most often where we are able to be of assistance is in expanding their markets. Green consumers are a growing, active group, and we can help farmers access them. It is often almost equally important to farmers to receive recognition for their efforts to protect the environment as it is to receive more money.

Question:

How many farms do you have certified?

Answer:

Nearly 100 banana plantations have been certified through the program, amounting to 50,000 acres in Central and South America. We have so far certified 4 coffee farms, and in Cacao, we're working with a cooperative of growers. The Ecuadorean growers have not yet been certified, but are helping with development of guidelines. We've just recently certified 5 orange farms in Costa Rica which will be used for juice in the United States. And

"We feel it is very important to work with farmers to help them improve their farms, not only cosmetically, but also to provide additional habitat for wildlife or buffer zones to national parks."

we're working with our partners in Brazil on guidelines for sugar cane production.

Question:

Do you have any marketing information about impacts on sales at grocery stores of items with the ECO-O.K. logo on them?

Answer:

No, in fact this orange juice opportunity will be the first time where an ECO-O.K. product is in the supermarket, right next to an uncertified product. This should provide us with a lot of valuable information.

Question:

What's your legal agreement with the different countries? Is this a voluntary process? Do you have to worry about getting in problems with the World Trade Organization?

Answer:

The program is entirely voluntary. What's interesting is that most of the farms who come to us to seek certification are already model farms. They would just like to receive recognition for the fact that they are working very hard at improving their local environment.

Question:

Is there a specific methodology for which these farms have to adapt themselves, or a basis that can be modified according to the type of country and size of farm?

Answer:

There is a set of principles, those 9 that I mentioned, from which we've derived generic criteria

which are applied to every crop and every country we work in. Then local conservation and social groups participate in adapting the criteria to the local conditions throughout the region. That process takes about a year. During that process, they develop approximately 250 specific guidelines for agricultural production in that country or region. In the case of bananas, it's a much larger list; in the case of coffee it's shorter. For bananas it's very complex, and farms are evaluated using a point system. So, out of 1,000 possible points, a farm must reach 800 to be certified. And then they must improve their score each year in order to retain certification. It's part of the idea of bringing someone into our program, then helping them to improve through technical exchange, education, and support.

Question:

How can a coffee grower participate. What should he do?

Answer:

Contact the Rainforest Alliance and we will send them a questionnaire that asks about their farm and what kind of management system they have. Based on the information they give us, we compile a group of technicians from our network to visit the farm. We work, where possible, with local partners. These first few farms that we certified in Panama were not done with a Panamanian partner organization, but we're certainly interested in establishing a relationship with someone here. That's something that's important to us,

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because obviously it's cheaper for farmers if they have a local resource they can go to. Also, having a local partner ensures our work is consistent with local values.

Question:

This is really not a question, it's a comment to add to the good work you're doing. The Rainforest Alliance has offices in Costa Rica, and Chris Wille, who is in charge of that office, has one of the best environmental newsletters in the entire American continent (Eco-Exchange/Ambien-Tema). It is sent by e-mail also, I believe. Just to put a plug in for Auburn, last year we won one of the 10 conservation awards that the Rainforest Alliance gives every year. And Chris speaks very, very highly of you.

Question:

Do you know of any organization that is doing this type of certification for ecotourism instead of agricultural products?

Answer:

No, in fact we've been contacted by tour operators working in the Galapagos who are really interested in getting some sort of eco-certification. It's a very complex issue, it has so many facets. It's very difficult to do beyond a local level, because it is so complex. I don't know of anyone who's doing it.

Question:

What is, where is, and how large is the market for certified products?

Answer:

It depends. We believe the market is actually quite large, and very varied, depending on the product. For instance, in shade-grown coffee, the market is predominantly birders in the U.S., who have taken to it with real fervor, as you know. The ABA, Audubon, and Smithsonian are all involved in shade-grown coffee endorsements, and most birders in the U.S. now understand the issue, which is great. But for other products, in particular mainstream products like bananas and orange juice, we think that there is this host of people who have an environmental ethic and who will feel that they have a duty as consumers to encourage environmentalism in production.

Question:

Your response indicates that the market is largely, if not exclusively in the U.S.

Answer:

Yes and no. In Brazil, for instance, our partner group who's working on sugar cane development is not looking at international markets at all. They believe that in Brazil there's enough of an environmental movement, enough of a social consciousness to market these products domestically. So it really depends. And in Costa Rica, ECO-O.K. certified orange juice has been on the market for about a year, with pretty good success. We don't know how that will transfer to the U. S. That remains to be seen.

"For mainstream products like bananas and orange juice, we think that there is this host of people who have an environmental ethic and who will feel that they have a duty as consumers to encourage environmentalism in production."

Question:

The troubling thing, if you will allow me a minor critical comment, is that your answer indicates that you have not done a detailed market analysis.

Answer:

Correct.

Question:

So to a certain extent we're undertaking this, and trust me, I support you, but we're undertaking this on faith and the fact that we feel good by doing it. My concern is that if it crashes, how do we recover? I don't expect an answer for that, but I think that you can see what I'm driving at. I'm just concerned that there has not been a sophisticated market analysis done, so we don't know where it's going. Frankly, while I agree with what you said about the coffee, it's a very, very, narrow market niche. And thanksgiving coffee sells for \$9.50-\$9.95 a bag, which is pretty high for most Americans.

Answer:

They're selling nearly 5,000 units per month, just in mail order products. It is higher than any other single product they've ever sold. Paul Katzeff is a happy man right now.

Question:

He has a very good web site that allows him to market. If I might add a comment here, I was preaching economics all morning, and now let me not preach economics, although I think market analysis has to be done. I really think the most significant

thing this program can do is public relations. It's really a raising of awareness on the part of consumers. It may or may not generate tremendous income for people producing the products, but in the long haul, for the larger goals that we've been discussing here for a day and a half, it's more public relations.

Answer:

One of the interesting things in looking at this as it relates to tourism in Costa Rica. Café Brit is one of the most popular attractions for visitors to Costa Rica. For some reason all these tourists want to go see a coffee farm. Understanding where everyday products are grown is apparently very interesting to a segment of the tourist population. They can learn under what conditions it's grown and who it's grown by. And I agree, the bulk of what we do is consumer education. Helping them to understand that all of these things that they love come to them at an environmental and social price.

Sabrena Rodriguez is a Program Officer with the Rainforest Alliance. Through the Alliance's ECO-O.K. Program, she educates consumers on the impact of agriculture on conservation and local communities. She has helped develop support for shade-grown coffee and agricultural certification, expanding markets and providing new opportunities for certified farmers. Prior to joining the Rainforest Alliance, Ms. Rodriguez conducted ecological research in Latin America, Africa, and Europe. She has an M.S. in conservation biology at the Durrell Institute of Conservation and Ecology, University of Kent, England, and she holds a B.S. in biology from the University of California, Irvine.



Ecotourism in Panama: A Business Perspective

David Ramirez,

EcoTours

Good afternoon. I want to offer an open panel of questions and answers. Basically, Panama has been the country to offer me the most as a product for my business. I have to define clearly that EcoTours of Panama is a business engaged in making money—of taking advantage of circumstances and what the country has to offer. And I'm sure that each person here has an intention. We're here to develop some ideas to help with our intention of protecting the natural areas of Panama. We're here to maintain and sustain the cultural heritage of the country, specifically the indigenous heritage. We were speaking about sustainable development. Ecotourism should be developed as one of the best examples of ecotourism, if it is adequately applied. In the development of this type of enterprise, there should be a balance between a well-conceived business plan and nature. The business must be friendly to nature and have respect for the environment. Man has a right to enjoy nature and nature should in return be respected. The idea is to find a balance. Understand that the environment is a product, serving anyone who wants to experience it. Tourists will gener-

ate economic benefits, producing social stability and many opportunities. It is well known that in Panama the area of ecological interest is not being developed, perhaps because of a lack of facilities, time required to receive bank loans, lack of investors, or simply because of ignorance. What we do know is that to develop these types of activities we need to know of people who wish to be a part of it. Ecotourism developers must learn from the environment, develop sensitivities to what surrounds them, and then find the best relationship between their intention to make money and nature itself.

On the other hand, Panama has been in a very interesting situation during the last 4 years. In this country we have seen excellent hotel growth. It is important that we mention that none of these companies would invest a single penny in this country if there were not adequate, feasible studies. This tells a lot of the wealth that this country offers. There will be a great offer of hotels in the capital, concentrating the visitors and interpreting the knowledge of different zones of culture and nature. And I have seen benefits

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"Panama is definitely the ideal place for development of cultural and natural tourism."

that come from the education of those persons who live in surrounding areas. All these protected areas and areas of ecological interest should be nearer to our new agents outside the capital, to provide new opportunities for lodging in rural areas. These will provide sources of income for other sectors of the country. Panama has a potential as few countries in America. In conclusion, so that you may ask questions, I must say that Panama is definitely the ideal place for development of a cultural and natural tourism which is called Ecotourism. Are there any questions?

Question:

You said that EcoTours is a company that expected to make money, and then you referred to the protection of natural resources. How much has EcoTours invested in return—given back to the environment?

Answer:

This is an excellent question. I can't give you any figures, but I can say we have tried to do this. Also, we have an agreement of mutual cooperation with the Audubon Society. For each tourist, the Smithsonian receives a \$10 donation. And we're constantly training people so that they will be a better-prepared guide, so that all these tourists can receive adequate information. And when any institution asks us for materials, we have tried to accommodate them. I am being sincere. We would like to protect, to serve better, and to return to the forest what the forest gives us. The forest is there

and we want to leave it there. We learned different things from our experience here in Panama. I think that we do have an impact on the land, but the impact is not as strong as long as there are defined areas or zones. Now, what are we giving back to Panama? Knowledge. We are putting Panama on the map. We are showing a country that few people are aware of. I don't want to blame anybody. I'm telling you this based on my personal knowledge. Costa Rica began doing what Panama is doing 15 years ago. I feel that this is my country. I want people to have a better knowledge of the great wealth that this country can offer, but we must do it in a balanced and sustainable manner. It will hurt me a lot if all this effort would destroy something. For instance, in Manatonia, Costa Rica, the monkeys are aggressive. Why? Because the monkeys had access to the tables where the tourists were, and the tourists would feed them. Now the monkeys steal, and if you try to avoid it they simply react. They become aggressive. So, if we're going to do something, let's think it out properly. I think that now the time has come for all of us to join together and not make the mistakes that have been made in other places.

Question:

I asked you this question because in many of these cases the companies such as yours benefit from the natural resource, and in some cases they return something to the ecosystem, but in other cases they degrade the ecosystem and then the govern-

ment has to assume the responsibility to pay for the damages. The company leaves and moves on to another area. So, I think as long as it is a shared responsibility, it can be sustainable.

Answer:

Yes, I think that it is truly sustainable. I think that we should limit the areas to visitors. The forest should have a buffer zone, where the tourists can come—the rest should be maintained intact. And people should respect and should not enter the zones that are off limits. If anyone is to have access it should be done scientifically.

Question:

Based on your experience of Costa Rica, what mistakes have been made there that we could avoid? If we are pioneers in this tourism business in Panama, how can we keep from repeating the mistakes? The massive tourism was uncontrolled originally that's why we had to increase the fee to get into national parks. Originally we charged one U.S. dollar. Now, it costs more than \$15, because the massive influx of people was degrading the area. The people did not have even the slightest idea of what was happening there. Certain species of plants started to be infected with fungi, because the people carried spores from other zones. The mammals, birds, and even certain insects were decreased and the best way we realized to avoid these problems was to limit the entrance of people. How can you do that? We decided to increase the rates, because it gave us the opportunity to have more money to build a better infrastructure; to

give the parks better equipment. I believe here in Panama we should be very, very careful with this, because personally I believe that Panama is more sensitive than Costa Rica. There should be a balance between development of tourism and limits on number of people allowed in.

Answer:

We have talked this over with several people from our office and with a professor from the university who has broad knowledge in biology. They only suggested the number of people and suggested the time limit that they should be there. To be very specific, I don't want to be like Costa Rica. But we must have limits. We have these 200 people who are allowed in the park per day. The purpose is that the impact should be minimum. The question is, well, why not 25 people per day? Twenty-five would cause less impact. But we also have to give the opportunity for the people to have access to this park. What we try to do is to do it as best as possible.

Question:

Does EcoTours have any relationship with the University of Panama; that is, preparing and training technicians in historical tourism and ecotourism? In my region, the University of Panama is training these 2 types of groups.

Answer:

Yes, we are aware of this, and I am very happy that you have motivation in this. Let me just open the door of my company, and offer jobs to all these people.

"I think that now the time has come for all of us to join together and not make the mistakes that have been made in other places."

Question:

To continue with the idea expressed earlier, I think it would be better for you to go to the university and tell them to change their curriculum to meet the needs of the market, because otherwise, you're going to find that a product of the university is not going to be in agreement with your needs.

Answer:

I thank you for your comments. Indeed, my father told me one time that you teach by learning, and you learn by teaching, so I want to take your comments to heart.

Question:

I receive letters from tourists who always want to know where they can go to see Panama other than the City of Panama, because the City has a lot of noise and it is polluted and the food offered on the tours is heavy. And they ask: "Why can't the tours have liquids, juices, water, vegetables, fruit, and fiber instead of chicken with curry and cold mashed potatoes?" My question is this: "What could be done so that you could learn what the tourists like and what they don't like?"

Answer:

Unfortunately, we're not as united as we would like to be, but you're right. What we're doing when we have field tours is order the food and show them the menu--especially the people who are spending a lot of time out of doors. The bird watchers or people that are considered fanatics don't even care if they eat or not. As long as

they have liquids they're content. We should be in agreement to plan things adequately so we can serve the tourist. The problem I feel we have is that Latin Americans like heavy food and we think that everybody is going to eat the same thing and we are mistaken. Europeans don't have lunches and we do; but we don't have breakfast like Americans do. We need to internationalize our mentality to know with whom we are dealing and not change people's habits, or we're going to have tourists that are sick all the time. One of the questions we ask our clients is if they have a special type of restriction with regard to food. We do this to try to take better care of our clients. The tourism business involves 2 things: to have clients that come back because they were satisfied with the service, and to have new clients to join the previously satisfied clients. Thank you very much.

David Ramirez represents EcoTours of Panama. He was born in Costa Rica. He has a master's degree in linguistics and has more than 12 years experience in tourism enterprises in Central America.



The Role of an NGO in Promoting Conservation and Tourism

Osvaldo Jordan,

Project Manager, Panama Audubon Society

Good afternoon to all of you. I will speak about the role of a non-governmental organization (NGO) in promoting conservation of the environment. I have the responsibility of showing you some bird slides. Being a Panama Audubon Society presentation, I think that many persons would not be satisfied if I didn't do so.

In our country we have a great diversity of birds, as you can see. We have some 930 species which vary between very common species such as the blue-gray tanager and the black vulture, and other species that we do not see as frequently because they are restricted to the forest and/or they are not as abundant. I don't want to talk much about individual species, I just want you to have a glimpse of the diversity we have here in Panama.

The Panama Audubon Society began as an organization of birdwatchers. However, we could not escape from the reality that we were losing habitats, so we turned to conservation. We joined Birdlife International's efforts to conserve the Important Bird Areas (IBAs) of the world. One of the things that we saw from the very beginning is that bird con-

servation requires the conservation of biodiversity. The areas that are important for birds are also important for mammals, reptiles, insects, and even for plants. But as I said, the reality which we have faced for years is that natural areas are decreasing, and those left are more fragmented and are increasingly affected by human activities.

In January of 1996, Audubon began the first research of the IBAs in Panama. Panama then became the first country on the continent to start this program that is promoted internationally by Birdlife International. Jane Lyons had the opportunity to talk about the details of this program this morning.

The first phase of the Program had as its main objective to identify sites that could be declared IBAs and to obtain scientific information about these areas. We held a workshop which was attended by representatives from governmental institutions, NGOs, and other institutions involved in bird research. The purpose of the workshop was to define the criteria to select sites, to prepare a list of possible IBAs, and to identify possible sources of informa-

"The Panama Audubon Society began as an organization of birdwatchers. However, we could not escape from the reality that we were losing habitats. So we turned to conservation."