

Parks Can Change a Nation

In 1969, as a young Costa Rican biology student, Alvaro Ugalde went to the United States for an inside view of the National Park System. By 1970 he became the second employee of Costa Rica's newly forming park system. Looking back on this almost 40 year history of park development, Alvaro Ugalde says that the history of Costa Rica can be divided in two distinct eras, before and after the people committed to preserve the country's unique biodiversity for generations to come.

Alvaro Ugalde is considered a founding father of the Costa Rican park system, having served as its national director twice, and as a leading figure in other important conservation organizations. In 1999, he was named an environmental leader of the century by Time Magazine.

I saw the U.S. National Park System up close for several months in 1969, invited to participate in the International Seminar on National Parks and Equivalent Reserves, a program allowing me and about 25 other selected individuals from around the world, to travel to several parks in the United States. We met with park rangers, and biologists, and concessionaries – all sorts of people in the U.S. system.

It's not that I planned to join the park service as a career, because there was no such thing as a park service in Costa Rica at that time. But when I went home, the Costa Rican Congress had passed legislation mandating a park system be built. So I was a volunteer for six months in the first days of creating this system, and then I was hired in 1970 as the second employee of the park service.

My colleague, Mario Boza, the first employee of our park system, also went on this study trip sponsored by the U.S. National Park Service, and it gave us both the vision of a system for managing parks, operating parks, welcoming visitors, and preserving land and nature. I

always think that the United States system was the window through which we saw the bigger picture.

Being biologists ourselves, we knew that protection of our country's biodiversity should be the main purpose for our parks. Our small country – only one third of 1 percent of the world's land mass – is home to 5 percent of all the species on Earth. People didn't even use the word biodiversity at that time, but the many forms of tropical life in our country had been studied for decades. My teachers at the University of Costa Rica were enlightened people who gave us a sense of ecology and evolution. At the same time, though, we were seeing my country being developed very, very, very fast.

So that was our inspiration as we began to convince Costa Ricans of what had to be done to create these parks and preserve what was unique to our country. We were telling the people that we had to keep Costa Rica as Costa Rica, that a denuded country with no forests and no wildlife was not Costa Rica. Creating parks and preserves was what we should do to leave something for the future, for the children, so they would know what the country really was. It was not that hard to spread the message around the country. That tourism, as a further benefit, would come out of that effort was a secondary reason.

The history of Costa Rica could be divided between before the parks and after the parks. The country changed completely a few years after the parks were started. There is no Costa Rican now who doesn't know about conservation, doesn't know about the natural wealth of the country, and there are very few Costa Ricans that do not benefit from conservation efforts. We changed the course of our nation, and changed the economy of the country as we built parks and preserves. We have a new development paradigm, a different country than the one we had 40 years ago.

Before 1970, there were no protected natural areas, and most natural places were under pressure from mining, hunting, and logging, especially in places like the Osa Peninsula, the most beautiful place in the universe! That's how I call it because it is incredibly beautiful and highly biodiverse. Since we started trying to save the Osa, we caught the attention of the world. So now, people come to see the Osa and its economy has nothing to do with mining and logging. It all has to do with nature.

Today, as our system in Costa Rica matures, we still have problems. Inside the parks, hunting is a problem,

and sometimes wild fires. But, the bigger problem is on the outside of the parks. When uncontrolled development occurs in a nearby village, then we see the effects of a lack of governance, poor control, and poor coordination among ministries and other public agencies. It adds up to a bad situation with lots of buildings, water pollution, and lack of sewage treatment. These things are happening very close to some of the parks, and so that's one of the main problems we have now, besides the looming negative effects of climate change.

We didn't know way back that the planet was in trouble. Now, we are not ignorant anymore. The collective behavior of humanity has now provoked a collective source of dangers for the planet: global warming, the deteriorating biosphere, disappearing species, and melting poles, among other indicators.

In my country, we have flooding more often and longer periods of dry climate. The weather changes are opening up drier zones and some of the species of the lowland ecosystems are now drifting up the mountains. Toucans are living in places where they weren't before; same thing with ants. These changes ripple through the web of life. We attempt to protect the biodiversity in the parks, but the impact is all over the nation. In Costa Rica we have done much to set aside protected areas, but they are still just islands surrounded by bigger environmental problems.

We cannot postpone our attention to these threats to the planet anymore; we cannot afford that luxury. Postponing action against global warming would mean that we don't care about what kind of planet and what kind of life conditions we will leave to our children. But, as an optimist, I strongly believe that if we all do something—individuals, families, communities and governments—and start now, the planet will respond to our care and we will prevail.

— Alvaro Ugalde
President

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La Montaña Sagrada

Dawn broke clear and bright. Angled rays of early sunlight revealed verdantly forested mountains free of conspicuous human detail. Like secrets closely held, the previous evening's veiling mantle of mist had obscured all that was this morning, uncloaked and fully resplendent. I had awoken to my first sight of La Montaña Sagrada, the Sacred Mountain of one of Costa Rica's lesser known Protected Areas: Parque Nacional del Agua Juan Castro Blanco.

As a guest of Nectandra Institute's president, Alvaro Ugalde, we had set out on a multi-day circumnavigation of Parque del Agua. Alvaro's explicit mission was to ascertain the current status of the Park and its immediate environs. What percentage of the designated Park lands had been permanently acquired by the National government? How many still privately owned "fincas" remained within the Park's 145 square kilometer boundary? How successful were local community leaders in acquiring ecologically sensitive properties adjacent to Park boundaries?

My mission was of considerably less weight than Alvaro's. I was simply to garner a broad general understanding of the Park's current 'signature' within the National Park System, to grasp the significance of preserving the integrity of bordering properties, and to gain an appreciation for the challenges facing the many defenders of this ecologically sensitive area. Hopefully my newly acquired knowledge would enable me to offer constructive guidance on a variety of specific issues: a regionally-unifying identification system, environmental educational outreach programs and a coordinated agenda of international promotion and public relations.

Established in 1992, Juan Castro Blanco National Park covers a zone of rain and cloud forest in north central Costa Rica, approximately 100 miles from San José. Headwaters of six rivers, the Aguas Zarcas, Platanar, Toro, Tres Amigos, La Balsa and La Vieja shelter an astonishing two percent of the world's biodiversity. Within the Park at least fifty-seven species of mammal have been recorded, among them are tapirs, ocelots, sloths, howler monkeys, and twenty-two species of bats. Over two hundred thirty-three species of birds including Costa Rica's national bird, the clay-colored robin and endangered species such as quetzals, curassows, black guans and red brocket deer can also be found in the Montaña Sagrada.



Scenes from Parque Nacional del Agua Juan Castro Blanco. Aerial support provided by LightHawk.

Notwithstanding the undeniable majesty of the Park lands, I was additionally happily surprised by the high level of the local commitment to conservation that was displayed throughout the trip. Working collaboratively, landowners, institutions, individuals, communities and non-profits are together seeking common solutions for long-term nondestructive uses of shared resources. The recurrent theme linking numerous endeavors was the widely accepted recognition that the health of the communities is intrinsically linked to their lands and waters. Although this may perhaps sound simple, it is a sophisticated realization and one that is not usually found to be regionally embraced, certainly not to the extent that I witnessed. Indeed, so impressive was the level of community participation and resourceful the initiatives that had been put into practice that to collectively refer to these dedicated advocates as *conservation entrepreneurs* would not be hyperbole.

From Nectandra Cloud Forest Preserve's stunningly beautiful gardens, which so gladden my heart at every visit, to San José de la Montaña where I first glimpsed La Montaña Sagrada, to the high, cloud-shrouded peaks of MINAE's Biological station at Volcan Viejo, I experienced a journey of extraordinary impressiveness. As a life-long conservationist and twenty-five-year multi-time visitor to Costa Rica, this brief introduction to a hereto now (to me) unfamiliar sector of the country was to be re-captivated by the bounteous natural heritage of this most singular of nations.

It is my sincere hope that through the anticipation of both current as well as future needs for Parque Nacional del Agua, the maintenance and preservation of still-healthy ecosystems and the corresponding conservation of biodiversity, that we shall be successful in preserving La Montaña Sagrada for the long-term well-being of individuals and communities, human and otherwise.

— Charlene deJori

Charlene deJori has over 30 years of international, hands on, conservation experience. From helping establish Mahonia Na Dari marine research station in Papua, New Guinea to partnering in the establishment of Santuario Silvestre de Osa (Osa Wildlife Sanctuary) in Costa Rica, to 16 years of publishing Ocean Realm, an internationally acclaimed marine natural history magazine, Charlene has extensive first hand experience in dealing with conservation organizations, wildlife specialists, scientists, local and international governmental officials, and local communities.

News & Activities, January to June 2011

February – Nectandra Institute made its seventh [eco-loan](#) to help finance the purchase and protection of important watershed lands. The loan was made to the water management association of San Luis, a small, [Balsa River Watershed](#) community of 500 residents. San Luis' newly-acquired property is a former two-acre cow pasture situated immediately uphill from one of the town's main water sources. Further uphill from the property, potato crops are grown using pesticides and herbicides that can easily be washed down slope by surface runoff towards the freshwater spring. The community of San Luis will increase protection for the spring by planting native species trees, as well as allowing vegetation to grow back naturally. The resulting secondary forest will serve as a natural barrier between the [spring and potential, uphill contamination sources](#).

For the third consecutive year, the volunteer-based aviation organization [LightHawk](#) donated an aerial survey flight to help support Nectandra Institute's watershed protection work. The weather was surprisingly clear on the day of the flight, allowing us to take photographs of the various properties that have been purchased with eco-loan assistance, as well as some difficult-to-obtain pictures of Juan Castro Blanco/Water National Park, which sits next to the Balsa River Watershed. The [photos obtained](#) will be useful in many ways, including as part of educational presentations, to help inform forest restoration efforts, and as part of a campaign to raise funds for the National Park.

March – Nectandra Institute coordinated a visit to Costa Rica by [Pedro Arrojo](#), physicist and economics professor at University of Zaragoza in Spain, and leading advocate for sustainable water use and management. Considered the founder of Europe's "New Culture of Water" movement, Arrojo works to push for a holistic management of water and its associated ecosystems. He reasons that a river is more than just a channel with H₂O flowing through it; it is an entire ecosystem that supports a diversity of living organisms, providing an array of very real, although not always so obvious, services to humanity that are high in economic, social, cultural, and environmental value. During his visit to Costa Rica, Dr. Arrojo made memorable presentations to high-ranking government officials, including the country's vice-president, as well as to local community leaders working with Nectandra Institute on watershed protection initiatives.

April – Nectandra Institute made its eighth eco-loan. The communities of Angeles de Tapezco, La Brisa, and La Legua used the loan funds together with financial resources of their own to purchase a [20-acre property](#) in the upper reaches of the Balsa River Watershed, near another similar-sized property purchased by the same communities a few months earlier. Angeles de Tapezco, La Brisa, and La Legua source their drinking water from this part of the watershed. Residents have been enthusiastically engaged in the various activities that are considered the "eco-interest payments" on the loan from Nectandra. These activities range from placing signs on the property to inform passers-by that it is protected and undergoing restoration, collecting wild seeds and spreading them on restoration plots, transplanting seedlings from under mature trees to areas on the property where they will experience less competition from taller plants or trees and thus experience a higher rate of survival, and planting live cuttings of native species trees on restoration plots as a strategy complementary to the aforementioned. Eco-interest

work is not limited only to assisting with the reforestation on the property; it also includes activities aimed at educating the general public about the importance of protecting and restoring the areas' forests. One such activity was an "ecological mass", a creative awareness-building initiative organized by the volunteer board of the towns' joint water management association. The event took place on the property a few days after its purchase. Around 150 residents made the 3-kilometer trek from town to spend a Sunday morning listening to Padre Alexander's inspired sermon stressing the importance of working to protect nature's gifts for the benefit of future generations and congratulating those gathered there that day for becoming stewards of the newly protected property. The setting was unconventional for a Sunday mass; the congregation was surrounded by trees, birds and other animals, and the shrouding mist that is typical of tropical cloud forests. For many, it was the first time visiting the special place higher up on the watershed, where the water that spills out of their tap first percolates into the ground.

May – The first episode of "Nectandra presents..." aired on a local cable channel broadcast to many of our partner communities in the Balsa River watershed. The 1-hour long monthly program will feature content related to Nectandra Institute's work with our partner communities, including restoration work on properties purchased with eco-loan financing, [stream water quality monitoring by local women](#), and water policy advocacy work by Liga CUENCA, the federation of Balsa River Watershed water management associations founded with support from Nectandra.

June – [AFAMAAR](#), one of Nectandra Institute's eco-loan borrowers made a loan principal payment, marking more than \$50,000 in total repayments by all borrowers since Nectandra launched the financing program in 2007. Borrowers have continued making their quarterly principal payments 100% on time knowing that these funds are re-used to make more loans so that other communities can buy, restore, and protect additional land in and around the watershed.

Nectandra on Public Television Award-winning travel writer and journalist Richard Bangs' recent visit to Nectandra Cloud Forest Garden and Preserve is featured in the show [Richard Bangs' Adventures with Purpose: Costa Rica, Quest for Pura Vida](#), scheduled for a September 2011 release by American Public Television. Please check with your local public television stations for specific viewing time in your local area.

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