

## *(INTRODUCTION)*

### **Paradise In Peril:**

**About 600 miles off-shore, are the islands that Charles Darwin made famous with *The Origin of Species*. The Galapagos Islands are a living testament to the evolutionary process. Giant turtles, blue footed boobies and marine iguanas are just some of the strange and beautiful species that call the Galapagos home. For more than thirty years volunteers have helped preserve the Galapagos' "living experiment of evolution."**

At first glance, nothing appears to be wrong with this island paradise. A land iguana lazily strolls across the barren landscape of Baltra Island, uninterested in the scores of yet another group of curious tourists. Crystal clear water, in vivid shades of blue and turquoise, gently laps the rocky shore. Sea lions soak up the sun's rays along the docks, sleeping without fear as visitors step around them. If anything, the animal and human world appear to be in perfect harmony. But beneath the facade of harmonious cohabitation, the Galapagos is under assault.

Introduced species destroy the habitat of the islands' original occupants, over fishing threatens the park's marine reserve and a growing number of tourists and residents are literally loving the islands to death.

Since 1964, the Charles Darwin Research Station has dedicated itself to the conservation of the Galapagos. For many of those years, Peace Corps volunteers have worked in conjunction with the Station to help address the islands' changing needs.

*(Story #1)*

### **COMMITMENT TO SERVICE:**

**For more than thirty years, Peace Corps volunteers have worked with the Charles Darwin Research Station to help address some of the islands most pressing problems.**

Whether its agriculture volunteers improving the crop yield of local farmers or environmental educators encouraging conservation, the Peace Corps fills an important niche within the Charles Darwin Research Station.

Although the Station's staff consists of scientists, conservationists and administrative personnel, an important part of the its overall functioning depends upon the work of volunteers.

"Galapagos has the good fortune to be a place where people want to help," Charles Darwin Research Station Director, Robert Bensted-Smith says.

"We have always benefited from the participation of volunteers."

Volunteers from all over the world offer their skills, but the Station's selection process is highly competitive. The station accepts few

undergraduate students and looks for volunteers who have real skills to offer.

Peace Corps volunteers are a good fit with the Station. The Peace Corps makes the Station's job easier by supplying volunteers who have been carefully selected. In addition, volunteers receive pre-service language and technical training.

"The Peace Corps organization has done a lot of the preparatory work for us," Bensted-Smith says. "So we know that the people are coming into this with their eyes open and coming into it properly prepared. That's a pretty good advantage for us."

In fact, many of the Peace Corps volunteers working for the Station are exceptional volunteers. They are fluent in Spanish and possess the technical and cultural skills necessary to enter the community and begin work immediately.

"Many of them have really been able to take a lot of responsibility," Bensted-Smith says. "We're very satisfied by the work that's been done by Peace Corps volunteers."

When selecting volunteers, Peace Corps looks for ways in which it can meet the Station's needs. Peace Corps has helped facilitate the arrival of certain specialized volunteers, like Gayle Davis-Merlen and Howard and Heidi Snell, but that doesn't mean there is no room for generalists.

With population increases and over fishing, a greater emphasis is needed on education. Michelle and Ryan Finchum work as environmental educators

teaching the residents of San Cristobal about the dangers of introduced species and the importance of conservation.

*(Story #2)*

## **GAYLE DAVIS: AT HOME IN THE GALAPAGOS**

When Gayle Davis-Merlen set out to pursue a Master's degree in zoology from the University of Wisconsin in 1974, she never realized that her life was in for a serious change.

At the time, Gayle was working as the registrar at the university's zoological museum. She decided to combine the skills from her undergraduate degrees in art and zoology along with her museum experience to create a zoological exhibit for her Master's thesis.

Then an incredible opportunity arose. Her advisor told her the Smithsonian Institute needed someone to develop exhibits for an interpretation center at the Charles Darwin Research Station in the Galapagos. The project was a joint partnership between the Smithsonian and the Peace Corps. She didn't hesitate on the offer.

"It was a very major job to undertake and that worried me," Gayle says.

"But it also was a good opportunity – to see another part of the world, to do my Master's project and to give myself a challenge."

By September of 1976, Gayle was in the Galapagos. The hot and arid island with its candelabra cactuses reminded her of the southwestern desert, one of her favorite parts of the United States. She felt immediately at home. Prior to Gayle's arrival, the Station offered very few permanent educational displays for tourists. Gayle set out upon creating content that would give tourists a better understanding of the islands.

After establishing a plan of action, Gayle began work on the different displays – geology, biology, evolution, introduced species and conservation. The creation of the exhibit was tedious. Unlike today's exhibits developed on computer, Gayle had to create everything by hand.

During the three years that Gayle worked on the interpretation center, she received a lesson she didn't expect to learn.

“Coming down here really did have a very profound impact on me,” Gayle says. “It just made me realize how much I really wanted to be surrounded by nature and involved in conservation work.”

She never returned to complete her Masters.

For Gayle, the essence of being a zoologist isn't in earning a title and sitting in front of a computer doing research. In the Galapagos, she had the rare – if not only opportunity -- to live and interact with nature.

She decided that it was much more fulfilling to live and work in this environment than to pursue a title far away from the place she once called home. Gayle was the librarian for the Charles Darwin Research Station. She died during the creation of this publication.

*PHOTO CAPTION:*

Gayle's exhibits take the visitor from the geological formation of the island, to the station's efforts with conservation. Gayle took pleasure in watching backpackers, notebook in hand, copying down her words-- words she had written some twenty-five years ago.

*(Story #3)*

**Howard and Heidi Snell:  
Helping return the islands to their natural splendor**

Howard Snell remembers his walk across Santa Cruz Island some twenty years ago. The island once teeming with land iguanas was now only populated with their corpses. Packs of ferrel dogs reduced the island's population, which once numbered in the thousands, to around a hundred. "You really realize then that extinction is a real thing – that species can go extinct in a very short time and its all because of [human] activities," Howard, the Charles Darwin Research Center's program leader of vertebrate ecology and a professor of biology at the University of New Mexico at Albuquerque, said.

Today, thanks to a program of captive breeding and rearing created by Howard and his wife, Heidi, more than 800 land iguanas have been repatriated to the most affected islands of Santa Cruz, Baltra and Isabela.

The journey back from the brink of extinction was a long one. In 1976, the Research Station and the Galapagos National Park Service, realizing the threat to the iguanas, captured them to prevent their extinction. Now, the problem was how to make their numbers grow? Howard and Heidi Snell were invited to head the program to repopulate the threatened land iguanas. They came as Peace Corps volunteers in 1977 as part of a partnership with the Smithsonian Institute.

“Our role was to figure out how to encourage them to breed in captivity, how to incubate the eggs, how to raise them and at what point to introduce them,” Howard says.

The Snells immediately encountered difficulties. They created corrals for the iguanas to breed, but found that the highly territorial males injured and killed rivals when placed together in the confined area. Once the eggs were laid, the Snells had to dig them up and place them in an incubator. Fungus growth and the lack of a dependable power source made incubating the eggs difficult. Once the eggs hatched the Snells had to feed the baby iguanas. Attempts with fruits, meat, eggs and fish failed until the the land iguanas’ favorite dishes were discovered: grasshoppers, spiders and yellow flowers from plants.

Once the program built up momentum, the Snells needed a suitable site away from the overcrowded rearing center where the iguanas could breed free of dogs. Howard found a deserted island, but the islands barren landscape was unsuitable for nesting. Undaunted, the Snells and 10

volunteers hauled 100 cubic meters of dirt five kilometers to create an appropriate nesting area.

“It really was a lot of work,” Howard says. “The iguanas breed like crazy at that site. It’s now very rewarding but at the time it was very tough.”

While the Snells looked for ways to improve breeding and rearing the land iguanas, the National Park instituted a very successful campaign to eliminate ferrel dogs. The iguanas could only be repopulated after their chief predator was removed.

The iguanas remain in the breeding center until they are between 4 and 5 years old, giving them a fighting chance at survival when they are returned to their natural environment

The Snells finished their Peace Corps service in 1979. Since their time as volunteers, Howard and Heidi have received their doctorates and continue to work at the research station.

*PHOTO CAPTIONS:*

Howard is currently the program leader of vertebrate ecology and is responsible for rearing and reintroducing animals as diverse as marine birds to giant tortoises back into the environment.

Heidi, a professional photographer and scientific consultant to the Charles Darwin Resaearch Station, recently provided the artwork and design for a series of Ecuadorian postage stamps featuring the wildlife of the Galapagos.



*(Story #4)*

**Ryan and Michelle Finchum:  
Creating awareness of the islands' riches**

When Michelle Finchum takes her environmental education clubs to the white sandy beaches of San Cristobal Island, more often than not she knows what will happen.

As the children frolic in the water, an inevitable visitor will appear in the form of a baby sea lion. Like a timid child feeling left out of the fun, the pup sticks its head out of the water and stares longingly at the children.

A moment passes before the children notice. Their eyes connect with the pup and they shriek with excitement. Satisfied by the recognition, the pup happily swims off.

"It's this interspecies interaction that you just don't find," Ryan Finchum, Michelle's husband says. "It's amazing."

Surprisingly, these close encounters are not as common as might be expected on this living island of evolution. Having never set foot off of San Cristobal, many of the island's children take for granted the special environment in which they live. Few have visited beaches within walking distance of their homes and even less have stopped by the island's three million-dollar interpretation center built in 1998.

The Finchums work through the island's Environmental Education Center (CEA). The center helps build a bridge between the Charles Darwin Research Station and the community by informing the public of the station's work and encouraging conservation.

The Finchums are at the forefront of this campaign.

They work with local schools strengthening the education received by students about the environment and the Galapagos. When the school day is done, the center becomes the meeting place for a series of clubs created by the couple.

Ryan and Michelle develop activities to educate about the marine reserve, the effect of introduced species on the environment and the human influence on the Galapagos.

Although the educational themes vary from day to day, one constant is the couple's commitment to experiential learning. They take the classroom outside the center by combining field trips with the content of their lessons. "I'm a firm believer in going out and seeing and doing," Ryan says. "The message sticks much more."

For Claudio Terán, the coordinator of education and communication at the CEA, the couples' key benefit is that they show there is a world outside of the islands.

This is especially important because many of San Cristobal's residents see conservation as something only they are required to practice.

Ryan and Michelle demonstrate that conservation isn't just the duty of Galapageños but of all the citizens of the world.

In this spirit, Ryan and Michelle created a program for their club students called Young Scientists On Board. They arranged a partnership with travel agencies, in order for students to take part in the tours. By hearing guides and participating in the tour like tourists, the children get a sense that they really live in someplace special.

"We can teach about environmental education all we want, but if they can't appreciate the natural beauty that tourists actually see, how will they want to protect it?" Michelle says.

*(Story #5)*

**CARLOS VALLE:  
Peace Corps' legacy**

Ryan and Michelle Finchum know that the results of teaching environmental education aren't always immediately visible.

As educators, they plant seeds of knowledge with the hopes that over time the spirit of conservation will grow within their students.

If there is any doubt that some of these seeds take root and grow one only has to look at Carlos Valle.

Carlos is the Galapagos Coordinator for the World Wildlife Fund (WWF) – the branch of the WWF that supports conservation in the Galapagos.

If it wasn't for a Peace Corps volunteer spurring his interest in the Galapagos, however, Valle may not be where he is today.

“One of my first inclinations towards conservation came from a Peace Corps Volunteer,” Carlos says.

Carlos, who was born and raised on Santa Cruz, attended high school at Colegio Galapagos in the early 1970s. His science and English professor at the time was Steve Bootman, a Peace Corps volunteer.

Apart from being North American, Steve was different from Carlos' other professors. He took his science classes outside the confines of the classroom.

“It's what we would call the class outside of the classroom,” Carlos says. Carlos remembers walks along the shore where Steve explained the interaction between the different plant and animal species. He warned of man's ability to disrupt this delicate balance and stressed conservation. Surprisingly, very few of Carlos' professors taught outside of the classroom.

Carlos, inspired by a world that he had never given much consideration to before, received an undergraduate degree in biology. After working as a biologist and a naturalist guide at the Charles Darwin Research Station, Carlos eventually went on to receive a doctorate in environmental ecology in the United States. For the past two years he has worked as the Galapagos Coordinator for the World Wildlife Fund.

Carlos, taking into account his own experience, believes the work of volunteers is important to the Galapagos.

“Education is a a fundamental and crucial component for the future conservation of Galapagos.”

Carlos hopes that the insight from future Peace Corps volunteers will rub off on their students -- like it did with him some thirty years ago.