

Dear Friends of the Galapagos:

Since my last letter to you I have spent nearly two months in Ecuador, mainly on the Galapagos Islands. For two weeks at the Darwin Station I was part of a team reviewing current work and planning programs for 1984-85. Let me again transmit to you some important news from Galapagos as well as some of my personal impressions.

Both the National Park Service and the Darwin Station have new directors. Miguel Cifuentes, Park Superintendent until 1980, has returned after taking additional training and getting a Masters degree in Costa Rica. Gunther Reck, the new Darwin Station Director, also knows Galapagos well, having worked for several years in a number of marine projects in the islands. He made an important study of the bacalao and lobster fishery industry which was the basis for his Ph.D. Friedemann Koster, who retired as Director January 1984, remains close to the Station, working with a film crew producing an up-to-date TV series on the Galapagos environment. We are proud to have these excellent people working for conservation in these Enchanted Isles.

In April I will take up the post of head of the Conservation Division of the World Wildlife Fund International, one of the traditional supporters of conservation in the Galapagos. As it would be inappropriate for me to represent both WWF and the Darwin Foundation, I have asked the Darwin Foundation General Assembly to accept my resignation. We have been very fortunate to find a successor, who is well known to everyone who is involved in Galapagos and Latin American conservation: Craig MacFarland. Craig was a Darwin Station director and did much of the basic research that led to the saving of the giant tortoises. For six years he has headed the Wildlands and Watershed Project at CATIE. Located in Costa Rica this international center is devoted to promoting the wise use of natural resources in Mesoamerica. Craig will formally assume the CDF Presidency at our next meeting in Quito.

The most important Galapagos event in 1983 was unplanned and unforeseen. The first 3 months of the year--normally a warm, wet season--lasted 3 months longer than usual and was exceptionally warm and rainy. This extraordinary "El Niño" phenomenon is the subject of a number of articles in the latest issue of Noticias de Galapagos. Rainfall was ten times that of an average year, and sea temperatures rose to 86°F from the normal 77°F. The resultant extreme drop of nutrient concentrations in the sea water caused severe losses in all animal species that depend, directly or indirectly, on marine algal productivity. Sea lions, fur seals, marine iguanas, penguins, cormorants, and all other sea birds, as well as corals, sea urchins and many other marine animals died in large numbers or migrated in search of food. Sea birds--particularly swallow-tailed gulls, boobies and albatrosses--disappeared completely from the archipelago. They migrated to other

seas, and only began returning in reduced numbers in July/August. The situation on the islands themselves, however, was quite different (though no less dramatic). Plants grew and proliferated luxuriantly and animals profited from this unusual production. Darwin finches multiplied and land iguanas could be seen sitting in green pastures, which must have seemed a paradise to them. What was a catastrophe for marine animals provided a veritable "land of milk and honey" for most of the land animals.

Though we have not witnessed anything like this before, such "El Niño" years must have occurred many times, but at great intervals. The deep erosion channels on dry islands, for example, give evidence of "El Niño" events in past centuries. This means, of course, that all present Galapagos species have lived through such years many times before. Although many individuals may suffer and die, those species that are well adapted to such events will survive--unless their populations have been reduced to such low numbers that they cannot survive such a natural "bottleneck" situation. Consider what would have happened if an "El Niño" year had come in the 1940's when fur seals were severely reduced in numbers because of hunting by man: the Galapagos fur seal quite possibly would have become extinct. Thanks to the conservation efforts in the islands, however, the fur seal populations have recovered over the last twenty years and survived last year's El Niño.

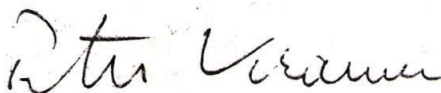
For the Galapagos visitor who only experiences the islands as being predominantly dry, the effects of "El Niño" are overwhelming: endless thunderstorms, huge fresh-water lakes in the low and flat areas, and torrential rivers on the flanks of the volcanoes. At times tremendous waterfalls lasted for weeks!

The unusual weather conditions made conservation work more difficult, but the results are particularly important and interesting. For example, on Floreana a colony of the endangered dark-rumped petrel was successfully protected from predatory black rats through carefully placed poisoned bait. For the first time since their introduction, rats did not destroy the petrel eggs or young, but the strong rains destroyed some burrows where the petrels breed. Work is continuing with the endangered petrels and other colonies will be included in the program if funds permit.

Another important success can be recorded for land iguanas when many young iguanas, bred under protected conditions at the Darwin Station, were "repatriated" to their islands of origin. A number of the reintroduced individuals were observed many months later and apparently had adapted well to their natural environment in spite of the presence of feral cats.

We were able to carry out these and other conservation activities on Galapagos thanks to your contributions, for which I would like to thank you in the name of the Charles Darwin Foundation. Please continue to support this work by giving to the Smithsonian Institution or the World Wildlife Fund or directly to the Charles Darwin Foundation or the Charles Darwin Research Station. We cannot survive without your generous assistance.

Sincerely yours,



Peter Kramer
President