

## CHANGE OF EDITORSHIP FOR NOTICIAS

Future issues of NOTICIAS DE GALAPAGOS will be prepared under the editorship of Dr. Thomas H. Fritts, Department of Biology, University of New Mexico, Albuquerque, New Mexico 87131, U.S.A. Correspondence relating to submission of articles, photographs and news items should be sent to the New Mexico address. Until further notice, donations from CDF supporters may continue to be sent to G.T. Corley Smith at Greensted Hall, Ongar, Essex, CM5 9LD, England.

\* \* \* \* \*

## LOOKING BACK

Some personal recollections and reflexions on two decades of service with the Charles Darwin Foundation for the Galapagos Islands

by

*G.T. Corley Smith*

When I arrived in Quito in 1962, I did not know that either the Galapagos Islands or the Charles Darwin Foundation (CDF) existed, an ignorance I shared with most of the rest of humanity. Because of Darwin, a limited number of scientists had heard of the archipelago but even they were mostly unaware that it formed part of the Republic of Ecuador.

In those days it was difficult to visit the islands but early in 1964 the Galapagos International Scientific Project and the United States Embassy in Quito arranged transport to enable a number of Ecuadorean and foreign scientists and personalities to attend the official inauguration of the Charles Darwin Research Station (CDRS) on Santa Cruz Island. There was not much of a station at that date and no building big enough to accommodate the party, so we met outdoors among the cactus. The dignitaries, in jackets and ties, had chairs and sat under a scanty canvas canopy, while the less formally attired scientists received the full benefit of the scorching equatorial sun. Later that year, Prince Philip invited Aubrey Buxton and myself to accompany him on a short tour of the islands. All three of us became "hooked" and ever since have remained devoted defenders of the Galapagos. One immediate result was that Aubrey (now Lord) Buxton sent a crack camera team (Alan and Joan Root) to make a remarkable film for Anglia Television, in which Prince Philip spoke the commentary. This gave millions of people all over the world their first introduction to the Galapagos.



Joan Root making friends with the Galapagos Mockingbirds while her husband was making his famous 1966 television film "The Enchanted Isles"  
*Photographed by Alan Root*

My initial involvement in Galapagos conservation had little to do with the Charles Darwin Foundation as such. It had no representative in Quito in those days. I did visit the station and knew its successive directors but, during my five years in Ecuador, the only correspondence I had with Jean Dorst, the CDF's President, was on the subject of a high altitude Andean hummingbird in which we were both interested. It was in my capacity as British Ambassador that I became involved when I was requested by the Ecuadorean Government to arrange with our Department of Overseas Development in London to send a small expert mission to draw up a plan for the development of the proposed Galapagos National Park. I presented the report (by Ian Grimwood and David Snow) to President Yerovi Indaburu and for the rest of my service in Ecuador discussed with the authorities how best the plan might be implemented. Among its many recommendations were proposals that a National Park Service should be established; that the extent and boundaries of the Park should be clearly and speedily defined; that a modest marine zone should be included in the Park; and that tours should be organized by ship with the visitors sleeping on board. Today all this seems obvious. It was not so in 1966. There were many difficulties including the fears of fishermen and farmers that their interests would be harmed. The idea of wildlife conservation was novel and there was great scepticism about the possibility of developing a tourist trade, as communications with Galapagos were infrequent, irregular and primitive. But from the beginning it was recognized that there could be no long-term prospect for tourism without rigorous conservation of the islands' only true asset — the unique wildlife which alone would attract visitors from the four corners of the earth.

It was largely due to chance that I joined the Darwin Foundation. Shortly after my retirement in 1967, its executive council happened to be meeting in Charles Darwin's old home, Down House, in Kent, not far from where I was staying. I was invited to give its members an account of my recent discussions with the Ecuadorean authorities. I expected to spend an hour with them and had not the remotest suspicion that I was condemning myself to twenty years hard labour as Council member, Secretary General and editor of *Noticias*.

Looking back across these years, I realize with regret that so much of the time and energy of the Foundation's council used to be spent on raising funds, a task for which it was ill-adapted as its members were mostly scientists and conservationists. There have been so many desperate financial crises that they have by this time become one huge blur in my mind. The things that stand out in my memory are very different. I do not have the space, nor is this the moment, to write a history of the Darwin Foundation. I can only select a few examples from a vast store of memories and this selection, like my views, is bound to be purely personal.



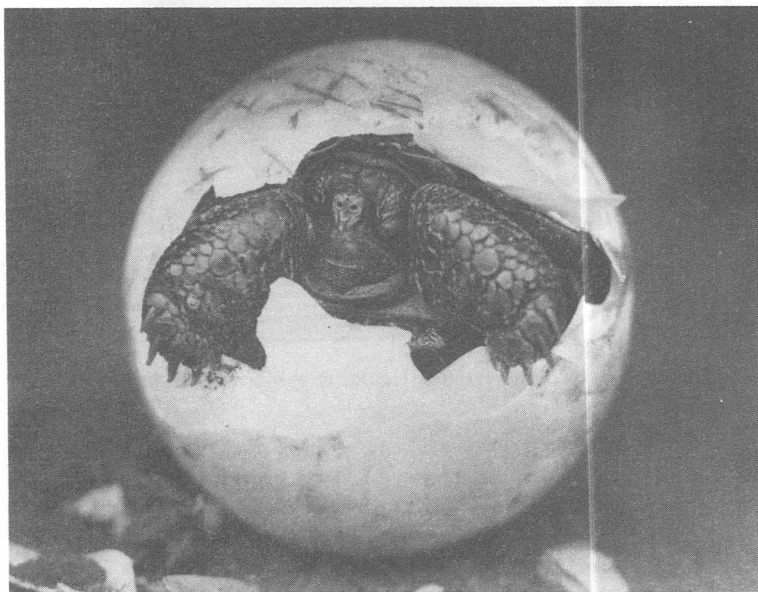
Left to right:  
Roger Perry, CDRS Director (1964-70), Miguel Castro, the first Galapagos Conservation Officer,  
and Eric Shipton, mountaineer and explorer

*Photo by Sven Gillsäter*

One morning I received a postcard from Mike Harris at the CDRS with the laconic message that a clutch of Española (Hood Island) tortoises had hatched in the station's incubator. This was a great moment. The founders of the CDF hoped to halt the long-term degradation of the Galapagos but I doubt whether any of them believed that they could actually reverse the tide. Yet that was what this news implied. For half a century or more, the dozen elderly survivors of the Española race (*Geochelone elephantopus hoodensis*) had failed to breed, perhaps partly from malnutrition but more probably because they were too widely scattered to meet: so the race was doomed to extinction. In 1965, Roger Perry took as many of these tortoises as he could find to the CDRS and kept them in corrals: there they bred. By trial and error, he and his successors developed methods of hatching, rearing and repatriating young *hoodensis* to their ancestral island. As a result, the tortoise population of Española today consists entirely of captive-bred youngsters and, although I do not enjoy the life expectation of a giant tortoise, I still hope that I may yet receive another postcard telling me that these products of the Darwin Station's captive breeding experiment have produced young of their own in the wild. This will be a landmark in the history of conservation; the only other case known to me being the Arabian Oryx, whose wild population today is entirely the result of captive breeding.

Captive breeding was only one part of the Española success story. It was also necessary to restore the tortoises' habitat. David Snow, CDRS Director 1962-64, reported gloomily that "only one tortoise was found on Hood (Española) in the course of searches by three men for two days. The vegetation has been terribly ravaged by goats; when the tortoise was found it was feeding in company and in competition with 15 goats." At that time, the elimination of goats on such a rugged island was considered impossible. But after years of struggle success was eventually achieved. The vegetation has since recovered and now provides food for the young repatriated tortoises. One of my happiest memories is the award of medals to the team of hardy hunters who finally cleared the island of this introduced species, which was destroying Española's unique ecosystem.

The rescue of the Española tortoise is no doubt the most spectacular of the breeding successes of the Darwin Station and the Galapagos National Park Service (GNPS) but it is only one of many. All the races of giant tortoise existing when the CDF was established now seem safe for posterity with the exception of "Lonesome George", the sole survivor of the Pinta Island race. All the King's horses and all the King's men, not to mention all the skills of the scientists, could not enable him to continue his dynasty without female assistance. The success with breeding, rearing and repatriating tortoises is now being repeated with endangered populations of land iguanas.



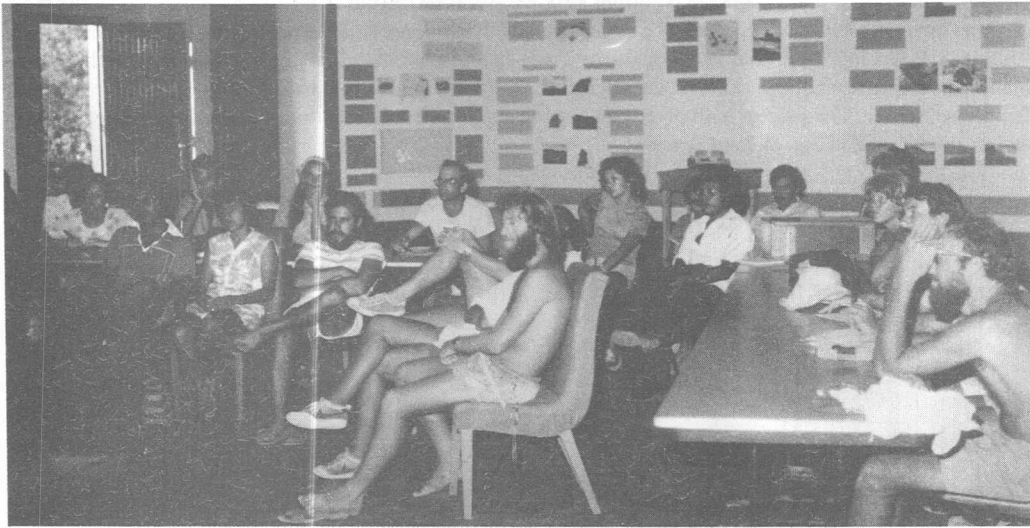
Española tortoise emerging from its egg at the Darwin Captive Breeding Center.

Photo by Andy Wilson

The establishment of the purely Ecuadorean "Galapagos National Park Service" in 1968 and the appointment of a Park Superintendent in 1972, marked another decisive step in the history of the islands. By that time an organized tourist traffic was developing and it was clear that henceforward control should be visibly in the hands of the sovereign power, as such responsibility was inappropriate to an international scientific body such as the Darwin Foundation, however useful it might continue to be in an advisory capacity. That the two organizations have worked side by side is a tribute to all concerned and has been of critical importance to the promotion of Galapagos conservation. With the organization of the GNPS, it became possible to define firmly the limits of human settlement, leaving 97% of the land area of the archipelago and 90% of its coastlines as National Park, entirely free from residents, private property or commercial development. It was not until 1986 that a marine resources reserve was established but, when this was finally decreed, it covered not the one kilometre coastal band originally requested by the CDF but the entire Galapagos internal waters of 80,000 square kilometres.

A moment I recall vividly was when Eugénia del Pino, a lecturer in the Catholic University of Quito, congratulated Peter Kramer and the CDF Council on their farsighted policy of instituting scholarships to enable Ecuadorean students to work at the Research Station, and then gently explained why this scheme was neither good enough nor big enough. Things have changed since then. Additional resources have somehow been found and education has become one of the main concerns of the CDRS. If I had to choose a single symbol to illustrate change in the Galapagos in the last quarter of a century, it would be a young Ecuadorean student with a back-pack almost as big as herself, striding off into the wilderness on a scientific mission.

This is the twenty-fourth and last issue of *Notícias* that I shall edit. My worst chore has been compiling the list of visitors and events at the Darwin Station, which is probably as big a bore for the reader as for the editor. But do give it a quick glance. At least it shows what a beehive of activity the CDRS has become and how Ecuadorean youth as well as international science is making use of this extraordinary institution. Unbelievable twenty years ago!



Seminar in the Van Straelen (lecture & exhibition) Hall, CDRS

Conservation and education are only two of the CDF's preoccupations. Another is scientific investigation; the Station with its laboratories, research vessel, library and other facilities, provides a base from which visiting scientists from all over the world can study in the islands. Before the CDF was formed, the Galapagos Islands had suffered a century and a half of degradation but they are still ecologically the least disturbed of the world's major oceanic groups and the best suited for evolutionary studies. Until the CDRS was established, few scientists were able to exploit the seemingly endless possibilities for research but now they arrive in a constant stream. Years ago, someone calculated that the Station had received over 500 visiting scientists but goodness knows what the total is now.

When Charles Darwin made his historic visit, he was lucky to stay as long as five weeks. Today that would be considered a relatively short spell. Projects vary but a few, involving research in depth, last for years. A later issue of Noticias will include a review of Peter Grant's big new book on Darwin finches\*; in it he summarises the results of the first ten years of his research, supported by successive teams of scientists from Canada and the U.S.A. Fritz Trillmich of the Max-Planck Institute and his assistants have been studying the endemic fur seals for a comparable period. On other pages, Andrew Laurie of Cambridge University sums up his six years of concentrated investigation into the population dynamics of the marine iguanas before handing over the project to successors from the Max-Planck Institute for a further three years. Such prolonged researches provide a firm basis for conservation policy. Inevitably these long-term studies are exceptional, but hundreds of shorter projects have resulted in papers published in the specialist journals and together must form a tremendous contribution to knowledge. In addition there has recently been a great flood of books on Galapagos, both strictly scientific volumes and more general works.

These publications have done much to make the world better acquainted with the Galapagos but the main impact on the popular mind has been through films and particularly television. Heinz Sielman, Alan Root, David Attenborough and most recently Dieter Plage, to mention only a few of the great wildlife photographers, have brought the Galapagos into the homes of millions. There is an astonishing contrast between the ignorance and indifference of twenty years ago and the world-wide concern shown by the media during the great fire on Isabela in 1985, although I am bound to admit that their reports often contained more imagination than truth.

For some years past I have received persistent laments from well-wishers who were alarmed that tourist traffic would soon bring ruin to the islands, if it had not already done so. These fears had earlier been a dominant pre-occupation of the Darwin Foundation and a considerable share of our limited resources had been devoted to the scientific study of "tourist impact". The conclusion was that the impact has so far been minimal. In 1986 I paid what was probably my last visit to the CDRS and, while I was there, joined a commercial cruise to see for myself what the National Park was like from the tourists' point of view. I saw nothing to cause immediate disquiet. Tourists do not visit the vast areas defined as "primitive" or "primitive scientific" zones. They land only at a number of "intensive use" zones, which are of outstanding interest to visitors and where they are shepherded by naturalist guides, trained and licenced by the GNPS. So far, so good. The trouble is that the sites suitable for intensive use are limited and, if the numbers of tourists should increase beyond a certain point, they would begin to destroy the very things that they go to enjoy, particularly the atmosphere of wilderness. The major tourist organizations are aware of the dangers. They have shown great responsibility and have co-operated closely with the Park authorities. Given this community of interest, it should be possible to avoid excessive expansion. At present, introduced species of alien plants and animals are the most serious threat to the archipelago's unique ecosystems.

There have from time to time been threats of a much more damaging form of commercial exploitation, with hotels and conventional beach attractions within the National Park. Any such developments would definitely be destructive and have hitherto been rejected by successive governments. In the twenty two years between my first and last visits, the tourist industry has become an important factor in the economy of Ecuador and the need for increased earnings of foreign exchange, never more acute than in 1987, naturally provokes efforts to expand the revenues from tourism. The Galapagos have been the key to the rise of this national industry but the excessive exploitation of the wild but fragile environment of the archipelago, which alone has attracted visitors from distant lands, could quickly lead to permanent damage. This would be the equivalent of killing the goose that lays the golden eggs. The final guarantee against any such enormity is the great pride of Ecuadoreans in their island possession and their growing international reputation as leaders in the field of conservation.

In 1959, the novel formula for preserving the Galapagos — an alliance between national government and international science — was completely untried. That it has succeeded has been due to a variety of factors. Of course there have been obstacles, alarms and crises but I see no point in recounting them here as they have been overcome. There has been a good deal of plain bad luck such as the 1982-1983 El Niño event and the great fire on Isabela, not to mention population explosions of harmful introduced species of both animals and plants. On the other hand it is good to remember how much *good* luck we have had over the years. First and foremost, the Darwin Foundation has enjoyed the support of successive Governments of

\* Ecology and Evolution of Darwin's Finches: Princeton Univ. Press.



the Republic. The tolerance and understanding that the authorities of this developing country have shown for a body of international scientists, dedicated to conservation rather than to development, is quite remarkable. It is true that material advantage has followed in the form of a growing tourist industry, scientific education and improved living standards for the people of the islands, but none of this was evident when the Ecuadoreans gave their blessing to the experiment. It is an acknowledgement of their high ideals that the Galapagos should have been one of the first four natural areas to be awarded World Heritage status.

The CDF was likewise fortunate in its founding fathers. Its pioneers included Irenëus Eibl-Eibesfeldt, Robert Bowman and its Honorary President, Sir Julian Huxley; its first committee counted among its members J-G. Baer, Cristóbal Bonifaz, François Bourlière, Harold Coolidge, Jean Dorst, Luis Jaramillo, S. Dillon Ripley and Peter Scott. The chief architect of the organization was its first President, Victor Van Straelen, whose dynamic force set the Foundation on its course, although he died only days after inaugurating the Darwin Research Station and signing the basic agreement with the Government of Ecuador. These founders won international distinction in the world of conservation and those of them who are still with us can look back with deep satisfaction on their achievement. I am happy that I was able to know them. I am equally happy to have known their successors, a strange band of men and women, differing in origin and outlook, but held together by a single thread — their devotion to the Galapagos. I am proud to have served with them.



Victor Van Straelen and Robert Bowman at the inauguration of the Charles Darwin Research Station in 1964

*Photo by A. Gille*