

NOTICIAS DE GALAPAGOS

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## NEWS FROM ACADEMY BAY

### GALAPAGOS GIVEN WORLD HERITAGE STATUS

On 29 July, the Director General of the United Nations Educational, Scientific and Cultural Organization (UNESCO), Mr Amadou-Mahtar M'Bow, and General Fernando Dobronski, Ecuadorean Minister of Education, visited Academy Bay to make the formal declaration that the Galapagos National Park had been selected for inclusion in the World Heritage list. It was one of the first four "Natural Areas" to be chosen for this distinction, the others being Yellowstone (U.S.A.), Simien (Ethiopia) and Nahanni (Canada).

Mr M'Bow expressed his pride in the achievements of the Charles Darwin Foundation, created under the auspices of UNESCO, one of whose essential duties was the conservation of the environment. The Galapagos Islands, he said, would henceforth enjoy international protection, thanks to the firm commitments of the Government of Ecuador, the world scientific community and UNESCO.

### THE TWENTIETH ANNIVERSARY OF THE CHARLES DARWIN FOUNDATION

The 20th anniversary of the Charles Darwin Foundation was celebrated at Academy Bay on 28 October 1979. The newly installed President of the Republic, who was unable to be present on this occasion, although he had twice visited the Research Station before his election, was represented by the Vice President, Dr Oswaldo Hurtado. The official party included the Minister of Finance and Mrs Fernando Aspiazu, the Minister of Natural Resources and Mrs Mauricio Dávalos, the Director General of Forestry and Mrs Carlos Aguirre, Mr and Mrs Moisés Simmonds (DITURIS), Galapagos Congressman Lcdo. Rodrigo Cisneros, Dr Miguel Moreno (Director, Natural History Museum) and Mr Hernán Correa (Manager, Metropolitan Touring). They were welcomed by the Charles Darwin Foundation's Vice-President and Mrs Alfredo Luna Tobar, the local authorities and the staffs of the Galapagos National Park Service and the Darwin Research Station.

The ceremonies took place in the Van Straelen Hall, named in honour of the CDF's first President. Since 1973 this handsome building (designed and constructed by the former station manager, Mr Rolf Sievers) has served for holding many kinds of meetings and particularly the training courses for park wardens and authorised tourist guides. Now, thanks to the support of Mr and Mrs Morrison Waud, the World Wildlife Fund, the U.S. Peace Corps and many who helped with funds or services, Dr Hurtado and the other distinguished guests were able to inaugurate a multi-purpose building, serving not only as a lecture room and information centre but also as an exhibition hall, where the outstanding features of Galapagos natural history are explained and illustrated by photographs, maps and art work, the gifts of numerous institutions and individuals.

### THE LIBRARY

The visit of the Vice-President of the Republic and his party was also the occasion for the formal inauguration of the expanded library. Until relatively recently the library and the collections of plant and animal specimens – our little museum – were housed in the laboratory. With the expansion of research, sharing the limited space became an increasing nuisance to scientists, whether they were working at the benches or trying to read in peace. So books and collections were moved into what had been the Director's house, and this also gave space for

a modest reading room. But documents, books and collections grew and so did the number of visiting scientists and students. Lack of space and the danger of deterioration through heat and humidity made it necessary to refuse valuable collections of specimens offered by grateful scientists. In 1980, thanks to the generosity of Mr and Mrs E. H. Heaton, it became possible to enlarge the building and install air-conditioning to preserve both books and specimens. In addition to a virtually complete collection of publications on Galapagos science, there are now over a thousand volumes on the natural sciences in general and a growing Spanish section. The new library will substantially aid both research and the training of Ecuadorean science students – a subject which is discussed elsewhere in this issue by Dr Eugenia del Pino.

### RESCUE OF THE LAND IGUANAS

It should cause little surprise that the campaign to save the threatened land iguanas has had its ups and downs. Nobody had previously tried to breed or raise land iguanas in captivity and the field was completely unexplored, so the only approach to the manifold problems was one of trial and error. Esperanza (Hope), the first *Conolophus* to be born in captivity, died in January 1979 and four others were lost soon after. This seems to have been due to the diet of papaya which suited adults but apparently not youngsters. The latter and some 40 later hatchlings are now fed on flowers and grasshoppers, so far with success. These are all descendants of the Cartago Bay (Isabela) population, most of which was massacred by dogs.



Land Iguana (*Conolophus subcristatus*): Drawing by Heidi Snell

There were also problems with the offspring of the remnant of the Santa Cruz population. Eggs were heavily attacked with fungus and only 3 of the first batch survived. However, with experience, hatching success and rearing are making good progress and there were nine new hatchlings in the incubator by Christmas and more on the way. Also there was clear evidence that those Santa Cruz iguanas which were removed to semi-captivity on the tiny islet called Venezia were at last breeding.

Howard and Heidi Snell, who have been in charge of this programme, ought to feel well satisfied with their achievements. Of course it has meant that they have had to devote most of the first two years of their three year stint to solving the urgent problems of diet, incubation and fighting. Now that the battle for survival appears to have been won and that bigger corrals have been built with the support of the Ministry of Finance, they can turn their attention increasingly to longer-term matters, including an intensive study in dog-free areas of the land iguana's growth, reproductive effort and success, survivorship and other factors of population dynamics. This information is valuable not only to science but also to the breeding programme and the eventual repatriation of the various captive populations to their home territories.

#### CONTROL OF INTRODUCED ANIMALS

Goats have now been eradicated from the islands of Plaza, Santa Fe, Rabida, Espanola and most recently from Marchena. So much progress has been made on the once infested Pinta that there are now hopes that 1980 may see the last of them on that island also. On all the above islands the improvement of the vegetation since goats were brought under control has been most encouraging and so has the effect on the dependant animals. Efforts can now be concentrated on the largest islands where the worst problem still remains, though it should be lessened by new equipment and improved methods.

This year should also see the most comprehensive efforts so far to deal with the threats to the native species from other introduced animals. A major campaign to control the feral dogs will be launched. The dogs are increasingly destroying both land and marine iguanas, fur seals and sea lions, tortoises and turtles. They are already a menace to the highly endangered Hawaiian Petrel when it comes on shore to nest and each expansion of their range causes deep concern for the Flightless Cormorant and the Galapagos Penguin, which are highly vulnerable when on land. The control programme will begin with an attempt at the complete eradication of wild dogs on Santa Cruz and part of Southern Isabela.

At the same time there will be an intensified drive against the destructive feral pigs in the nesting areas of the giant tortoises on Santa Cruz, Santiago (James) and the Sierra Negra and Cerro Azul regions of Isabela. Pilot studies of the cats and donkeys have already been begun to assess the degree of damage these feral animals are causing.

Approaching these problems from another angle, detailed methods to protect the surviving Hawaiian Petrels from dogs, cats, pigs and black rats are being formulated. The long-term study of the Land Iguanas and their survival problems will be complemented by a 3-year investigation of the population dynamics of the Marine Iguanas, which have also come under attack in some areas. The study of the sea turtles and the parasitism of their eggs by an introduced scarab beetle will be vigorously pursued.

Together, these projects form the biggest conservation campaign yet mounted by the CDRS and the GNPS. This has been made possible by the combined support of the World Wildlife Fund, the Smithsonian Institution, Frankfurt Zoological Society, Stanford Alumni Association, U.S. Fish and Wildlife Service, Fauna Preservation Society and many individual benefactors.

## PENGUINS IN PERIL

Numbers of the rare Galapagos Penguin have been found dead. Suspicion has fallen on fishing boats operating in the very limited area where these penguins are found. There is no evidence to suggest that they were deliberately killed. In the case of dolphins, it is well established that far more are killed inadvertently in the course of fishing than are deliberately slaughtered – in spite of the publicity given to particular incidents. The number of dolphins killed has been greatly reduced by regulations and changes in fishing methods. The CDF's Council, meeting in Guayaquil, unanimously endorsed an appeal to ship-owners to instruct their captains to use the utmost care to avoid harming penguins (and for that matter turtles) when fishing in those waters.



Galapagos Penguin:  
Photograph by Fritz Pölking

## POLICIES FOR THE NEXT TEN YEARS

Perhaps the most important product of the 20th anniversary celebrations was the decision to organize a “workshop” or “working party” to hammer out a basic programme for the next ten years. The undoubted success of the CDF's first twenty years was not without its dangers: on the one hand success might encourage a rash expansion of activities before adequate financial resources to support them had been secured; on the other hand, success might lull those responsible into satisfaction with past achievements, when what was needed was new initiatives. Priorities needed to be re-examined.

The first step was to circulate a questionnaire on Galapagos problems to a large number of experts who had worked in the islands. Their replies were presented from many different angles. Some dealt with a scientific speciality (such as Prof. Syuzo Itow on the importance of

vegetation mapping), some with a broad subject such as education, or a particular area (such as the paper on Santa Fé Island by Drs. Christian and Tracy, reproduced in this issue) while others discussed the long-term and universal significance of Galapagos conservation, as this extract from a wide-ranging paper by Prof. Peter Grant illustrates:

“On the subject of conservation I have one general comment to make. Conservation has been dominated by what I refer to frivously as the big-is-beautiful attitude. Certain large and conspicuous animals have great appeal to everyone. If they are endangered there is considerable concern, and a large effort is made to see that the species or population does not go extinct. This is praiseworthy on all counts, but it is an ecologically restricted view. The environment of this species is usually viewed as an integral part of the environment. Conservation, in my opinion, has to be an activity which preserves the integrity. I think everyone would agree with this in principle, but not necessarily in practice. And the danger is that in caring primarily for the welfare of the large animals, smaller ones and plants may be allowed to go extinct through neglect or lack of concern. This, then, is an argument for the conservation of natural habitats, and those in near-natural state, as of prime importance, possibly of top priority.

“My long term view is that ecological principles, which appear now to be of esoteric interest to just a small group of professionals will be commonplace knowledge in a hundred years' time. I believe the socio-biology movement is the beginning of a long trend in making people more aware of their probable origins and evolution, the reasons for many patterns of human behaviour and the position or role of the human species in a vastly complex environment. But unfortunately there will only be a minute amount of natural habitat left in the world in 100 years' time. For many people then, more than now, natural habitat will be a concept only, never to be experienced first hand, only to be read about or seen in photographs or on film. In other words, I see an increasing need for people to experience habitats in pristine or near natural state, but a decreasing supply of such habitats. Hence the importance of Galapagos. It is not just a unique part of Ecuador. If conserved properly it will be one of the few riches of the world; to use a metaphor, its value will consistently increase through inflation !”

These varied contributions were considered by a small group, who worked in the Ministry of Foreign Relations at Quito from 18 to 27 February. The officers of the Foundation and the Galapagos National Park Service were represented but others were included in the “workshop” to provide an element of independent criticism, their only common denominator being experience of the Galapagos Archipelago and concern for its future. The report will be published in both Spanish and English and submitted to the next meeting of the Executive Council.

#### NEW COUNCIL MEMBERS

At the meeting in Guayaquil on 28 February 1980 the resignation of Prof. M. F. Mörzer-Bruyns was accepted with regret and Dr M. S. Hoogmoed was elected to the Council. The Ecuadorean Minister of Finance was elected as an *ex officio* member of the Executive Council.

#### APPOINTMENT OF A STATION DIRECTOR

A new Director of the Charles Darwin Research Station will be required to succeed Dr Hendrik Hoeck from 1 January 1981 for a minimum period of 3 years. A biologist with fluency in English and Spanish would be preferred. Requests for a detailed job description should be sent to Mr G. T. Corley Smith, Secretary General of the Charles Darwin Foundation, Greensted Hall, Ongar, Essex CM5 9LD, England.

**FUNDACION CHARLES DARWIN PARA LAS ISLAS GALAPAGOS**  
**CHARLES DARWIN FOUNDATION FOR THE GALAPAGOS ISLANDS**  
**FONDATION CHARLES DARWIN POUR LES GALAPAGOS**

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