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LE PRESIDENT VICTOR VAN STRAELEN

1889 - 1964

Notre Fondation est en grand deuil : elle vient de perdre celui qui en fut l'âme depuis ses premiers débuts et qui lui permit d'atteindre ses objectifs premiers en un très court laps de temps.

Notre Président venait de rentrer d'Ecuador. Il y avait vu son oeuvre accomplie et ses plus chers désirs réalisés plus entièrement que les pronostics les plus optimistes le laissaient espérer. Le 21 janvier 1964, la Station de Recherches Charles Darwin était inaugurée en présence des hautes autorités équatoriennes, des représentants du corps diplomatique et d'une pléiade de savants faisant partie de l'expédition de l'Université de Californie. Le 14 février suivant, il signait à Quito un accord avec le Gouvernement de la République de l'Ecuador, définissant nos droits et nos devoirs et nous permettant d'exercer librement nos activités. Il se voyait décerner une haute distinction en étant promu Commandeur de l'Ordre Al Merito de la République d'Ecuador ; cela le comblait d'une joie très profonde et lui témoignait la sympathie d'un pays où l'on ne donne son amitié qu'à bon escient.

Il rentra à Bruxelles et se remit au travail. C'est là que la mort vint le surprendre le 29 février 1964. Sa disparition nous laisse tous atterrés.

Nous n'avons pas ici la place de retracer l'oeuvre du Professeur Victor Van Straelen, car elle fut riche et variée. Né à Anvers le 14 juin

1889, il fut immédiatement attiré par les sciences de la terre et commença des études de géologie en Belgique et en France. Il n'en était pas moins de naissance un naturaliste complet et avait conscience de l'unité fondamentale de la nature. Sa nomination, dès 1925, comme Directeur de ce qui allait devenir l'Institut Royal des Sciences naturelles de Belgique à Bruxelles, se justifie de ce fait même. Il allait tout en poursuivant une carrière scientifique féconde, réorganiser cette institution, en faire un organisme mondialement connu, et réaliser le rêve de tout conservateur de collections : construire et aménager des bâtiments dignes des matériaux dont il a la charge.

Ses voyages à travers le monde, notamment en Indonésie et au Congo, lui avaient révélé la gravité des menaces qui pèsent sur la nature sauvage à travers le monde. Le Professeur Van Straelen se rangea tout de suite parmi ceux qui déjà oeuvraient pour sa défense. Son champ d'action fut avant tout l'Afrique Centrale. Dès 1933 il était nommé Président de l'Institut des Parcs nationaux du Congo. Il allait, grâce aux appuis politiques les plus élevés et à la collaboration de savants du monde entier, poursuivre une double oeuvre de conservation et de recherche scientifique approfondie. Le Parc national Albert - ensemble biologique équilibré unique au monde situé dans une des plus belles régions de l'Afrique - et ceux de la Garamba et de l'Upemba au Congo, de la Kagera au Rwanda, attestent de la réussite d'un homme et de son équipe. La série des Mémoires de l'Institut constitue un ensemble monumental sans équivalent pour une autre région de l'Afrique, mine de documents et base même des sciences naturelles dans le Continent Noir.

Il nous serait trop long d'évoquer les multiples autres activités du Professeur Van Straelen et nous nous attacherons brièvement à sa dernière, celle qui nous concerne plus particulièrement.

Peu de choses en apparence le destinaient à présider une Fondation oeuvrant aux Galapagos, à part l'universalité de son esprit et l'attrait de ces îles pour tous les naturalistes. Et pourtant il convient de souligner combien il était préparé à cette entreprise neuve et originale.

Il était profondément naturaliste et convaincu de la nécessité de protéger la nature dans l'intérêt même de l'homme. Administrateur né, il avait le génie de l'organisation, si rarement rencontré chez les biologistes. Il était aussi profondément humain et internationaliste. Il fut donc, tout naturellement, dirions-nous, amené à s'occuper de l'oeuvre à entreprendre aux Galapagos, région du monde d'un exceptionnel intérêt pour les biologistes, si gravement menacée pour les causes que l'on sait.

Notre Fondation naquit en 1959. Un Conseil exécutif provisoire élu à l'unanimité le Professeur Van Straelen à sa présidence ; dès lors il en fut le plus actif ouvrier. Il s'agissait simultanément d'organiser la Fondation, de lui donner un statut légal, de réunir des fonds et d'aménager la



Signature de l'accord passé entre le Gouvernement de l'Ecuador et notre Fondation, à Quito, le 14 Février 1964. Les signataires sont S.E. M. Armando PESANTES GARCIA, Ministro de Relaciones Exteriores, et M. le Professeur V. Van Straelen.

Station de Recherches à Santa-Cruz tout en négociant un accord avec le Gouvernement équatorien afin d'assurer la réussite et la pérennité de nos efforts.

D'innombrables difficultés surgirent immédiatement et le manque de fonds n'en fut que le côté le plus apparent. Notre Président sut vaincre ces obstacles et dans un laps de temps très bref réaliser une oeuvre trop connue pour être rappelée ici. Ceux qui connaissent notre Fondation, la Station Charles Darwin et ses moyens de travail actuels, se rendent compte du travail réalisé et du labeur incessant que son aménagement a exigé. Aucune de nos réussites ne fut autre chose que le fruit du travail personnel de notre Président.

Le Professeur Van Straelen disparaît à un tournant de l'histoire de la Fondation Charles Darwin pour les Galapagos. Son nom mérite amplement de figurer à côté de celui de cet illustre prédécesseur. L'un a fait connaître au Monde ces îles d'un intérêt capital pour la compréhension des phénomènes vitaux, l'autre assura la conservation de ce patrimoine naturel pour les générations à venir.

Tout en pleurant notre Président si brutalement enlevé à notre respectueuse affection, nous devons être convaincu que le plus sûr moyen de lui rendre hommage est de continuer l'oeuvre amorcée et de poursuivre la route dont il nous a si brillamment ouvert le premier tronçon.

THE GALAPAGOS INTERNATIONAL SCIENTIFIC PROJECT

By Dr Nathan Cohen and Dr Robert Bowman

The Galapagos International Scientific Project (GISP) was an eleven week inter-disciplinary special project in science, which took place largely in the Galapagos Islands. The participants included 66 biological and physical scientists of different disciplines, backgrounds, nationalities, and ages (see table).

Participants in the GISP

Country	Physical scientists	Biological scientists	Senior scientists	Students	Total no participants
Belgium	1	2	3	-	3
Canada	-	1	1	-	1
Chile	-	1	1	-	1
Costa Rica	-	1	-	1	1
Ecuador	2	5	3	4	7
England	-	2	2	-	2
Japan	-	1	1	-	1
United States	5	45	38	12	50
Totals :	8	58	49	17	66

The Project provided invaluable training for the younger scientists, and an opportunity for all members of the group to visit and work in a unique and historic environment, where the logistics are often more difficult than in polar regions. A number of symposium publications, a popular book and articles, and numerous scientific reports on the various research projects, will make their appearance in the months and years ahead.

Rationale

Studies on the biota, ecology, geology, meteorology, and oceanography of the Galapagos are in their infancy. The scientific literature on the islands is scanty, and much of it is based on outdated viewpoints. A first-hand experience with the islands' biological oddities and other phenomena resulting from insularity could serve to stimulate much needed research in an area that is rapidly undergoing destruction through colonization.

It is preeminently fitting for the San Francisco area to be the United States center for Galapagos studies, and for institutions of higher

learning in the area to take the lead. The University of California includes on its faculty numerous scientists familiar with the Galapagos. Its oceanographic vessels have already spent much time exploring Galapagos waters. The bulk of the world's collections of museum specimens of Galapagos biota and geology are in the San Francisco Bay area, housed principally at the California Academy of Sciences in San Francisco and at the Museum of Natural History at Stanford University, and at the Museum of Vertebrate Zoology, University of California, Berkeley.

One of the important aims of the Project was to focus world attention on the Galapagos and stimulate scientific research in the western Latin American countries. The Project could also help to encourage national parks programs in Latin America and help preserve some of the vanishing plants and animals of the Galapagos.

Development of Project

The GISP was nearly two years in planning. It was initiated in early 1962 following a meeting between Mrs James K. Kermeen of University of California Extension and Dr Cadet Hand, Professor of Zoology at Berkeley. Discussion sessions followed with Dr Robert I. Bowman, Associate Professor of Biology at San Francisco State College (who had just returned from his third expedition to the Galapagos) and Secretary for the Americas of the Darwin Foundation, and with Dr Robert L. Usinger, Professor of Entomology at the University of California and Chairman of the Pacific Science Board.

As planning for the Project progressed, the California Maritime Academy at Vallejo, California agreed to transport the scientists to the Galapagos aboard the Academy's training ship "Golden Bear", during the course of the ship's annual training cruise in 1964. Captain Henry E. Richter, Superintendent of the Academy, and Captain Carl G. Bowman, Commanding Officer of the "Golden Bear", worked closely with the project planners in solving logistic problems.

A substantial grant (\$ 121,650) was made to the University of California by the National Science Foundation in May, 1963, of which \$ 12,50 was given directly to the Charles Darwin Foundation for the construction of housing and laboratory facilities at the Charles Darwin Research Station, Academy Bay, Galapagos. On April 2, 1964, an additional sum of \$ 7,500 was granted by the National Science Foundation, in support of a Galapagos Symposium volume to be published by the University of California Press in 1965.

Administration of Project

The Galapagos Project was administered by co-directors Dr Usinger and Dr Bowman, Mrs Kermeen (Assistant Head, Liberal Arts Department, University Extension), and Dr Nathan W. Cohen

(Science Coordinator, Liberal Arts Department, University Extension).
Members of the Planning Committee who participated in developing the
Project are :

- Sr Leonidas Baquero, Consul-General of Ecuador in San Francisco
(until November, 1963)
- Dr Lincoln Constance, Professor of Botany and Vice-Chancellor
for Academic Affairs, University of California, Berkeley
- Sr Eduardo Davalos, Consul-General of Ecuador in San Francisco
(as of November, 1963)
- Dr Cadet H. Hand, Professor of Zoology, University of California,
Berkeley and Director of the University's Bodega Marine
Lab.
- Dr A. Starker Leopold, Professor of Zoology and Associate Director
of the Museum of Vertebrate Zoology, University of
California, Berkeley.
- Dr Alden H. Miller, Professor of Zoology, and Director of the
Museum of Vertebrate Zoology, University of California,
Berkeley
- Dr Robert T. Orr, Professor of Biology, University of San Francisco
and Curator of Birds and Mammals, California Academy of
Sciences, San Francisco
- Dr G. Ledyard Stebbins, Professor of Genetics and Chairman of
the Department, University of California at Davis, and
President of the International Union of Biological Sciences.

Special mention should be made of the help of Dr Harold J. Coolidge,
Executive-Director of the Pacific Science Board, and an active member
of the Executive Committee of the Charles Darwin Foundation, who,
through the National Research Council-National Academy of Sciences,
facilitated all operations in Washington and Ecuador and obtained the
services and cooperation of the United States Army, Navy, and Air
Force, and the departments of Commerce and State.

Description of Project Phases

In October, 1963, the University of California introduced the Project
to the University community and to the public by presenting a lecture
series on the Galapagos Islands. More than 225 people attended the
series of four lectures offered on the Berkeley campus. The lectures,
illustrated with slides and motion pictures and tape recordings, were
given by participants in the GISP, each of whom discussed his own field
of research. Dr Bowman opened the series with "An overview of the
Galapagos Islands", followed by Dr Howel Williams who discussed "Volcanic
history of Galapagos and the adjacent mainland"; Dr Charles M. Rick
spoke about "The nature of Galapagos plants" ; and finally, Dr Charles
C. Carpenter, whose topic was "Evolution of Galapagos Reptiles".

Expedition members from all over the world gathered in Berkeley

in January, 1964 to prepare for the Galapagos trip. On January 8 and 9 they took part in a two-day symposium, with an audience of more than 600, devoted to the scientific history of the Galapagos Islands and to the major biological research problems to be encountered there. Unlike the earlier lecture series, this symposium was designed for a more scientifically sophisticated audience and was attended by research scientists, scholars, and educators from throughout the United States. The distinguished speakers included Sir Julian Huxley, Honorary President of the Charles Darwin Foundation ; the late Dr Victor Van Straelen, first President of the Darwin Foundation ; Dr G. Ledyard Stebbins ; Dr Alden H. Miller ; Dr George A. Bartholomew, Professor of Zoology at the University of California in Los Angeles ; and Dr Dean Amadon, Chairman of the Department of Ornithology and Lamont Curator of Birds at the American Museum of Natural History.

On January 8 the scientists were guests of the California Academy of Sciences for a luncheon and a tour of the Academy's collections from the Galapagos.

By January 10, 1964, the sailing date of the "Golden Bear" from the dock of the California Maritime Academy in Vallejo, all preparations for the expedition were satisfactorily completed. As a practical measure, it was necessary to supply nearly all the food and camping gear that the expedition members would need in the field.

The "Golden Bear," a training ship for future merchant marine officers, and carrying a crew of 230 mid-shipmen and 15 officers, was re-outfitted in one area to accommodate bunks for 60 scientists. Each scientist provided his personal gear and research equipment.

Shipboard symposium meetings commenced on the morning of January 11 and were held every morning and afternoon for the next eight days, in one of the ship's lecture rooms. These symposia were organized far in advance, and each participant aboard presented a paper on his current or past research, and related this to the research he expected to do in the Islands. Thirty-six papers were presented. These were organized around such topics as the physiographic setting of the Galapagos ; evolutionary problems ; distributional patterns ; origin of the biota, and adaptations ; origin of soils ; the geology of the islands ; and the nature of the ocean floor about the Galapagos. The papers summarized present knowledge, dealt with theoretical considerations, and emphasized lines of possible future investigations. In addition to these papers, each scientist presented a brief informal outline of his proposed field work in the Galapagos. All scientists endorsed the proposition that conservation of animals and plants facing extinction was of prime importance, and that none of these animals was to be collected. However, otherwise rare species would be conservatively collected for scientific purposes.

Because of the daily symposia, each scientist aboard ship became well informed about his colleagues' proposed investigations, resulting in close coordination among many of the scientific undertakings.

At the Equator, most of the scientists voluntarily underwent the traditional initiation into the "Ancient Order of the Deep" by Neptunus Rex, much to the delight of the ship's officers and midshipmen.

The "Golden Bear" arrived at Academy Bay on the afternoon of January 19, and shortly thereafter over 50 tons of supplies and equipment--including a new Jeep for the Research Station-- were unloaded from the ship and moved ashore in a variety of small boats and two landing craft provided by the Ecuadorian Navy. All the scientists performed ably as stevedores, and did many of the midshipmen, in this complex, and sometimes dangerous, operation.

During this hectic period, the 107 delegates to the dedication ceremonies of the Darwin Research Station were flown from the mainland to Baltra Island by Ecuadorian and United States air force planes. Since there are no roads on the islands connecting Academy Bay to Baltra Island, delegates were transported to Academy Bay aboard the "U. S. S. Pine Island".

The dedication program of the Darwin Research Station was under the direction of Dr Coolidge, with some of the Project scientists formally participating.

By the 23rd of January, all supplies and equipment were properly stored or in use, the delegates had departed, and the scientists began their research. Cooperative research plans among many groups of scientists, which had occupied their evenings aboard the "Golden Bear", were now put into operation with the aid of Ecuadorian guides, ten fishing boats, the Ecuadorian Patrol Boat, and the "U. S. S. Pine Island". Transportation and traffic problems were highly complex. At any given time, about half of the scientific group was conducting research on one of the several islands, was en route to an island, or was returning to Academy Bay. The "Pine Island" with its helicopters contributed notably to the success of the expedition by quickly transporting scientists to otherwise inaccessible island areas. It is estimated that this rapid means of transportation doubled the amount of time the scientists could actually spend at their research.

On exploring party of 11 scientists - ornithologists, botanists, zoologists and geologists - led by Dr Bowman, was transported via helicopter to the top of Culpepper Island, marking the first visit in human history to the summit of this northernmost island in the Galapagos Archipelago. Many plants and insects new to science were collected on this expedition. Live finches were captured and are now under study by Dr Bowman in San Francisco. Army "C" rations and water in canteens sufficed for the two days the party was on this island.

Back at Academy Bay, Dr Robert C. Stebbins, Dr Jerold Lowenstein, and Dr Cohen conducted experiments in thyroid uptake in marine iguanas, and on the evolution of the "third eye" atop the heads of the small lava lizards which abound in this area. Dr Usinger and Dr E. Gorton Linsley

conducted intensive studies on the insects of Santa Cruz Island and most of the other islands. Dr F. Ray Fosberg, Dr Ira L. Wiggins, Dr Charles Rick, and other botanists made careful studies on the plant life and amassed large collections for later systematic studies. Dr Bartholomew and Dr Carpenter devoted much time to a study of the physiology and behavior of marine iguanas, while Dr John Hendrickson, with the aid of student Ross Kiester, launched a detailed investigation on the behavior of the giant tortoises. Dr Bowman, assisted by two of his graduate students continued their research on the songs of Darwin's Finches. The Galapagos penguin and flightless cormorant were studied by Dr Alden Miller. Dr Boyd Walker and his graduate assistant Edmund S. Hobson, busily collected many new species of fishes and studied the behavior of the groupers. Dr Donald P. Abbott studied and collected Galapagos tunicates. Dr William A. Weber made exhaustive collections of lichens. Dr E. Yale Dawson continued his work on Galapagos sea-weeds and cacti. Dr S. Itow from Japan, studied the plant associations on several islands. Near the Darwin Research Station Dr Farrington Daniels carried out experiments with solar stills. Also at Academy Bay Dr Stuart Mackay tested tiny radio transmitters within the gut of marine iguanas and the tortoise. Captive tortoises innocently swallowed these minute, harmless, transmitters buried in chunks of bananas, and their body temperatures were recorded by means of signals picked up by an ordinary transistor radio.

Dr Guillermo Kuschel and Dr Peter Ashlock studied insect life, and Dr Jacques Laruelle concerned himself with pedological studies. Dr Howel Williams, Dr Allan Cox, and Dr Alexander McBirney studied volcanism, lavas, and paleomagnetism on several of the islands. Several graduate students conducted independent research, and undergraduates from the United States and Ecuador assisted the senior scientists.

Dr Wyatt Durham studied coral formations. Allyn Smith collected rare land and marine snails. Dr Robert T. Orr investigated the activities of Galapagos rodents and sea-lions.

The projects mentioned here reflect only a small portion of the diverse and rewarding research conducted on this expedition. The scientists had spent nearly six weeks of intensive study in the Archipelago, and on March 27, the "Golden Bear" returned from Tahiti to transport expedition members to Guayaquil. There, members of the GISP participated in a series of scientific meetings over a period of four days.

In Guayaquil, the Mayor and City Council were most gracious, providing transportation from the new port to various parts of the city where official functions were held. All senior scientists in the expedition were presented with engraved scrolls signed by the Mayor.

On the evening of March 3, a symposium on the Galapagos was held at the Casa de la Cultura. Lectures were presented entirely in Spanish by a number of Spanish speaking expedition members to an enthusiastic overflow crowd of several hundred. During the stay in

Guayaquil, the American Consul-General hosted a reception for the expedition members in his home.

Symposia dedicated to conservation and the establishment of natural parks in Latin America were organized by Dr Coolidge. Many Expedition members participated in these meetings, some of which were held at the University of Guayaquil. A special symposium dealing with Galapagos science was organized by the Ecuadorian scientific community headed by Dr Acosta-Solis of Quito.

On March 4, six members - Dr Usinger, Dr Bowman, Dr Linsley, Dr Coolidge, Dr Cohen and Dr David Snow, Director of the Darwin research Station - flew to Quito to give a personal report to the Ecuadorian Government on the preliminary results of the expedition. Following the report, Drs Usinger, Bowman, and Coolidge were awarded the National Order of Merit of Ecuador by the Acting Foreign Minister of Ecuador, for their rôles in the GISP and their part in securing and understanding between the Darwin Foundation and the Government of Ecuador, which strengthens the Foundation's conservation activities in the Galapagos. The American Ambassador hosted a reception for the expedition members who had come to Quito.

While the expedition was in Ecuador, it received the sad news of the death of one of its most honored and respected members, Dr Victor Van Straelen. Dr Van Straelen had taken part in all major phases of the GISP, beginning with the Berkeley Symposium, and including the voyage to Galapagos aboard the "Golden Bear". He, too, had been honored several weeks earlier, by the Ecuadorian Government.

On the 6th of March, the "Golden Bear" sailed from Guayaquil and stopped at Cocos Island, Costa Rica, for two days. This stop permitted 32 scientists who were returning aboard the ship to study the biology and geology of this island, which is significantly linked to the Galapagos Archipelago. The "Golden Bear" arrived in San Diego on March 18, and all members of the expedition left the ship and returned to their homes via commercial transportation.

Results

The following developments have taken place as a result of the G. I. S. P.

A. Publications :

1. A symposium volume, including the papers presented at the Berkeley and shipboard symposia, is to be published by the University of California Press early in 1965. The book is subsidized by a subsidiary grant-in-aid from the National Science Foundation, Dr Bowman is serving as Scientific Editor.

2. A symposium volume, containing the presentations of the GISP participants at the Guayaquil symposium, is to be published by the Casa de la Cultura in Quito under the editorship of Dr Alfonso Naranjo.

3. A "popular" scientific book on Galapagos science is presently being written by Dr Bowman and will be published late next year.

4. The California Academy of Sciences in San Francisco is planning to issue several volumes of their Proceedings devoted entirely to scientific papers dealing with GISP research.

5. The Latin American Committee on National Parks plans to publish the remarks of the panel-discussions of GISP participants in the Symposium on "Conservation in Latin America with Special Reference to Science, Conservation, and Economic Development of the Galapagos", which was held in Guayaquil, March 4, 1964.

B. Conservation :

Coincident with the GISP was the signing of the formal agreement between the Government of Ecuador and the Charles Darwin Foundation (see Registro Oficial, N° 181, February 15, 1964). The GISP provided an appropriate time and the proper public-opinion environment for final action by the Ecuadorian Government.

The world-wide publicity resulting from the GISP and the Dedication Ceremony has brought the Galapagos Islands and the problems of conservation related thereto to the fore.

The tremendous impact of the GISP on the Government of Ecuador is reflected in the success with which Dr Snow was able to negotiate a plan for the practical conservation of threatened species in the Galapagos, as reflected in the recent Executive Decree n° 523.

As a result of this decree, and because of the first-hand evaluation of the exigency which exists in preserving the tortoise population on Santa Cruz Island, by Dr Herndon Dowling, the New York Zoological Society, at its meeting of the Executive Committee of its Board of Trustees on May 20, 1964, agreed to support the salary of a "Conservation Officer" in the Galapagos from 1964 through 1966.

C. Future research :

Many of the GISP participants have already expressed their intention to return to the Galapagos Islands to continue their research initiated by the GISP. Many new students will thereby be introduced to Galapagos research. The housing facilities constructed at the Darwin Research Station under the National Science Foundation grant to the GISP will be utilized on a year-round basis.

Thus it is apparent that the GISP was eminently successful in achieving its objectives of intensive interdisciplinary scientific investigation in the Galapagos and the encouragement of conservation of natural resources. The success was due to a combination of factors - three of the most important being the very careful choice of highly-qualified scientists as expedition members, the financial and logistic support of many agencies, and the truly fine spirit of cooperation among the expedition members and the officers and crews of the "Golden Bear" and the "U. S. S. Pine Island".

Acknowledgments

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SIGNATURE D'UN ACCORD ENTRE LE GOUVERNEMENT DE L'ECUADOR ET NOTRE FONDATION.

Dès ses premiers débuts, notre Fondation entra en rapport avec les autorités compétentes les plus élevées de la République de l'Ecuador pour passer avec celles-ci un accord définissant nos devoirs et nos droits. La nécessité d'une entente formelle est évidente, car nous nous proposons de travailler et de faire travailler des scientifiques de tous les pays dans un territoire qui fait partie intégrante du territoire national équatorien. Il convenait donc que l'Ecuador nous ^{pour}garantisse l'indispensable liberté d'action pendant une période assez longue que nous puissions réaliser notre programme de recherches et amortir nos investissements, au moins sur le plan scientifique. En revanche notre Fondation devait s'engager en termes formels à respecter la législation équatorienne et à collaborer avec les autorités dans le domaine de la conservation de la nature et de la science.

Un accord préliminaire, concrétisé par un document signé par le Ministre des Relations extérieures le 6 janvier 1959, nous permit d'implanter notre Station à Santa Cruz et d'ouvrir le premier chantier dès cette année. Simultanément nous nous mîmes à la préparation d'un projet d'accord, qui fut adopté par notre Conseil et soumis aux autorités compétentes de l'Ecuador. Ce texte, profondément remanié et dans une certaine mesure simplifié, servit de base aux termes de l'accord formel qui vient d'être signé à Quito le 14 février 1964 par S. E. M. Armando Pesantes Garcia, Ministro de Relaciones Exteriores, au nom de la République de l'Ecuador, et par le Professeur V. Van Straelen, au nom de la Fondation.

Le temps écoulé entre les premières démarches et la signature est long. Il s'explique par des difficultés politiques et administratives et par de patientes et laborieuses mises au point, où le Représentant des Nations Unies à Quito joua un rôle déterminant. Nous tenons à souligner la compréhension des personnalités équatoriennes, leur bonne volonté et leur désir de nous donner satisfaction dans la limite des lois en vigueur. L'accord passé nous garantit les droits nécessaires à notre action et servira de base à une collaboration aussi cordiale que fructueuse.

Il serait trop long d'analyser, encore plus de transcrire ici le texte de l'accord. Les premiers articles définissent notre action sur le plan de la protection de la nature aux Galapagos et intègrent notre programme d'investigations dans le cadre de la recherche fondamentale et appliquée en Ecuador. L'article 9 nous accorde la concession d'un vaste terrain sur la côte Sud de Santa Cruz et nous donne le droit d'y aménager notre station biologique. L'article 10 nous donne une option sur les terrains limitrophes, afin de permettre une extension possible de la Station ou de ses champs d'expérience.

Les articles suivants concernent l'octroi des visas pour les chercheurs travaillant sous nos auspices, l'exonération des droits, taxes et impôts sur nos constructions, nos bateaux et véhicules et sur le matériel importé. L'article 16 nous garantit une subvention annuelle d'un montant proportionné aux

ressources financières disponibles en Ecuador. Le gouvernement équatorien s'engage à coopérer dans la limite de ses moyens au fonctionnement de la Station, au transport du personnel et du matériel et à donner libre usage des télécommunications officielles ; il s'engage aussi à nous consulter sur tout ce qui touche à la protection de la nature , notamment quant à une transformation des habitats et des équilibres naturels aux Galapagos, et de recueillir notre avis préalable.

En revanche, notre Fondation s'engage à collaborer étroitement avec les autorités scientifiques équatoriennes, à leur communiquer les résultats des travaux réalisés à la Station, à former de jeunes chercheurs, à mettre à la disposition des scientifiques compétents toutes les facilités de travail ; elle respectera les lois en vigueur sur le territoire national de l'Ecuador et les règlements concernant plus spécialement les Galapagos.

Cet accord, entré immédiatement en vigueur, couvre une période de 25 ans. Il est renouvelable par périodes de 5 ans par tacite accord des parties contractantes.

Notre Fondation se réjouit de la signature de ce document qui lui donne toutes les facilités d'action nécessaires pour oeuvrer dans le domaine de la conservation de la nature et de la recherche scientifique. Il est un gage de la compréhension mutuelle et de la collaboration étroite entre l'Ecuador et notre Fondation. Nous saurons être dignes de la confiance et de l'amitié dont nous témoignent les autorités équatoriennes.

Jean DORST

UN DECRET EQUATORIEN CONCERNANT LA CONSERVATION DE LA NATURE AUX GALAPAGOS.

Le gouvernement de l'Ecuador vient de promulguer un décret d'une exceptionnelle importance concernant la protection de la nature aux îles Galapagos et le rôle réservé à notre Fondation dans l'application des mesures déjà prises ou à prendre. Il complète le Decreto Ley de Emergencia n° 17 du 4 juillet 1959 publié dans le Registro oficial du 20 juillet 1959 (n° 873), concernant la délimitation des zones à mettre en réserve et la liste des espèces protégées.

Aux termes du décret n° 523 donné à Quito le 12 mars 1964, la Station Charles Darwin et son personnel scientifique, en accord avec le bureau de la Fondation, sont chargés de déterminer les zones à mettre en réserve (article 1) ; et d'établir la liste des espèces végétales et animales menacées à protéger intégralement (article 2). Par ailleurs la Station est autorisée à prendre toutes mesures pour le contrôle et

l'éradication des animaux introduits, avec la collaboration des autorités militaires et civiles équatoriennes, quand ceux-ci sont susceptibles de porter de graves préjudices aux animaux autochtones ou à l'équilibre des habitats naturels (article 3). Enfin la colonisation des aires mises en réserve et le transport d'animaux autochtones ou introduits sont interdits (articles 4 et 5).

Ce simple énoncé suffit à mesurer l'exceptionnel intérêt que présente ce décret pour la réalisation de notre objectif premier : la conservation des habitats naturels, de la faune et de la flore autochtones. En fait il nous charge de toutes les études préliminaires concernant la mise en application du décret de 1959, tout en renforçant celui-ci. Inutile de dire qu'il comble nos vœux les plus chers en nous donnant toutes les libertés d'action que nous souhaitons. La confiance que nous manifeste le gouvernement de l'Ecuador, en nous rendant responsables de la préservation de ce patrimoine naturel, nous honore. Elle constitue une preuve supplémentaire de la collaboration étroite qui s'est établie entre l'Ecuador et notre Fondation.

Nous avons immédiatement commencé à travailler dans ce sens. L'aménagement de la réserve de Tortues à Santa Cruz, en voie d'achèvement, en est le premier témoignage tangible. Par ailleurs, lors de sa session de juin 1964, notre Conseil a chargé le Dr I. Eibl-Eibesfeldt de préparer une liste des zones à mettre en réserve en priorité ; son rapport préliminaire sera soumis à divers spécialistes et aux experts qui ont oeuvré avec nous, avant d'être discuté par le Conseil exécutif en novembre prochain. Les conclusions adoptées seront présentées au gouvernement équatorien dans les plus brefs délais afin que celui-ci puisse prendre les mesures qu'il est bien entendu seul habilité à rendre légales.

Nous croyons utile de reproduire ci-dessous le texte même de ce décret, dans la version officielle anglaise que nous a transmis le gouvernement de la République de l'Ecuador.

REPUBLICA DEL ECUADOR

MINISTERIO DE RELACIONES EXTERIORES

N° 523

THE MILITARY BOARD OF GOVERNMENT

Whereas :

That, by Emergency Law-Decree N°17 of July 4, 1959 - published in the Official Registry N°873 of July 20, 1959 - all islands of the Galapagos Archipel were declared zones of reserve and National Parks under the exclusive jurisdiction of the State in order of preserving the fauna and flora of the islands.

That, the immediate enforcement of this Decree is essential for the effective protection of these Reserves of known international scientific value.

That, the United Nations Organization for Education, Science and Culture - UNESCO - and the Charles Darwin Foundation have established the "Charles Darwin Research Station" on the islands,

And, in use of the faculties the Board is invested,

Decrees :

Article First. - The Charles Darwin Research Station is hereby empowered to determine the zones of reserve or natural monuments, without restriction of area, on the following islands : Santa Cruz, Isabela, Espanola, Santa Fé and others the above-mentioned International Institution seems it advisable.

Article Second. - The Charles Darwin Research Station is likewise empowered to determine the typical species of the flora and fauna that must have priority for Conservation which at the present time are on its way of extinction.

Article Third. - The Charles Darwin Research Station is hereby authorized to take all steps considered convenient, with the corresponding support of Military and Civil Authorities, for the control and extermination of animals, either native or introduced, that have actually constituted themselves into menacing plagues and that are altering adequate environment conditions required for the conservation and perpetuation of the fauna and flora of the Islands.

Article Fourth. - It remains hereinafter prohibited any type of spontaneous colonization with farming purposes, burning and exploitation of trees for the supply of lumber and charcoal on those areas so determined by the Charles Darwin Station.

Article Fifth. - It likewise remains hereinafter prohibited the exchange of animals, either native or introduced, among the islands that constitute the Galapagos Archipel and between the latter and the Continent, of which inspection and control members of the National Navy, civilian authorities and national wardens, to be mobilized for that purpose, will be in charge.

Article Sixth. - The ministry of Development is hereby empowered to issue the necessary regulations towards complying with these dispositions.

Article Seventh, - The Authorities of the Galapagos Archipel shall be in charge of enforcing the dispositions of this Decree and of those to be furtherly issued with the same purpose.

Article Ninth, - The Minister of Development will be in charge of executing the present Decree.

Given in Quito on the 12th day of March 1964.

(signed) Ramon Castro Jijon, Rear-Admiral. - Marcos Gandara Enriquez, General of Division. - Luis Cabrera Sevilla, General of Division. - Guillermo Freile Pozo, Air Force Colonel. - José C. Cardenas, Ministerio of Development.

UNE IMPORTANTE CONTRIBUTION DE LA NEW YORK ZOOLOGICAL SOCIETY POUR LA CONSERVATION DE LA NATURE AUX GALAPAGOS

Il n'est pas besoin de rappeler le grand intérêt que porte depuis toujours la New York Zoological Society aux Galapagos et à la Conservation de leur patrimoine naturel. Cette Institution a envoyé maintes expéditions dans ces îles. Elle nous a par ailleurs aidé à plusieurs reprises. Les subventions qu'elle nous a versées au cours des dernières années ont contribué dans une mesure appréciable au succès de nos entreprises.

Elle vient de faire mieux encore. Au cours de sa séance du 20 mai 1964, le Conseil exécutif de cette Société vient en effet de nous octroyer une somme de US \$ 10,500 payables en 3 ans à partir de 1964, pour rétribuer un Conservation Officer qui travaillera sous la supervision du Directeur de la Station Charles Darwin. Ses attributions seront de promouvoir toutes mesures propres à préserver les habitats naturels, la faune et la flore aux Galapagos, à créer les réserves et parcs nationaux prévus par le décret pris par l'Écuador, à définir le statut des espèces menacées et à procéder à leur étude scientifique, tout en collaborant avec les autorités équatoriennes responsables du gardiennage et de la répression des actes contrevenant aux règlements en vigueur.

Nous avons ainsi la possibilité de nous adjoindre un collaborateur oeuvrant dans un domaine qui nous est particulièrement cher et de réaliser notre objectif premier. Nous avons engagé un homme de valeur, le Senor Miguel Castro, colon équatorien établi depuis longtemps aux Galapagos, connaissant à fond les îles et leur faune, en même temps que les problèmes que pose la coexistence d'animaux rares et fragiles et d'hommes aux activités contraires à leur survie. M. Castro a d'ailleurs coopéré depuis la première heure avec nos chargés de mission et nos représentants aux Galapagos. Nous sommes heureux de le compter parmi nos cadres locaux.

Et nous sommes profondément reconnaissants à la New York Zoological Society de son aide généreuse qui nous permet de réaliser un programme de recherches pratiques en vue d'assurer la survie des communautés naturelles des Galapagos pour les générations à venir.

Jean DORST

NOTES BREVES

STATE OF THE SANTA CRUZ TORTOISE POPULATION.

This is the most flourishing of the remaining tortoise populations, and since the station too is on Santa Cruz the most detailed attention has been given to it. A systematic marking programme was started in 1961 by Lévêque, and has been carried on, with modifications, ever since. So far, over 600 tortoises have been marked by cutting small notches in the edges of the carapace, and the data are beginning to yield information on sex ratios, movements, growth etc. In some areas, over 90% of the population is marked. The total population of the whole island is estimated at around 2,000 individuals.

David SNOW

STATE OF THE OTHER TORTOISE POPULATIONS.

This work was begun in 1963, with the object of finding out the numbers and distribution of the tortoises surviving on the other islands. Some results of value have already been obtained. It has been found out, as a result of three short expeditions, that the tortoises of Duncan Island, thought to be nearly extinct, in fact number probably more than 100 individuals. 26 of them have been marked. Two tortoises have been found on Hood, where they were generally thought to be extinct. Two were found on James, where nothing was known of their present status. Preliminary expeditions indicated the continued presence of tortoises on the three northern volcanoes of Albemarle. A thorough examination of Jervis confirmed that the tortoise there is certainly extinct, as has been generally assumed. The survey is being continued.

David SNOW

SEISMOGRAPH.

In April 1964 the Charles Darwin Research Station became a participant in the World-wide Standardized Seismograph Program, operated by the U.S. Coast and Geodetic Survey in collaboration with the governments of the countries in which the seismographs are situated. After initial agreement between the Charles Darwin Foundation and the Coast and Geodetic Survey, work was begun in May 1963 on the access path to the vault, which had to be situated well inland in order to minimize the noise from the sea and to avoid the fissured lava nearer the shore, and the vault itself was completed by December. Technicians of the Coast and Geodetic Survey installed the instruments in April 1964, and they became operative in early May.

The photographic records are developed every day, and are sent in monthly to Washington. The Coast and Geodetic Survey provides a small

stipend for the part-time operator, and contributes towards the cost of the continuous running of the generator, upon which the operation of the seismograph depends.

David SNOW

ARRIVEE DU "BEAGLE II" AUX GALAPAGOS

Le "Beagle" est arrivé le 30 avril 1964 à Bahia de la Academia, Santa Cruz. Il est immédiatement entré en fonction. Il assurera le transport des chercheurs à l'intérieur de l'archipel, en même temps qu'il effectuera des croisières de routine pour suivre l'évolution des populations animales et des peuplements végétaux menacés.

CONTROL OF INTRODUCED ANIMALS.

In addition to the long-term campaign against the pigs on Santa Cruz and the projected campaign against the Duncan rats, an attempt is being made to exterminate the goats on Barrington. The destruction of the vegetation on this island has reached an advanced stage. Already some plants have disappeared, others survive only in inaccessible places, and it is probably only a matter of time, if nothing is done, until the endemic Barrington land iguana becomes extinct due to the destruction of its food supply. The Barrington tortoise has already disappeared.

Dr Carl Koford, a member of the G. I. S. P., estimated in February 1964 that the goat population was down to approximately 200. Many animals were emaciated and little breeding was taking place. The time seemed to be opportune for an attempt at systematic eradication.

David SNOW

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

Créée sous les auspices de l'Organisation des Nations-Unies pour l'Education
la Science et la Culture (UNESCO)

1 rue Ducale, Bruxelles, Belgique

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Président : N.....

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(Munster), S. Dillon Ripley (New Haven), Peter Scott (Slimbridge), Randolph
Taylor (Ann Arbor), Harold J. Coolidge (Washington).

L'association est chargée de l'organisation et de la gestion de la station de
recherches "Charles Darwin", dont le gouvernement de la République de l'Ecuador
a autorisé l'établissement dans l'archipel des Galapagos à l'occasion du centenaire
de l'énoncé de la doctrine de l'évolution (1858-1958).

L'association propose aux autorités compétentes toutes mesures propres à as-
surer, dans l'archipel des Galapagos et dans les mers qui l'entourent, la conser-
vation du sol, de la flore et de la faune, et la sauvegarde de la vie sauvage et de
son milieu naturel. Elle arrête le programme de recherches de la station biolo-
gique et la charge de toutes études scientifiques en rapport avec les objets ci-dessus.

Elle recueille et gère les fonds destinés au fonctionnement de la station et à la
promotion des recherches qui y ont leur base.

L'association veille à la diffusion, par tous moyens appropriés, du résultat
des travaux de la station et de toutes informations scientifiques relatives aux
réserves naturelles.

(Article 2 des Statuts de la Fondation Charles Darwin pour les Galapagos).

NOTICIAS DE GALAPAGOS - 55 rue de Buffon, Paris, France

Gérant : J. Dorst.