

Edgardo Civallero

The stories of Galapagueana

- issue II -



Fundación
Charles Darwin
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GALAPAGOS

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Edgardo Civallero

The stories of Galapagueana

- issue II -

Project Galapagueana
Galapagueana to take away

Charles Darwin Foundation
Library, Archive and Museum
Puerto Ayora - Santa Cruz
Galapagos Islands - Ecuador - 2023



Highlight

The Grants' bands for ringing finches

All collections of artifacts and documents housed by libraries, archives and museums have items that stand out for some reason: for the quality of their material, for the meaning of their content, for their historical value... In the Charles Darwin Foundation (CDF) collections, one of such items are the Grants' bands for ringing finches.

Within the scientific community, Peter and Rosemary Grant are internationally known because of their work with endemic finches in the Galapagos Islands. Both British evolutionary biologists, they worked in the small Daphne Major islet since 1973, capturing, tagging, and sampling the local finches. Through those patient, long-term studies, they finally achieved their main goal: showing that natural selection, contrary to what Charles Darwin originally thought, can be seen within a single lifetime. They also "elucidated the mechanisms by which new species arise and how genetic diversity is maintained in natural populations".

The Grants' work is collected and described in a myriad of books, academic papers, conferences, and interviews. There are, however, humbler documents linked to that

research. Materials with a story behind, which also make part of the long-term process of inquiry and discovery. It is the case of the Grants' ringing bands.

The bands were found in the CDF Archive by chance. They were discovered taped inside an old, seriously damaged field diary which included notes on birds without any relation to the Grants' work. No additional information was added to the basic label adhered to the paper alongside the bands. Luckily enough, the Grants themselves were kind enough to provide the proper background to the finding.

"These look like celluloid bands made by a company in England for bird-ringers (banders). The name of the company is A. C. Hughes and Company. We used those in our first field season in early 1973.

Subsequently, we discovered that finches were able to remove the bands from their legs fairly easily. They also became brittle in the strong sunlight. Therefore, we switched to bands made of PVC (polyvinyl chloride) plastic. At first we were able to purchase bands made by a technician (J. Anderson) at the University of Durham in England. Unfortunately, after just a couple of years he decided to stop making them because it was painful for his thumbs, but before he did so we purchased from him a large supply of plastic in 10 colors.

We then made the bands individually by ourselves because we could not find an alternative supplier. It was tedious work but we became quite fast at it. The procedure was as follows. Each of the PVC sheets measured approximately 30 x 20 centimeters.

We cut strips approximately 2 mm wide, and then cut them in lengths of about 2 cm. To make the bands we used forceps to grasp a single piece at one end, plunged it into boiling water for a few seconds to make it soft and pliable, removed it from the water, wrapped it around the tips of the forceps and thrust it into a specially made aluminum tube and withdrew the forceps. The inner dimensions of the tube matched the outer dimensions of the band. In the last step we put the tube into boiling water so that the coiled plastic could expand and fit snugly against the metal. After putting the tube into cold water to harden the plastic we used a metal rod as a plunger to push the band out of the tube. The result was a band with a small amount of overlap of the two ends. They are illustrated in Fig. 2.7 in our book *40 Years of Evolution. Darwin's Finches on Daphne Major Island* (P. R. Grant and B. R. Grant, 2014, Princeton University Press)".

Small fragments of scientific work like these bands are a vital, and too often underappreciated, part of the history of science. And oral tradition (and personal communication) is a valuable channel to recover basic information about non-recorded events. The combination of all these elements can bring to life an important piece of the huge mosaic of scientific endeavor.

Catalogue

Grant, Peter; Grant, Rosemary. [*Ringling bands for finches*]. [Object]. [N.d.] : A. C. Hughes and Company, 1973. [N.d.] : [n.d.] : [n.d.]. DDC 508. Well preserved.

Indexing

Subject categories: Ecology | Evolution | Genetics | History of science | Natural history
| Ornithology

Keywords: Artifacts | Birds | Objects

Time framework: 1973

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/highlight/high002.html>



Feminine presence in the islands

The scientists of the *Noma* and the *Arcturus*

In 1923, American entrepreneur and billionaire Harrison Williams financed an expedition to the Galapagos Islands led by naturalist, explorer, and author William Beebe. At the time, Beebe was the director of the Department of Tropical Research (DTR, created in 1918) within the New York Zoological Society — nowadays, the Wildlife Conservation Society. Back then, the NYZS had its headquarters at the Bronx Zoo, created in 1899 by the Society itself and managed as the "New York Zoological Park and Gardens".

Beebe, who had developed a long and fruitful career as the first curator of ornithology of the Zoo (1899), was eager to visit the Galapagos to collect further data supporting Darwin's evolution theory.

Williams provided a 76 m steam yacht, the *Noma*, and allowed a support crew which included several scientists and artists, most of them from the DTR and, therefore, linked to Beebe. The expedition lasted 20 days, during which the Galapagoan biodiversity was thoroughly documented. One of the many outcomes of the journey

was a book, *Galapagos: World's End* — an instant best-seller which inspired many travelers to visit the islands, and even to remain there as the earliest colonists.

On the crew of the *Noma* there were three women who were among the first (if not the very first) female professionals / scientists to visit the archipelago: Ruth Rose, Isabel Cooper, and Marie Poland Fish.

Both Rose and Copper had worked before with Beebe in the British Guianas, in the summer of 1916. They traveled to create the first tropical research station in the jungles: Kalacoon, near Bartica. There, the idea of the "Department of Tropical Research" was born. Both women went to the Galapagos aboard the *Noma* and would return to the islands two years later in the *Arcturus*, also with Beebe.

Considered a "bohemian" and an iconoclast at his time, Beebe choose to hire women for prominent roles inside the DTR, including scientists as Gloria Hollister and Jocelyn Crane, and artists as Isabel Cooper, Anna Taylor, Rachel Hartley, Helen Damrosch Tee-Van, and Else Bostelmann. Inside DTR, artists were far more than illustrators: they were communicators, in a moment when photography was not yet able to capture movements or structural details.

Ruth Rose's story is quite peculiar. She was born in 1896 in New York, the daughter of a playwright, and she was originally an actress, having worked in a few plays in Broadway. During an actors' strike, and despite her absolute lack of experience, she

got a job as a research assistant in the New York Zoological Society. She was so good at it that she ended becoming an expert research technician.

Working at the DTR, she started collaborating with Beebe. After several journeys (including the one to the British Guiana), she went to Galapagos in the *Noma* and wrote two chapters of *Galapagos: World's End*. In 1925 she travelled aboard the *Arcturus* as the "historian and technician" of the expedition. In collaboration with Beebe, she wrote *The Arcturus Adventure*.

While working in the *Arcturus*, Rose met American cinematographer Ernest Schoedsack, who was documenting the journey. They married and Rose started working with her husband. In 1933, she created the script of the classical movie *King Kong*, co-directed by Schoedsack and Merriam C. Cooper.

Rose produced several other scripts, such as *Blind Adventure* (1933), *Son of Kong* (1933), *She* (1935), *The Last Days of Pompeii* (1935), and *Mighty Joe Young* (1949). She died in 1978.

Isabel Cooper was an American, New York-based artist who worked in all the imagery of the *Noma* and the *Arcturus* expeditions. In *Galapagos: World's End*, 24 color illustrations by Cooper were included. One of the photographs taken during the *Arcturus* expedition features Rose and Cooper alongside the ship's pet capuchin monkey, Chiriqui. Her correspondence with her husband and her portfolio are valuable documents to understand the scientific journeys of that period, especially Beebe's. Her

drawings and paintings were recently collected in an exhibition, *Exploratory Works: Drawings from the Department of Tropical Research Field Expeditions* (organized by M. Dion, K. McLeod, and M. Thompson, 2017).

Finally, both in the *Noma* and in the *Arcturus* traveled Charles J. Fish and his wife, Marie "Bobbie" Dennis Poland Fish. They were marine biologists, and they specialized in fishes. Poland was known by her bioacoustics research, but during the *Arcturus* expedition she was able to identify the eggs of the American eel — the first person to do so, and to describe the complete developmental cycle of the elusive fish (which was published in *Science* and in *Zoologica*, among others).

Rose, Cooper, and Poland kickstarted a long (and sometimes regrettably underrepresented and undervalued) tradition of female scientists in the Galapagos Islands. A tradition that is continued today by the many women working at the Charles Darwin Research Station.

[The photographs that illustrate this text belong to the collection of the Wildlife Conservation Society, and were published by Allison Grillo on the WCS blog on December 23, 2014, as part of a document digitization and recovery process].

References

- Beebe, William (1981). *The Arcturus Adventure*. New York: Harper & Row.
- Beebe, William (1988). *Galapagos: World's End*. New York: Dover Publications.

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/women/wome002.html>



Contents and pieces | Piece

A tortoise's beginnings

One of the most iconic pieces of the CDF's audiovisual collection, and one intimately related to the scientific work in Galapagos, is the image accompanying this text: a slide of which no accurate information regarding date or authorship has been found so far.

It represents the hatching of a giant tortoise's egg, and it has been used in countless communication and education campaigns, including "La conservación en Galápagos" (Conservation in Galapagos). Such campaigns, prepared in the 80s and 90s, consisted in a numbered set of slides, a typed script, and an audio cassette with the recording of such script, read aloud.

As many other representative pieces at the CDF, this document encapsulates both knowledge and memory. In terms of knowledge, the picture documents a biological process (the reproduction of giant tortoises) that was scarcely known until that moment, as well as the conservation-related research aimed at reproducing a highly endangered species in captivity. On the other hand, in terms of social and scientific memory, the slide presents the outcome of a long, hard work involving not only

international scientists, but also local collaborators, students and the Galapagoan community in general.

Catalogue

Unknown author. [*Tortoise hatching egg*]. [Slide]. [N.d.] : [n.d.], [ca1980]. [N.d.] : b/w ill. : 3 x 5 cm. DDC 508. Well preserved.

Indexing

Subject categories: Conservation | Herpetology | History of CDF | History of science | Natural history

Keywords: Photos | Reptiles | Slides | Tortoises

Time framework: 1980

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/contents/cont002a.html>



Contents and pieces | Line

Taking care of tortoises

The process of reproducing and rearing Galapagos giant tortoises in captivity was developed in the Charles Darwin Research Station since 1965 onwards and has been thoroughly documented ever since on different materials (paper-based, audiovisual, digital), all of them kept at both the CDF Library and the Archive.

As it happens with many other pieces of cultural or scientific heritage, the different elements giving account of the reproduction process have been fragmented and separated for conservation in different spaces (archive, library, museum) and (sub)collections; some of those elements may have been even discarded or not considered, as it usually happens with oral tradition, anecdotes, and the so-called "minor documents", such as memorabilia.

Searching, recovering, and linking them can create a narrative "line" that may bring readers quite close to the original history. That line, in turn, becomes one more thread of that rich fabric that is social memory.

The image accompanying this text, took by MacFarland in June 1970, and titled "Putting eggs into incubator", is a part of that line of tortoise-related documents and events, alongside many slides, photographs, and negatives, as well as a number of digital pictures. Audiovisual material, such as films and videos, accompanied by audio items in cassettes, also presents vital evidence of the scientific research on the famous reptiles — and its results. Also, tangible heritage, such as buildings or incubators, add further information, as memories and oral tradition do, too. Finally, reports providing basic, raw data on the advances and failures of the conservation process are abundant in the CDF Archive, and many of them are connected to the many articles, theses, and books regarding Galapagoan tortoises, kept in the shelves of the CDF Library.

Joining all these pieces is a process quite like the creation of a mosaic by adding tesserae. The outcome provides a rich image, which is usually much more than the addition of its components.

Catalogue

Aa.Vv. [*Taking care of the giant tortoises*]. [Slide + photograph + audiovisual material + textual material]. [N.d.] : Aa.Vv., [ca1970]. [N.d.] : [n.d.] : [n.d.]. DDC 508. Well preserved.

Indexing

Subject categories: Conservation | Herpetology | History of CDF | History of Galapagos | History of science | Natural history

Keywords: Articles | Books | Photos | Recordings | Reports | Reptiles | Slides |
Tortoises | Videos
Time framework: 1970

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/contents/cont002b.html>



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Contents and pieces | Story

Rearing tortoises

The presence of the iconic giant tortoises in Galapagos was already mentioned in the first text produced about the islands: Bishop Tomás de Berlanga's letter to Spanish king Charles I. The archipelago was named after the reptiles, using an old Castilian word for "turtles", and since then they have appeared in almost all the books, chronicles, papers, news, and diaries related to the archipelago.

The initial relationship between humans and tortoises was a hunter-prey one: the animals fed the crews of the countless ships that landed in the Galapagos' coasts since the 16th century onwards. In time, however, they were considered more of a "natural resource": besides being used by ships as storage food, they were captured by merchants as a source of oil and fuel, and therefore, as a trade good. From mid-19th century until 1959, naturalists and zoologists added their actions to the threats list: they hunted tortoises to enrich their collections, eventually bringing the animals to the brink of extinction.

With the development of strong protection measures for the Galapagoan biodiversity (starting with the creation of the National Park in 1959), the awareness about the

urgent need to protect the tortoises raised, and eventually turn into practical, concrete actions.

According to Jacob Lundh's *Galapagos: A brief history* (which, in terms of CDF's history, is strongly based in the *Noticias de Galápagos* journals), tortoise marking begun in Santa Cruz under Raymond Lévêque, the first director of the Charles Darwin Research Station (CDRS), between 1960 and 1962. His successor in the position, André Brosset, continued those activities. As early as 1962, Dr. Herndon Dowling, curator of reptiles at the New York Zoological Park, collected tortoises on the islands for captive breeding. Also, a new and better system for marking tortoises was introduced by Prof. C. C. Carpenter: a combination of notches cut in the edges of the shells.

In 1963 David Snow started working as the CDRS director and expanded the survey of chelonians to other islands beyond Santa Cruz. Snow's report on Galapagoan tortoises (1964) included good news about the San Cristobal species reproducing in the late 1950's, and about those still surviving in Española.

Before 1970 it was found that 10 of the original 15 species of native tortoises survived, although they were seriously threatened by invasive predators. In 1965, Roger Perry, the new CDRS director, made an experiment: he brought eggs from Pinzón, where a small surviving population of tortoises had been trying to reproduce without success because of introduced rats. Although nothing was known about how to hatch eggs and raise young tortoises, Perry, Miguel Castro (CDRS conservation officer) and Anders

Rambech (an early Norwegian settler in Puerto Ayora) made it work. This encouraged Perry to extend the program to other endangered species.

In May 1969, Rolf Sievers, the station manager, designed and built a house for the incubation and rearing of the tortoises, with financial support of the San Diego Zoological Society. It was inaugurated in 1970. Towards the end of that year, the first 20 tortoises hatched from Pinzón's eggs were released in their original island; two years later, 52 more followed.

All those processes were encouraged and supported by directors Peter Kramer (1970-1973) and Craig MacFarland, who arrived after Kramer. MacFarland had studied tortoises' populations and written several papers on how to protect them. Under his direction, the breeding program was strengthened and improved.

In 1975, the oldest of the Santiago and Española tortoises raised at the CDRS were taken to their islands. Also, San Cristobal tortoises were doing well, after local people reduced the number of wild dogs. Curiously enough, the production of tortoises at Santa Cruz reserve, located up in the island's highlands, was damaged by dogs in 1971-1975.

By 1985, a further advancement was added to the breeding program: with advice from CDF-based scientists Howard and Heidi Snell, the CDRS and the Galapagos National Park hatched tortoises at different temperature and humidity levels, realizing that such

traits determined the sex of the animals. This discovery led to the production of a greater proportion of females, fostering the results of the reproduction program.

By 1988, more than a thousand tortoises had been released. In Española only, there were more than 200 captive-bred animals.

Catalogue

Merlen, Godfrey. [*Tortoise in breeding center*]. [Slide]. [N.d.] : Godfrey Merlen, [ca1980]. [N.d.] : col. ill. : 3 x 5 cm. DDC 508. Well preserved.

Indexing

Subject categories: Conservation | Herpetology | History of CDF | History of Galapagos
| History of science

Keywords: Reptiles | Slides | Tortoises

Time framework: 1980

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/contents/cont002c.html>



Contents and pieces | Memory

The tortoise #1000

By the end of the 90s, the CDF-based program of reproduction of Galapagos' giant tortoises and repatriation of juveniles to their original islands was fully working, in close cooperation with the Galapagos National Park Service, and with the participation of some of the best international specialists in the species.

One important event in that process was the repatriation of the young tortoise #1000 to Española Island. The act took the form of a real celebration and was fully documented by photographer Tui de Roy in a series of slides currently kept at the audiovisual collection of the CDF's Archive.

In the images, the small tortoise can be seen, particularly in the hands of Fausto Llerena Sánchez, a National Park guard (the oldest in Ecuador) who strongly collaborated with the CDRS, and one of the main supporters of the rearing program. In fact, the tortoise reproduction center at Santa Cruz is currently named after him.

Catalogue

De Roy, Tui. [*Tortoise #1000*]. [Slide]. Española : Tui de Roy, [ca1980]. [N.d.] : col. ill. : 3 x 5 cm. DDC 508. Well preserved.

Indexing

Subject categories: Conservation | Herpetology | History of CDF | History of Galapagos
| History of science

Keywords: Reptiles | Slides | Tortoises

Time framework: 1980

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/contents/cont002d.html>

PAÑADERIA DESPENSA
& SODA BAR

SEGOBI

AV. CHA...
BAVA...



The traces of the islands' memory

Elements of Galapagos' cultural heritage

Initially in their history of human occupation, the Galapagos Islands were a space for travel and exploration. One of the best elements expressing that quality are the many graffiti still found in the rocks of the archipelago's coasts, especially near the landing sites. They can be used to track down the history of navigation in the islands, and, even if they can be considered as an invasive trait or damage to the environment, they also codify the human presence in Galapagos at least since the late 18th century. Graffiti and other elements related to travelling (docks, anchors, wrecks, etc.) are part of the islands' tangible cultural heritage and represent an important part of the Galapagoan history.

In many cases, travelling led to colonization: the archipelago has been (and still is, actually) a space of colonists who have left traces almost everywhere. From the caves in the highlands of Floreana Island to the early houses and crop fields in Santa Cruz or the "Wall of Tears" in Isabela, all of them represent an invaluable tangible heritage.

Industry has been a vital part of the occupation and colonization process. Hence, the islands have also been an industrial space. The ruins and remains of the "haciendas" in

San Cristobal's highlands, the salt mine at Santiago or the saltworks near Puerto Ayora, in Santa Cruz Island, as well as many other marks and scars left on the territory by humans, are part of a very important industrial heritage that explains the attempts for survival and progress of the local populations throughout time.

War has influenced the landscape in the Galapagos. The presence of the US military base at Baltra has left several buildings and structures, both in that island and in the neighboring ones. There are abandoned war-related elements in southern Isabela, and "Baltra pine" (the wood from the disassembled American barracks) is still a building material in many old Galapagoan houses. Baltra's airport and harbor are themselves remnants of the American presence, as well as the water distribution system in San Cristobal. Although it is a weakly preserved heritage, it is still an important part of the islands' history and memory.

Last, but not least, is the scientific heritage. During the last two centuries, Galapagos has been one of the spaces most intensively occupied by scientists in the world. The presence of researchers, explorers and, in general, academics in the islands has been continuous since the late 18th century. And although the tangible signals of such a presence are not as evident as those belonging to other heritage categories, they are important. From the first scientific station created by Norwegian Alf Wollebaek in Floreana Island to the premises of the Charles Darwin Research Station in Santa Cruz, all of them give account of the scientific activities in the archipelago.

All of the above has generated an enormous and rich documentary heritage, also tangible: from photographs and videos documenting landscapes, people and buildings, to the numerous articles, books and newspapers that compile all the knowledge produced. Associated with these different spaces in terms of tangible heritage, there is an intangible one: the oral tradition, folklore, customs, beliefs and traditions of a place, a people and/or a community.

Cultural heritage in Galapagos is undoubtedly multifaceted. The stronger the established links between its many parts, the richer it becomes.

[The photograph that illustrates this text is a slide preserved in the CDF Archive. It was taken by Godfrey Merlen in Puerto Ayora, Santa Cruz Island, in what is now Av. Charles Darwin, in the mid-1970s].

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/memory/memo002.html>



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Galapagueana's collections

Photos of CDF's staff in b/w

The b/w photographs accompanying this text are a part of an entire plank of personal pictures taken in May 1990 to the personnel working at the Charles Darwin Research Station (CDRS) by Marco Robalino.

The plank is included in the collection of black & white, paper-based photographs that make part of the audiovisual collection kept at the CDF Archive. Alongside slides, paper-based photographs are the largest series among the audiovisual documents, and comprise a number of subjects, including what seems to be ID pictures for the entire CDRS staff.

Unfortunately, most of the planks do not include proper data for each individual featured in the pictures. Therefore, it is necessary to rely in the (sometimes inaccurate) memory and recognition skills of the oldest CDRS workers still active in Galapagos, in order to identify the people photographed by Robalino.

Catalogue

Robalino, Marco. *Personnel of CDRS*. [Photograph]. Santa Cruz : Marco Robalino, 1990.
[N.d.] : b/w ill. : 21 x 30 cm. DDC 986. Well preserved.

Indexing

Keywords: History of CDF

Subject categories: Memory | Photos

Time framework: 1990

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/collections/coll002a.html>



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Galapagueana's collections

Unpublished notes on tortoises

The notes on tortoises written by Miguel Castro in 1965, a fragment of which is presented in the image accompanying this text, are but one of the many unpublished texts (original or copies) held at the CDF's Library, within the so-called "Special Collections".

Some of those documents are original manuscripts or typographic texts. A second group is composed by typographic, edited copies of handwritten notes. Finally, there are copies (mimeographed, photocopied) of the previous items.

Most of them are unpublished documents: personal notes, travel diaries, or internal reports produced by / for the CDF, all of them concerning Galapagos or its biodiversity. They are comprised into the category known as "grey literature": materials and research produced by organizations outside of the traditional commercial or academic publishing and distribution channels.

The value of these documents is twofold. On the one hand, they contain primary, unpublished raw data that on many occasions have served as the basis for well-known

academic literature (articles and books). On the other, they include a mixture of scientific and personal speech that makes part of a particular social, cultural, and historical context — which is important to understand the reasons behind the academic work, the personal opinions, the circumstances, failures and problems, etc.

Unpublished, original texts remain a very important source of primary information, first-hand descriptions, and original impressions.

Catalogue

Castro, Miguel. *Reports from Miguel Castro. 1964-1969*. Tortoises. [Manuscript]. Santa Cruz : Miguel Castro, 1964-1969. 107 pp. : b/w ill. : 21 x 30 cm. DDC 508. Well preserved.

Indexing

Subject categories: Conservation | Herpetology | History of CDF | History of Galapagos
| History of science

Keywords: Archives | Manuscripts | Tortoises

Time framework: 1960

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/collections/coll002b.html>

230

Arlos Carpeta
detached.

Galapagueana's collections

The old diskettes

Media archaeology is a recently created discipline dealing with new and emerging media through examination and critical study of past materials. It focuses especially on the so-called "dead media": obsolete and forgotten communication technologies.

One of those dead media are diskettes or floppy disks: a thin, flexible disk of magnetic material used for storage of digital information, enclosed in a square plastic package. Invented by IBM by the late 60s, the original size was 8 inches, but diskettes of 5 ¼ and 3 ½ inches ended up being the most popular ones. They were quite common during the last part of the 20th century — actually, the icon to "save" information in most modern software is the schematic image of a 3 ½ diskette. Although they have been superseded by safer, faster storage methods, they are still used, and there is hardware that can be connected to modern computers through a USB port in order to read old "floppies".

The CDF's Archive holds a collection of several hundred diskettes. Although a number of them are damaged and cannot be read, most of them can still be accessed. A section holds software installation data, while another one keeps database

information, and a third one stores the kind of documents produced nowadays by desktop programs like Word and Excel.

Most of the information contained by those diskettes has been already downloaded into modern servers for preservation. Regardless, the original items are carefully kept, for they represent an entire period of human technology's history — and CDF's scientific work.

Catalogue

Aa.Vv. [*Diskettes*]. [Diskette]. Santa Cruz : Aa.Vv., [ca1990]. [N.d.] : [n.d.] : 9 x 9 cm.
DDC 986. Well preserved.

Indexing

Subject categories: History of CDF | History of Galapagos | History of science

Keywords: Archives | Diskettes

Time framework: 1990

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/collections/coll002c.html>



fundación

Charles

Darwin
foundation

VIS

CHRISTOPHE

Nombre/Name

GRENIER

Apellidos/Surname

02FE 77516

Galapagueana's collections

IDs at the CDF

Early scientists working at the Charles Darwin Research Station received, upon their arrival, an ID informing of their status. Although devoid of some important, crucial information (such as a date, area, project, etc.), those IDs were essential to keep track of the many people working around for the CDF in Galapagos. They also forged a sort of identity, and strengthened a sense of institutional belonging.

One of the collections at the CDF' Archive comprises exactly the half of all existing IDs issued by the CDF throughout the years. Originally, they were organized by alphabetic order and stored in two folders, one of which has not been found to the date. However, the other one holds about 200 original cards, with the identification of all professionals and academics that had a position in the CDF in the past.

Some of them do not collaborate with CDF any longer. Such is the case of French geographer Christophe Grenier, once the CDRS' Science Director, and author of celebrated *Conservation contre nature* (2007).

Others, however, still do. Like Heinke Jäger, CDF's restoration ecologist.

Catalogue

Charles Darwin Foundation. [*Scientists' IDs*]. [Card]. Santa Cruz : CDF, [ca1980]. [N.d.] : col. ill. : 5 x 8 cm. DDC 986. Well preserved.

Indexing

Subject categories: History of CDF | History of Galapagos | History of science

Keywords: Archives | Cards

Time framework: 1980

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/collections/coll002d.html>



Fragments for a history of Galapagos

The discovery

In 1535, during a trip between Panama and Ecuador, Spanish bishop Tomás de Berlanga was diverted from his route by calm winds and strong prevailing currents and became the first known European to land in Galapagos (March 10).

That same year, from Portoviejo (current Ecuador), he wrote a letter to King Carlos I describing the archipelago: *Carta a Su Majestad de Fray Tomás de Berlanga, describiendo su viaje desde Panamá á Puerto Viejo, e los trabajos que padeció en la navegacion* ["Letter to His Majesty from Fray Tomás de Berlanga, describing his journey from Panama to Puerto Viejo, and the labors he suffered in navigation"] (April 26).

There he recounts that, after departure, his ship had 7 days of favorable winds and another 6 of calm. During the latter, the currents pushed it to an island, which was sighted on March 10. They had enough water for 2 days, so they sent a boat to seek a spring. They didn't find but sea lions, and tortoises so big that they could carry a man on them, and a lot of iguanas "that are like serpents".

The next day they saw a different island, bigger than the first and with big mountains, and they went there, believing that, because of its size, it would have "rivers and fruits". When they could disembark, they were already without water in the ship, and they couldn't find it on land, so they had to cut opuntias' leaves and drink the sap.

On Easter Sunday, Berlanga said mass, and the crew ended up finding some water, but by then two men and ten horses had died of thirst.

From that island they could see other two, a bigger one and a medium-sized one. Berlanga found out that the islands were about one grade below the Equinoctial. There were sea lions and iguanas again, as well as giant tortoises, and many birds like those from Spain, but "so silly that they didn't know to flee". There were shining stones in the beaches that Berlanga mistakenly took for diamonds and amber, but the land was so stony that, in the bishop's opinion, nothing could be harvested there.

With a good provision of water, they navigated 11 days without sighting land and, after correcting the course, and worried again about the scarcity of liquid, they went further another 10 days until they arrived "to the bay and river of the Caraques, Friday, April 9".

Officially, nobody searched for the Galapagos Islands, and nobody landed on them again until 1546, when Spanish conqueror Diego de Rivadeneira arrived at the archipelago by accident. In 1569 the islands were added to the map by Mercator, and from there on, a long list of sightings arrivals is included in the history of Galapagos.

[The photograph that illustrates this text was taken by Edgardo Civallero].

References

- Carta a Su Magestad de Fray Tomás de Berlanga, describiendo su viaje desde Panamá á Puerto Viejo, e los trabajos que padeció en la navegación. En Pacheco, Joaquín F.; Cárdenas, Francisco de; Torres de Mendoza, Luis (comps.). *Colección de documentos inéditos relativos al descubrimiento, conquista y colonización de las posesiones españolas en América y Oceanía...* Madrid: Imprenta de M. Bernaldo de Quirós [etc.], 1864-1884, tomo XLI, pp. 538-544.

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/history/hist002.html>

THE CALIFORNIA

Published by the
California Historical Society
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1900

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1900

BINDING
327
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Activities and projects | Publications

A history of Galapagos in fifteen documents

History is conventionally defined as the period of time in which human societies have produced written texts. Arbitrary as it is, such a definition reflects an undeniable fact: through artifacts, manuscripts, prints, images, and many other documents (understood as "any material capable of containing and transmitting some type of information") it is possible to reconstruct the journey of human beings throughout the centuries. And while such documents definitively leave out a vast majority of events and characters, they provide at least a basic line that allows the construction of an elementary historical panorama.

From this perspective, the history of the Galapagos Islands begins in 1535, when the Spanish bishop Tomás de Berlanga, travelling from Panama to Ecuador, gave an account of their existence for the first time in a letter sent to King Charles I. From that moment on, they began to be mentioned in chronicles, newspapers, travel journals, naval logs, notebooks, correspondence, academic articles, novels, and countless other documents that, like a trail of crumbs, can be sought and recovered in order to (re)build a possible (always provisional, never definitive) history of the human presence in the archipelago.

In their pages, illustrations and charts, those materials show the progressive change in the gaze of the visitors who arrived in Galapagos, and how their experiences, discoveries, challenges, and problems fed each other. They also reflect the development of different international geo-political contexts, and how the islands were part of them. And they provide essential data to understand the emergence of different worldviews and scientific paradigms, as well as the evolution of different academic disciplines and methodologies.

A history of Galapagos in fifteen documents (subtitled *From Ortelius' map to Darwin's journals*) is a digital book edited by the CDF's Library, Archive & Museum area that collects and presents, pursuing a simple informative goal, a handful of textual materials that, from a heritage-related perspective, represent milestones in the Galapagoan history. They have been chosen, somewhat haphazardly, from a wide and rich documentary collection, as representative elements of an era — one going from the 16th century to the mid-19th century. This period allows avoiding the modern "explosion of information" era, when the amount of literature (international in general and on Galapagos in particular) exponentially multiplied. The chosen closing date for this work's timeline is a year that has proven to be "emblematic" for the history of the islands.

The documents are presented in chronological order, according to their initial date of publication, even though they sometimes refer to events that took place a few years earlier. Each one includes its bibliographic reference and presents the cover (original, when possible) and a fragment where the Galapagos Islands are directly referred to.

Last, they have been organized by century, and each group presents a brief initial note that puts the publications in context and highlights their importance.

As a complementary resource, each item has a link to download and view the full text, as part of *Galapagueana's* "Galapagos Historical Bibliography". Such texts, now part of the public domain and of the universal cultural and historical heritage, have been digitized by libraries and archives around the world and have generally been made available online by those entities or by platforms such as archive.org or Biodiversity Library. The versions to download have been uploaded to *Galapagueana* to guarantee continuity of access, while being accurately organized and described. Additionally, all the contents of this book are part of *Galapagueana's* "Timeline": a chronology that forms the central axis of that digital project.

The goal of this work is to provide a basic and initial gateway to a rich and sometimes little-known literary and documentary production. Likewise, it aims to show, albeit in an elementary way, the numerous relationships between the documents, and between these and the historical events that they rescue from oblivion. Finally, it seeks to present the idea of social memory (the basis of history) as a dense fabric, made up of innumerable strands of different types, smaller or larger but always equally important.

Catalogue

Civallero, Edgardo. *A history of Galapagos in fifteen documents: From Ortelius' map to Darwin's journals*. [Book]. Santa Cruz : CDF, 2022. 94 pp. : col. ill. : 21 x 21 cm. DDC 986. Well preserved.

Indexing

Subject categories: Geography | History of Galapagos | History of science | Literature | Social sciences

Keywords: Bibliographies | Books | Culture | Expeditions | Manuscripts | Maps

Time framework: 2022

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/activities/acti002a.html>



Activities and projects | Oral history

The importance of Galapagos' orality

As it was already mentioned, in Galapagos there are countless fragments of memory that are not preserved in physical media (books, reports or other graphic, audiovisual, or written documents), but through orality: the spoken word. The Charles Darwin Foundation (CDF) Oral History program focuses precisely on recovering those narratives.

Galapagoan orality has a paramount importance in the collection and construction of a local history, as demonstrated by the many amateur and professional historians who have tried to accomplish the unlikely goal of producing a serious, well-documented island's history book. Most of the facts are preserved only in the local population's memory and are transmitted orally. One fine example is Norwegian colonist Jacob P. Lundh's 2001 book *The Galapagos: A brief history*, where most of the information regarding the islands' modern history was collected from oral sources.

The scarcity of official policies for the preservation of information, and the practical inexistence of archives or similar institutions, combined with a serious problem for the conservation of paper-based and other documents in the islands (due to its particular

weather), makes the access to past records difficult or even impossible. Hence, oral sources become the only available way to explore social memory and reconstruct historical events.

As it may be expected when it comes to orality, the accounts about the very same fact can be quite different from teller to teller, and even ferociously opposite. That feature of oral tradition provides a level of uncertainty that makes most professional historians uneasy about dealing with such sources. But, on the other hand, it also provides a wide number of points of view, which allows the construction of a richer, more heterogenous account about an event, a character, or a process.

Since, in many cases, there is no other available source, orality has become the main deposit of Galapagos' social memory and, hence, of potential history. How to handle and process it is the real challenge when it comes to creating a solid discourse.

[The photograph that illustrates this text is a slide preserved in the CDF Archive. It has no date or mention of authorship].

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/activities/acti002b.html>



Activities and projects | Social memory

The slides of the Baltra base

The US Army Air Force base at Baltra (South Seymour) island was officially established in 1942 (although movements started in 1941), after a long period of geopolitical struggle regarding Galapagos and its strategic position in the eastern Pacific Ocean, near the Panama Canal.

During the World War II, the crew stationed in the island patrolled the area protecting the Canal and searching for enemy submarines. There were about 200 buildings, housing 2,400 people, including one heavy bombardment squadron, one reinforced infantry company, one coastal artillery battery, a seacoast searchlight platoon, and an airbase detachment. They baptized the place "The Rock": a barren, hot, dry landscape, full of stones everywhere.

The base included a church, a movie theatre, a beer garden, and a bowling alley. Outposts were set up in Santa Cruz, San Cristobal, Bartolomé and other islands, where nowadays remnants can be seen (anti-aircraft cannons, supply barges, abandoned bombs). Local legend said that the iconic Pinaculo Rock, in Bartolomé, was shaped by American air force, when it was taken as a practice target.

In 1946, Baltra was officially turn over to Ecuador.

At least two series of slides in the audiovisual collection of the CDF's Archive are related to the daily life in the Baltra base. All of them belonged to Dr. Alfred Croneis and were taken in 1943.

One of them is the only group of slides in the collection having a metal frame, which represents a curious feature. They document a number of moments inside the military compound. The other is perhaps the most interesting and intriguing in the entire audiovisual collection. On the one hand, because the slides' frames do not include any kind of information about the people, the places, or the dates. On the other, because of the moments they represent. Even if a part of them present aerial pictures of some islands, most of them are images of some American characters interacting with the local environment and population, in ways that may produce doubts or astonishment.

Catalogue

Croneis, Alfred. [*Baltra's slides*]. [Slide]. Baltra : Alfred Croneis, 1943. [N.d.] : col. ill. : 3 x 5 cm. DDC 986. Well preserved.

Indexing

Subject categories: History of Galapagos

Keywords: Heritage | Memory | Slides

Time framework: 1943

Publication

01.05.2022

<https://galapagueana.darwinfoundation.org/en/activities/acti002c.html>



Activities and projects | (In)tangible heritage

The incubator at the CDRS

The image above comes from a slide that, according to the information written in its cardboard frame, was taken by Charles Darwin Research Station director Peter Kramer in 1970, and is kept in the audiovisual collection of the CDF Archive. The structure in the picture is the original incubator at the CDRS, whose remains still stand near the front door of the director's house, yards away from La Ratonera beach.

In his 2001 book *The Galapagos: A brief history*, Norwegian colonist Jacob P. Lundh provides basic information about this element.

From 1964 to 1970, the position of director of the CDRS was held by British zoologist Roger Perry, a UNESCO wildlife conservation specialist. With the construction of the CDRS buildings almost finished, he was able to devote a larger amount of time to research and scientific work than his predecessors. It was during this period that the Station manager, Edgar Pots, resigned his position, and was replaced by Rolf-Dieter Sievers, a young German settler. Almost at the same time, Tjitte de Vries was employed as a resident ecologist, while Miguel Castro was the conservation officer, a position he obtained in 1964, while David Snow was still director.

In 1965, Perry began an experiment that would define the future of the CDRS — and Galapagos' science history. He had the most recent eggs laid by giant tortoises in Pinzón Island brought to the Station, to be kept there. The population of tortoises in Pinzón was small, and they had problems reproducing because of the invasive black rats destroying their nests and killing their youngsters.

There was no available information about how to take care of Galapagos tortoises' eggs. However, under the guidance of Perry and thanks to the careful work of Miguel Castro and Anders Rambech, one of the earliest Norwegian colonists in Puerto Ayora, the experiment worked. This successful outcome encouraged Perry to extend the activity to other species in different islands, especially those which had no opportunity to reproduce in the wild.

In May, 1969, and with the financial support of the San Diego Zoological Society, Sievers designed and built the basic structures for incubating and hatching the eggs and rearing the small tortoises. Such structures were officially inaugurated in January, 1970. At the end of that year, the first batch of young tortoises, those coming from the eggs collected in Pinzón in 1965, were released on their original island.

All the information shared above was confirmed by Rolf Sievers himself — one of the oldest members of CDF still willing to share his memories and stories.

The incubators have appeared in countless pictures documenting the scientific process of conservation of giant tortoises designed and developed by the CDF. Nowadays,

because of their meaning, they are a valuable, living part of the CDRS' and Galapagos' tangible heritage.

Catalogue

Kramer, Peter. [*Incubator at the CDRS*]. [Slide]. Santa Cruz : CDF, 1970. [N.d.] : col. ill. : 5 x 8 cm. DDC 986. Well preserved.

Indexing

Subject categories: Conservation | Herpetology | History of CDF | History of Galapagos
| History of science | Zoology

Keywords: Heritage | Memory | Reptiles | Slides

Time framework: 1970

Publishing

01.05.2022

<https://galapagueana.darwinfoundation.org/en/activities/acti002d.html>



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