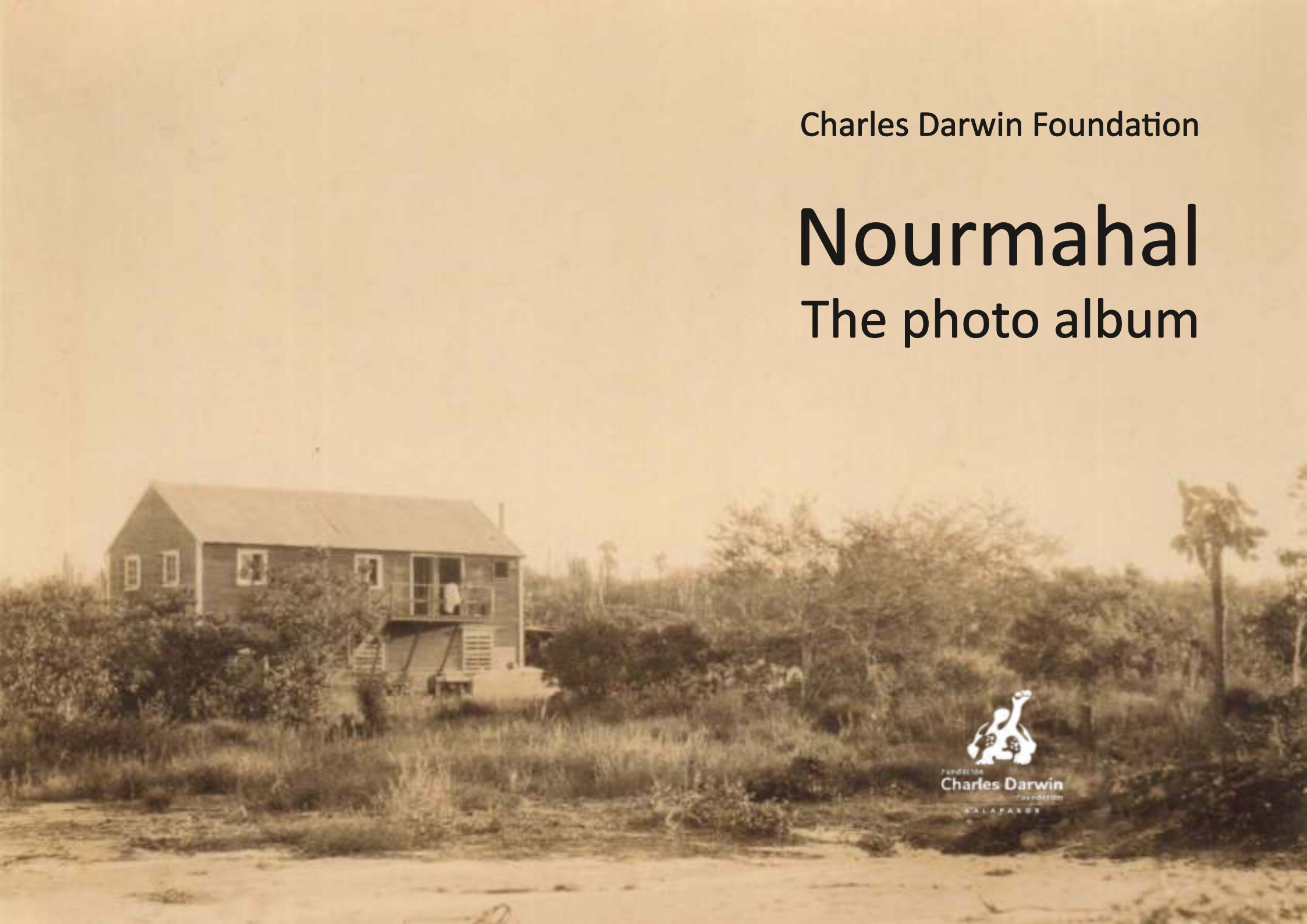


Charles Darwin Foundation

Nourmahal

The photo album



Charles Darwin Foundation

Nourmahal

The photo album



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Charles Darwin Foundation

Nourmahal

The photo album

Photographs by several authors
Texts and edition by Edgardo Civallero
Series "Memorias de la FCD" n° 22

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



A myriad of arrivals

The progressive recognition of the Galapagos Islands, their landscapes and their biodiversity throughout the history of the archipelago was inevitably associated with the amazement that their discoverers and visitors felt when encountering a unique biological reality.

The first document in the Galapagos bibliography, the letter to King Charles I from Bishop Tomás de Berlanga (1535), official discoverer of the islands and the first to leave a written record of their existence, already included a brief description of animals and unique places. His testimony was replicated, in greater detail, by British and French sailors (17th and 18th centuries) who, on piracy or hunting journeys through the waters of the South Sea, stopped at the Encantadas and described, in their logs and diaries, the particularities of the space they were traveling and getting to know.

Such was the case of the American David Porter (1813), who docked in the archipelago in the middle of a

vehement crusade to clean the Pacific waters of British whalers. He was followed by the visits of the *Briton* and the *Tagus* (with the later chronicles of Shillibeer) in 1814, the voyages of Amasa Delano (1800 and 1817), and those of Ben Morrell, author of exaggerated personal narratives.

The early biological and geological brushstrokes included in these narratives, simple and almost sketchy, were expanded and deepened in the reports of the first naturalists who set foot in the Galapagos. Their words ended up inspiring a cohort of colleagues determined to thoroughly study such a "lost paradise" in the middle of the waters of the Pacific Ocean.

Throughout the 19th century, scientists who managed to reach the shores of the Galapagos Islands did so as part of much larger exploration expeditions, with objectives that sometimes had nothing to do with science. Among those voyages were those of Basil Hall's *Conway* (1822), the *William & Ann* with Scouler on board (1825), Lord Byron's *Anson* (1825), and the *Potomac* (1834).

A turning point in the list came from the unforgettable visit of FitzRoy's *Beagle*, with Charles Darwin on deck (1835). It would be followed by the arrival of the *Vénus* of Petit-Thouars (1838), the *Herald* and the *Pandora* (and the chronicles of Seeman) (1846), the Swedish ship *Eugenie* (1852), the ornithologist Simeon Habel (1868), the *Reindeer* (1873), the *Peterel* (1875), the *Triumph* (1880), the Italian corvette *Vettor Pisani* (1884) and the *Albatross*, which dropped anchor in the Encantadas on several occasions (1889, 1891, 1904...).

It was probably from the visit of the Swiss-American biologist and geologist Jean Louis Rodolphe Agassiz in 1872, aboard the *Hassler*, when a new type of exploration began: academics and scholars who, moving in ships adapted to the situation, traveled specifically to the islands and their surroundings to investigate. And, above all, to collect biological samples and specimens that would feed the voracious appetite of zoos and private collections. The trail marked by Agassiz was followed by George Baur's Salisbury Expedition (1891), the Webster-Harris Expedition aboard the *Lila & Mattie* with Rollo H.

Beck among the participants (1897), and the Hopkins-Stanford Expedition (1898).

Beck would return to the Galapagos in 1901 aboard the *Mary Sachs*, on a voyage financed by Lord Walter Rothschild. And it was that trip, right at the turn of the century, that seems to have firmly established a kind of modification in the paradigm of expeditions. One that would extend at least during the first half of the 20th century. Many of them began to be supported by philanthropic magnates with a deep interest in natural history. The organization could fall to academic institutions, but the objectives, budget and even infrastructure were usually defined by such patrons. There were, of course, self-organized travels: a clear example was that of the Lack-Venables Expedition of 1938-9, whose members were forced to assume (and suffer) a long series of constraints and limitations. But in general, that was the exception rather than the rule.

Among the expeditions organized by strong organizations in Europe and the United States were the voyages of the *Albatross*, of the US Fish Commission,

and that of the California Academy of Sciences, aboard the *Academy* (1905). And among those that had private support, those of William Beebe stood out aboard the *Noma* (1923) and the *Arcturus* (1925), alongside that of the millionaire William K. Vanderbilt on the *Ara* (1926), that of Allan Hancock aboard the *Oaxaca* (1927), the Cornelius Crane Pacific Expedition financed by Vanderbilt himself aboard the *Illyria* (1929), and that of the magnate Vincent Astor with the *Nourmabal* (1930).

The *Vagabondia* of William Mellon and the *Mizpah* of Eugene McDonald, both millionaires, arrived in the Galapagos the same year that the *Nourmabal*. But Astor had the idea of taking a group of American scientists with him. They left a set of magnificent testimonies of their work, including articles, travel diaries, and a beautiful photo album.

The present work, divided into two parts, presents the aforementioned collection of images, and the transcription of one of the scientific diaries of the *Nourmabal* expedition: that of the American ornithologist James P. Chapin.

A trip in sepia

The album labeled "Nourmahal" is currently preserved in the special collection of the Charles Darwin Foundation (CDF) Library, Archive and Museum, located at the Charles Darwin Research Station (CDRS) on Santa Cruz Island, Galapagos, Ecuador.

It is the oldest collection of photographs, original and printed on paper, preserved by the institution, and a unique document in historical terms.

The *USS Nourmahal* was a ship about 80 m in length, built in 1928 as a pleasure yacht for American billionaire Vincent Astor at the Krupp shipyard in Kiel, Germany. It was the third Astor family yacht to bear that name (which in Hindi means "Light of the Palace" and belongs to the heroine of a poem included in *Lalla Rookh*, a novel by Thomas Moore from 1817). The cover of *Time* magazine on February 6, 1928 proclaimed it the best of its time. In 1940 the vessel was acquired by the US Coast Guard for one million dollars, and in 1943 it was converted by the US Navy into a gunboat to face World War II. Luckily, it

never needed to go into combat. In 1946 it was decommissioned, and in 1948 it was abandoned. Its story ended in 1964, when it was sold to scrap metal dealers for \$27,000 and dismantled.

Between 1928 and 1942, beyond merely recreational uses, the boat was used for philanthropic purposes, including serving as a means of transportation for various naturalist expeditions. Specifically, between March and May 1930, Vincent Astor took a group of American scientists to the Galapagos, Cocos Island, and adjacent islands on a sample collection trip. The researchers were from the New York Aquarium, the American Museum of Natural History and the Brooklyn Botanic Garden.

The album "Nourmahal" shows, in characteristic sepia tones, details of that journey: the members of the crew, the many places they passed through, the biological species they encountered, and the tasks addressed in their recognition and management.

The series of photographs, in combination with Chapin's travel diary, allows us to learn that the *Nourmahal* set sail

from Miami on March 23, 1930, crossed the Caribbean Sea and passed through the Panama Canal around the 28th of the same month, with a stop at the Tapia River, in the vicinity of Panama City. Then it continued its journey and arrived at Santa Cruz Island, in the Galapagos, on March 31. After exploring the neighborhoods of Academy Bay (where the town of Puerto Ayora is currently located) and the forested upper part of the island, the ship circumnavigated it to the east (April 10) to head for the Seymour Islands and Daphne Major, where scientists recognized the fauna of the crater that characterizes this last island. On April 11 the ship returned to Academy Bay sailing west of Santa Cruz, sighting Pinzón, Rábida and Santiago islands. From that point, the expedition headed to Floreana Island (April 12), where it took an image of a post office box placed on Black Beach by the Ritters, with whom the crew had lunch, and from there it returned to Academy Bay (April 13). The *Nourmabal* revisited the Seymour Islands (April 14) and then headed to Genovesa Island (April 15).

After that, the ship abandoned Galapagoan waters and headed north (April 16). It passed through Cocos Island

(Costa Rica) between April 17 and 20, and through the Pearl Archipelago (Señora Island, Pedro González Island, Panama) between April 21 and 22, and then arrived in Balboa, Panama. From that point the scientists visited Frijoles by land (April 23) and from there they went to the Barro Colorado Island scientific station. That same day they boarded the *Nourmabal*, which was crossing the Panama Canal, and went out to the Caribbean Sea. Surrounding the island of Cuba to the west, they stopped at several Dry Tortugas cays (April 27), south of Florida. The ship docked in Miami on April 28, and there the graphic story in the album ends. However, the voyage continued until May 2, when the *Nourmabal* finally dropped anchor in New York City.

It is curious to note that, in relation to the Galapagos—a territory that occupies the largest percentage of the album's content—the photographs do not reflect an active human presence on the islands. Although there is evidence of the remains of the colony of Norwegians who, arriving aboard the *Ulua*, settled in Academy Bay between 1926 and 1927, and there is an account of the Hacienda Fortuna and its crops (established in 1925) on

the heights of Santa Cruz Island, and the Ritters' mail barrel in Floreana, there are no other samples of the settler population in Galapagos.

However, there is an extensive account of the participants of the expedition.

The characters

Recognized members of the voyage aboard the *Nourmahal* were Vincent Astor, Eugene Pool, C. Swydan Cutting, Robert Huntington, Kermit Roosevelt, Clarence Leonard Hay, E. R. Sanborn, C. H. Townsend, Wilfrid S. Bronson, Henry K. Svenson, and James Paul Chapin.

About Vincent Astor, the ship's owner, a book could be written. Born in 1891 in New York, he lost his father in the sinking of the *Titanic* and, from that moment on, becoming a rich heir, he abandoned his studies at Harvard and devoted himself to business and philanthropy. He died in 1959, leaving his entire fortune to a foundation.

About Eugene Pool, C. Swydan Cutting and Robert Huntington, no further information has been found; they probably were Astor's personal friends. Kermit Roosevelt, a member of the famous dynasty of politicians, was a businessman and explorer, participated in a large number of expeditions, and between 1937 and 1939 he was vice-president of the Zoological Society of New York. For his part, Clarence Leonard Hay worked at the American Museum of Natural History as a botanical curator, and Elwin Roswell Sanborn was the first official photographer of the New York Zoo, and probably the author of most of the photographs in the album. Sanborn worked with Charles Haskins Townsend, a famous American zoologist and naturalist, who at the time of the *Nourmahal* expedition was the director of the New York Aquarium, and who traveled to the Galapagos on several occasions.

Wilfrid Swancourt Bronson was a natural history writer and artist, and at the time of the trip he was working for the Brooklyn Botanic Garden. Henry K. Svenson was an American botanist born in Sweden who also worked at

the Botanical Garden, and who produced an article on the flora of the Galapagos after the expedition; additionally, he continued investigating the relationships between the flora of the islands and those of South America. Finally, James P. Chapin was an ornithologist, and the author of the travel diary that complements this publication.

Also mentioned in the album is Gordon Wold, who was one of the first settlers on Santa Cruz Island.

The photographs

The images included in this work are presented in the order in which they were arranged on the original album, which implies some crossovers in the timeline.

The notes found on the back of the images have been used, except for a series of numerical codes. The hands that made the notes are clearly different. The scientific names, some of them outdated, have been kept in their original version.

Obvious duplicates have been avoided, as well as completely cropping the images. All of them have been enlarged equally, highlighting the variety of sizes and proportions included in the original album. None of them have been enhanced or retouched: the high-quality scan captures the original characteristics of each snapshot, including several overexposures. A limited number of photos have damage, slight or significant; they have not been retouched either.

Only a handful of photos have a stated authorship (Chapin and Townsend). The rest is assumed to be the work of E.R. Sanborn.

Images show unique locations, like Academy Bay's old fish cannery, the neighboring pier and the enormous *matazarño* trunk located at the end of it; all of these elements are testimonies of the first Norwegian colonization of Santa Cruz Island, which failed three years before the arrival of Astor and his companions. Also appearing are the salt flats near the current Puerto Ayora, the path to the Santa Cruz highlands (described by

many other travelers, before and after), and the Hacienda "Fortuna", the first to be established in the upper part of Santa Cruz, and nucleus of the current town of Bellavista. They also show the rich forests of *Scalesia* and the coast of Academy Bay, barely recognizable today.

They also present images of a series of local species for which there was no abundant visual documentation at the time. The photographs of the fauna of the Daphne Major Island crater are probably among the first to be taken at that location.

The photographs show an interaction with Galapagos nature that is currently no longer acceptable, even among scientists: the handling of species (captured marine and land iguanas, hawks being manipulated) or the taking of specimens as "samples" (stored on the deck of the yacht), for example.

Finally, it is worth mentioning that the original album includes a photo that does not belong to the expedition: a classic image, repeated *ad nauseam*, of the Ritters, Friedrich and Dore. They were a couple of German

settlers who lived on Floreana Island and who starred in one of the darkest and most famous stories in Galapagos history. According to the annotation on the back, the image was a gift from Harry S. Swarth, an American ornithologist who participated in the California Academy of Sciences expedition to the Galapagos (1905).

Paths to the future

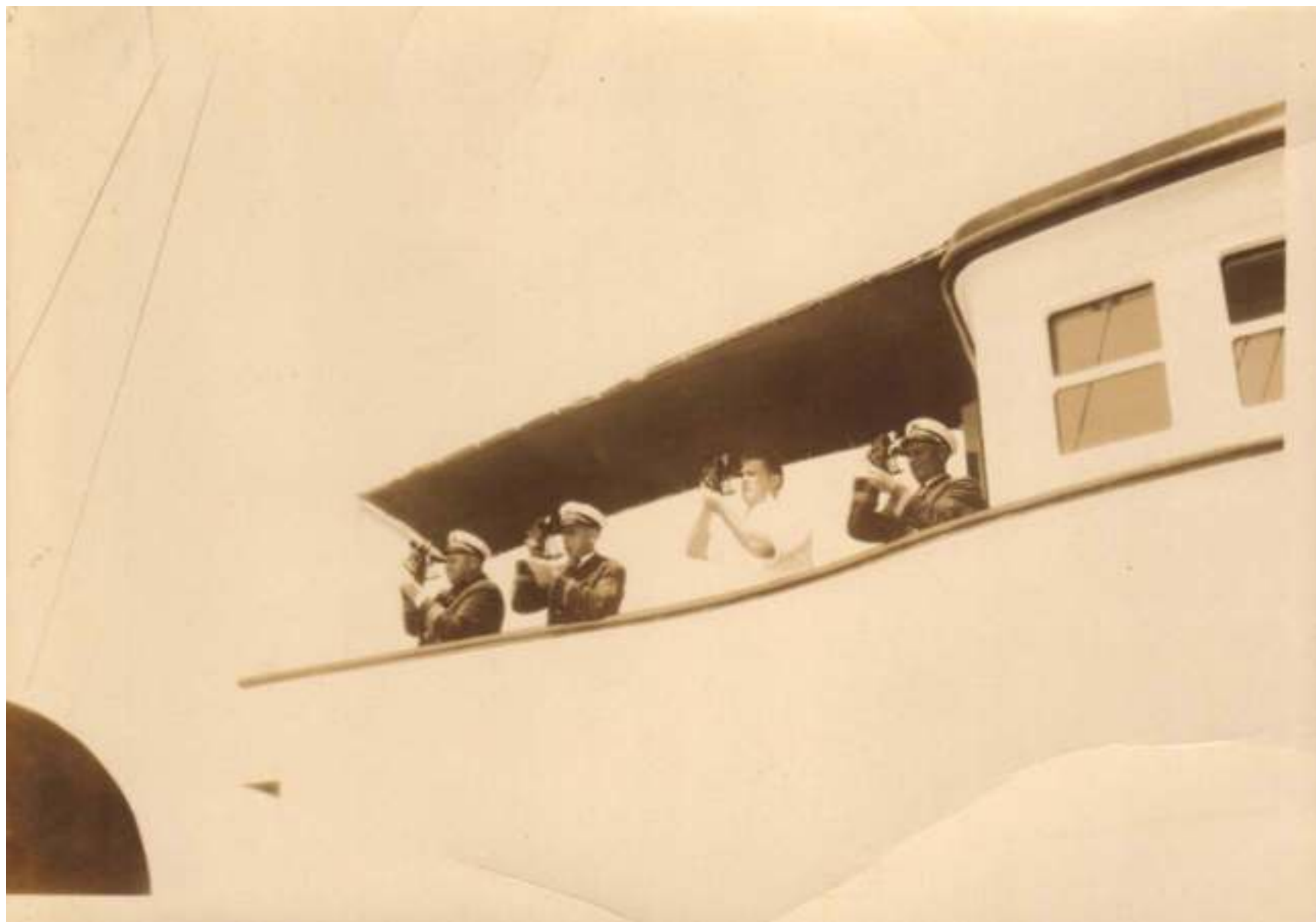
The recovery, digitization and presentation of this collection of images and their associated documents represent only a first step in the analysis of the items produced during the *Nourmahal* expedition.

It is necessary to undertake the search, compilation and comparison of other photographs taken during the same trip, and to carry out studies about the landscape changes in the visited territories, the first reports of the presence of species in specific places, and even human activity, particularly in the Galapagos Islands.

We hope that this first step will encourage others to follow this path.

Bibliography

Svenson, Henry K. (1935). Plants of the Astor Expedition, 1930 (Galapagos and Cocos Islands). *American Journal of Botany*, 22(2), pp. 208-277.



001

Captain Klang, Second Officer Nelson,
R. Huntington and First Officer
Carlson on Yacht Nourmahal



002

Second Officer Nelson, Capt. Klang,
R. Huntington and First Officer
Carlson on Yacht Nourmahal



003

Second Officer Nelson, R. Huntington
and First Officer Carlson on
Nourmahal. Caribbean Sea



004

Yacht Nourmahal



005

Yacht Nourmahal
off Cape Hatteras



006

Yacht Nourmahal



007

C. L. Hay on
yacht Nourmahal



008

Yacht Nourmahal
off Cape Hatteras



009

Yacht Nourmahal
off Cape Hatteras



010

View from crow's nest
of Nourmahal at Pearl Island



011

Cristobal, Canal Zone



012

Cristobal, Canal Zone



013

Cristobal, Canal Zone



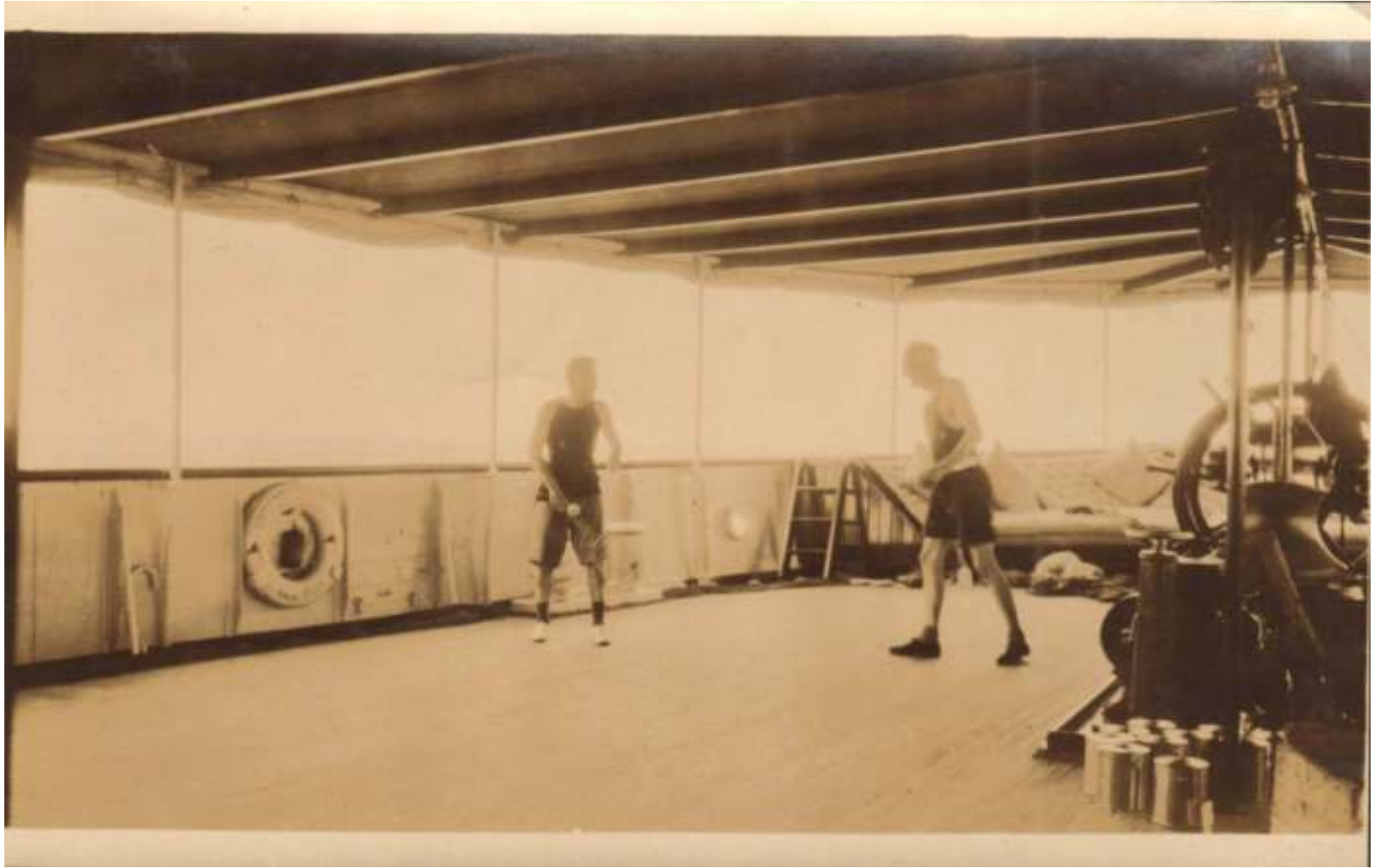
014

Yacht Nourmahal



015

V. Astor, K. Roosevelt, C. L. Hay,
W. S. Bronson, S. Cutting, Dr. E. Pool,
and H. K. Svenson on yacht



016

Deck tennis on Nourmahal
in Pacific



017

Yacht Nourmahal



018

Cristobal, Canal Zone



019

Cristobal, Canal Zone



020

Cristobal, Canal Zone



021

Atlantic entrance to the
Panama Canal



022

Entrance to the
Gatun Lock



023

Gatun Locks



024

Gatun Locks



025

Gatun Locks, Panama Canal



026

Gatun Locks, Panama Canal



027

Nourmahal in Gatun Lock



028

Gatun Lock



029

Gatun Lock



030

Tapia R., Panama



031

Tapia R., Panama



032

Tapia R., Panama



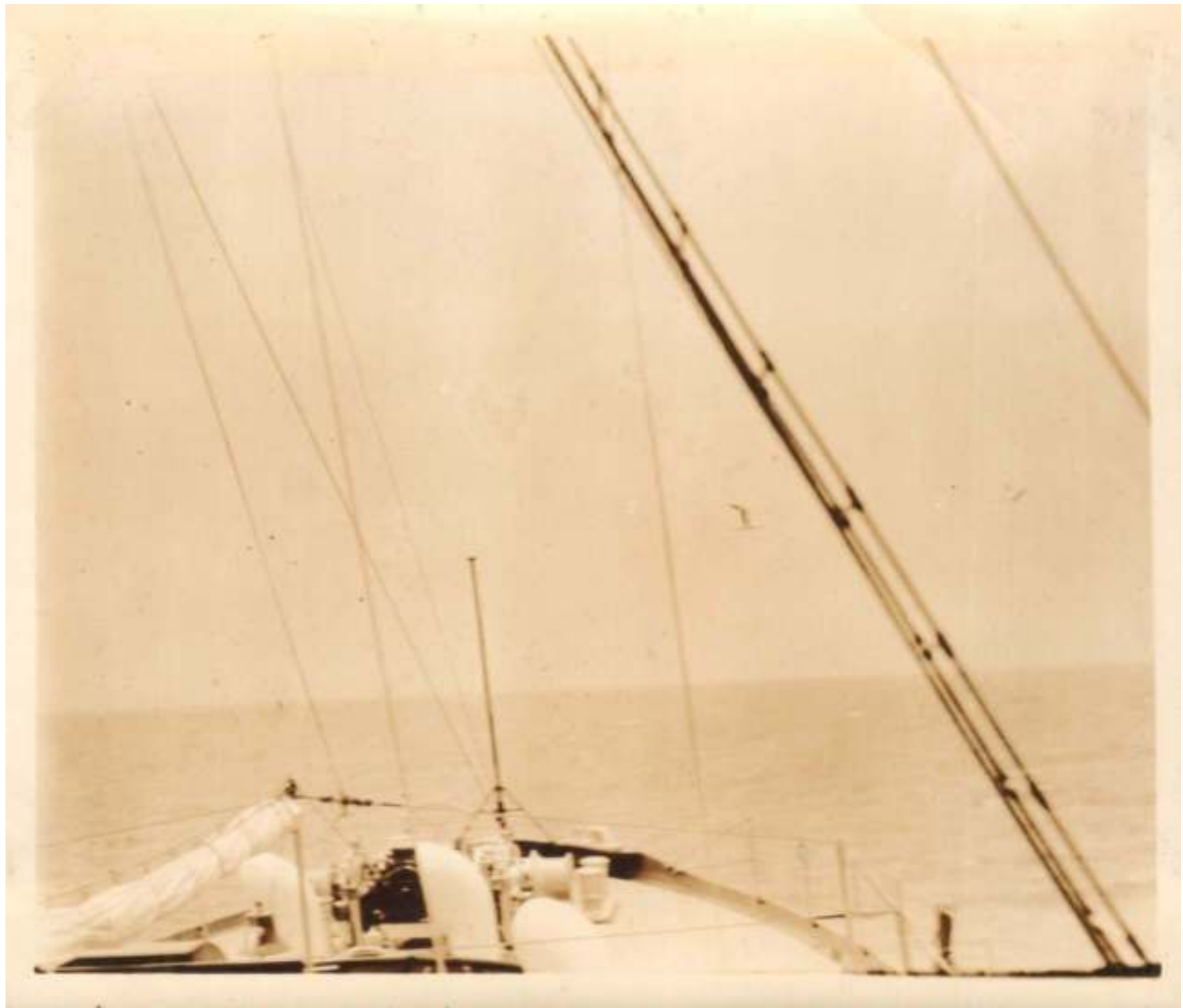
033

Tapia R., Panama



034

Sula dactylatra



035

Sula dactylatra



036

Porpoises



037

Porpoises



038

Indefatigable Island



039

Indefatigable I.
from Academy Bay



040

Indefatigable I.
from Academy Bay



041

Nourmahal off north shore
of island (Indefatigable)



042

Academy Bay,
Indefatigable I.



043

Launch leaving for Nourmahal,
Indefatigable I.



044

Academy Bay,
Indefatigable I.



045

Abandoned fish cannery,
Indefatigable I.



046

Vincent Astor and Robert
Huntington with first marine
iguana. Indefatigable Island



047

Abandoned fish cannery,
Indefatigable I.



048

Cooking lunch.
Indefatigable I.



049

Shore of salt pond.
Indefatigable I.



050

Academy Bay,
Indefatigable I.



051

Academy Bay,
Indefatigable



052

Trail near Academy Bay,
Indefatigable I.



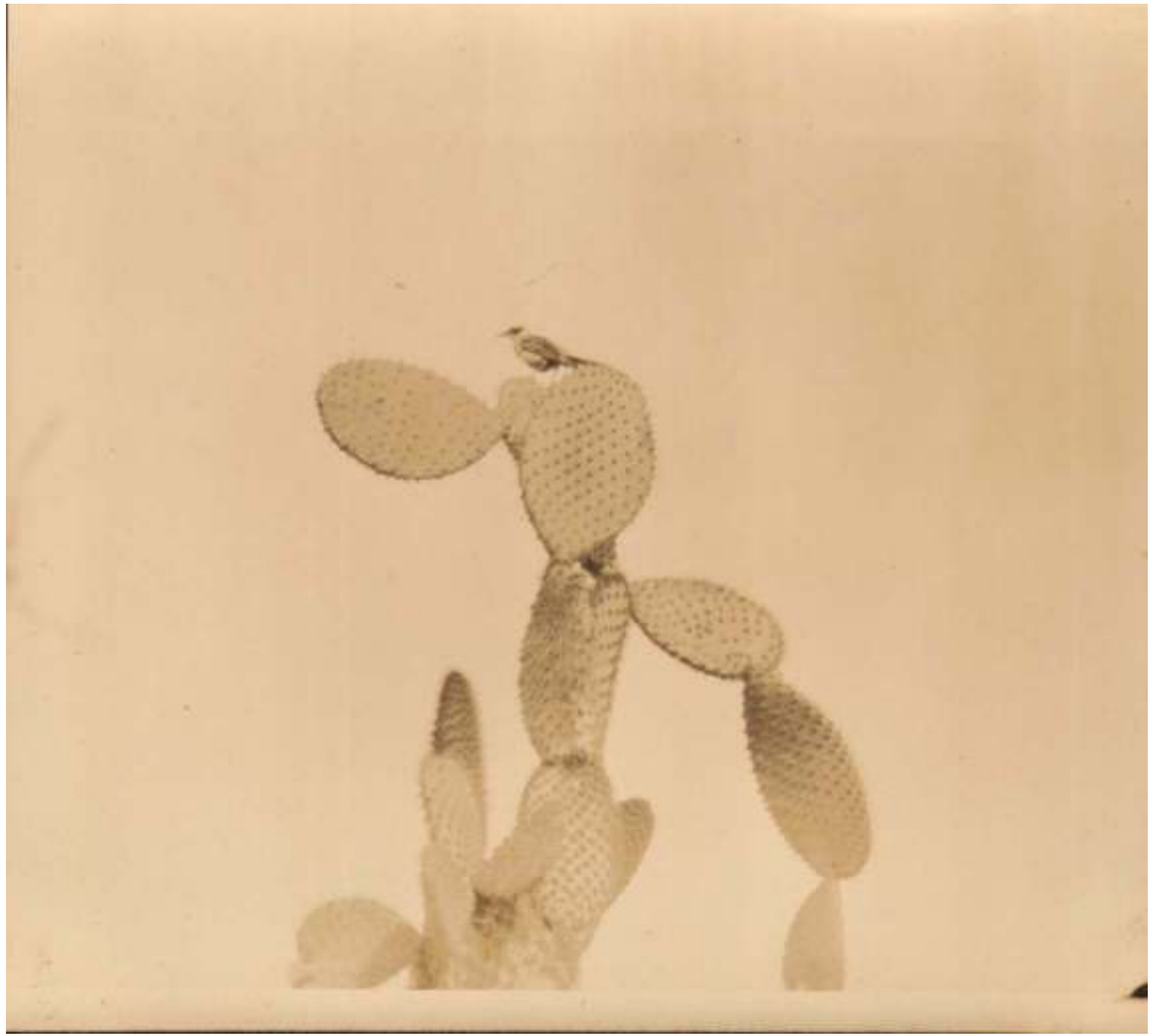
053

Nesomimus
(Indefatigable I.)



054

View to east from fish cannery.
Indefatigable Island



055

Nesomimus.
Indefatigable I.



056

Galapagos pintails.
Indefatigable



057

Academy Bay,
Indefatigable I.



058

Academy Bay,
Indefatigable I.



059

Academy Bay,
Indefatigable I.



060

Academy Bay,
Indefatigable Island



061

Academy Bay,
Indefatigable I.



062

Academy Bay,
Indefatigable I.



063

Academy Bay,
Indefatigable I.

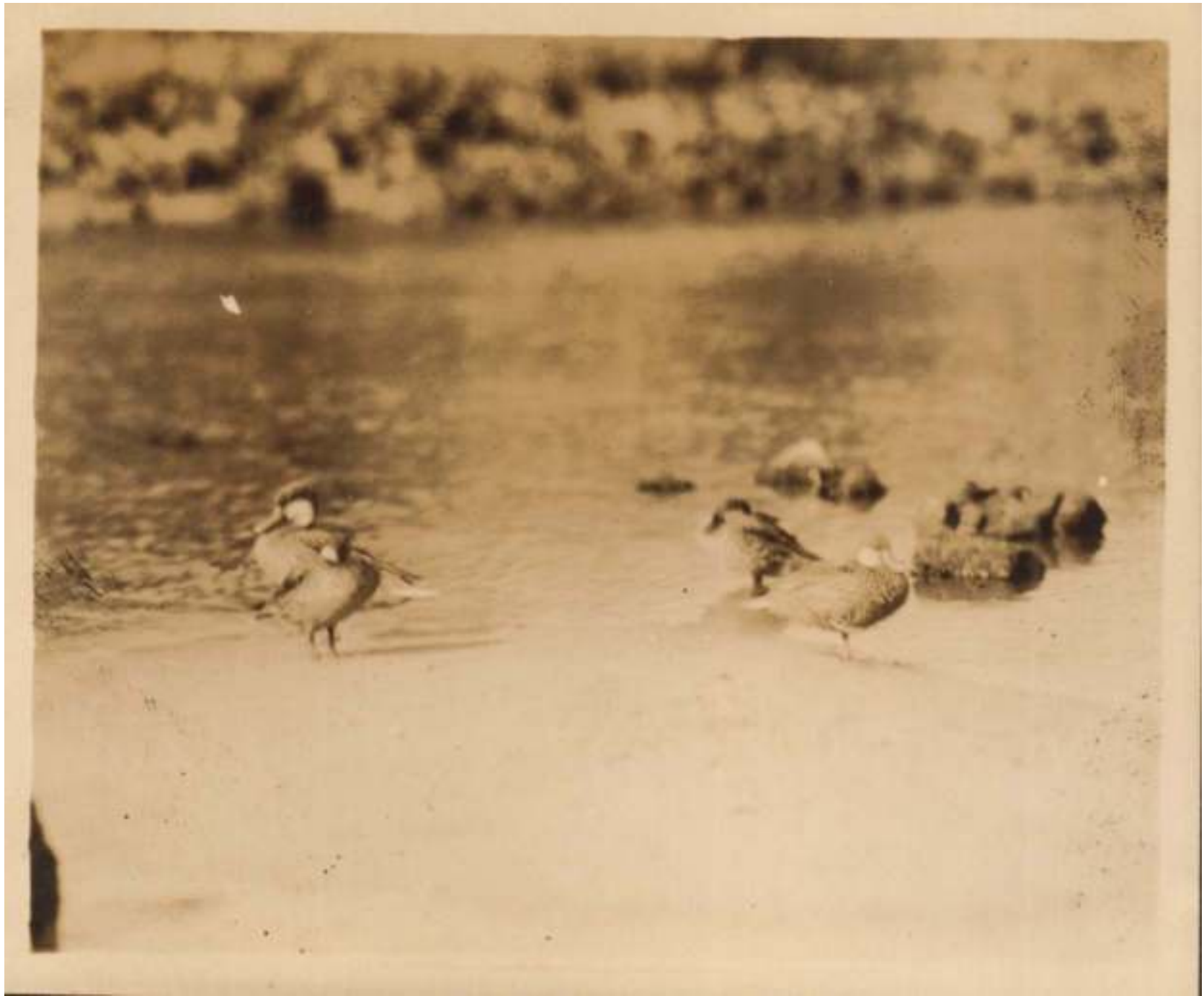


064



[...]





065

Galapagos pintails,
Indefatigable I.



066

Galapagos pintails,
Indefatigable I.



067

Galapagos pintails,
Indefatigable I.



068

Myiarchus.
Indefatigable I.



069

Academy Bay.
Indefatigable I.



070

Myiarchus.
Indefatigable I.



071

Svenson lifting hawk from tree.
Indefatigable I.



072

Svenson lowering hawk
on rake. Indefatigable Island



073

Galapagos hawk.
Indefatigable Island



074

Buteo galapagoensis.
Indefatigable I.



075

Academy Bay.
Indefatigable I.



076

Academy Bay.
Indefatigable I.



077

Academy Bay. Indefatigable I.
Galapagos. Trying to catch
a hawk in a butterfly net



078

Fortuna.
Indefatigable I.



079

Fortuna.
Indefatigable I.



080

Fortuna. 750 feet.
Indefatigable I.



081

Scalesia woods.
Indefatigable Island



082

Fortuna. 800 ft.
Indefatigable I.



083

Roosevelt, Hay, Wold, Svenson
and Cutting. Indefatigable I.



084

Fortuna. 800 feet.
Indefatigable I.



085

K. Roosevelt, C. L. Hay and
S. Cutting. Indefatigable I.



086

Left to right: Svenson, Hay, Cutting,
Chapin and Roosevelt. Indefatigable I.



087

Svenson. 1900 feet on
Indefatigable I.



088

Trail through mountain scrub.
Indefatigable I.



089

Gordon Wold. 2000 ft.
Indefatigable I.



090

Svenson. 1900 feet on
Indefatigable I.



091

1670 [feet] on Indefatigable I.
Svenson



092

1670 feet on Indefatigable I.
Svenson



093

Left to right: Svenson, Cutting, Hay,
Roosevelt and Gordon Wold after
lunch at 1800 ft. Indefatigable I.



094

Indefatigable I. from west



095

Duncan Island



096

Jarvis Island, part of
James Island (to right)



097

Duncan Island



098

Flightless cormorant.
Indefatigable Island, Galapagos.
C. H. T[ownsend] photo



099

Flightless cormorant.
Narborough Island, Galapagos



100

Nest of *Geospiza* from north shore
(Indefatigable I.)



101

Conolophus.
Indefatigable I.



102

Vincent Astor with
land iguanas (*Conolophus*).
Indefatigable I. (N. shore)



103

Conolophus.
Indefatigable I.



104

Conolophus.
Indefatigable I.



105

South Seymour Island



106

South Seymour Island



107

South Seymour Island



108

[Red] crabs.
South Seymour I.



109

Cutting.
S. Seymour I.



110

Larus fuliginosus.
S. Seymour I.



111

South Seymour Island



112

South Seymour Island



113

Seals. S. Seymour I.



114

Seals. S. Seymour I.



115

South Seymour Island



116

Daphne Major



117

Daphne crater. Daphne I.



118

Yellow crowned night heron
and nest. Daphne Island



119

Daphne Major



120

Adult Tropic Bird on nest
(1 egg). Daphne crater



121

Boobies on cliffs at east side
of Daphne Island



122

Creagrus furcatus on cliffs
at southeast of Daphne Island
(Daphne crater)



123

Crater rim, Daphne Major,
looking north



124

Looking into Daphne
crater from inner rim



125

Sula dactylatra on crater rim,
Daphne crater



126

Blue-footed boobies.
Daphne crater



127

Looking into Daphne crater
from low part of rim



128

Daphne crater





129

Dr. E. Pool and blue-footed boobies.
Daphne crater



130

Boobies in crater
at Daphne Island



131

Blue-footed boobies.
Daphne crater



132

Blue-footed boobies.
Daphne crater, Galapagos



133

Blue-footed booby.
Daphne crater



134

Boobies in crater
on Daphne Island.
Galapagos



135

Charles Island
from the north



136

Charles I. from N.



137

Charles I. from N.



138

Charles Island





139

Charles Island
from the north



140

Charles I. from off
Post Office Bay



141

Charles I. from off
Post Office Bay



142

Black Beach. Charles Island



143

Black Beach. Charles I.

Letterbox

for Dr. Rippen
and Fran Dore

Bring a signal

we will come in
half an hour

to Letterbox

144

Black Beach. Charles Island



145

Black Beach. Charles I.



146

Pool and Svenson. Charles I.



147

Frigate Birds over yacht. Tower I.



148

Frigate Birds, Tower Island



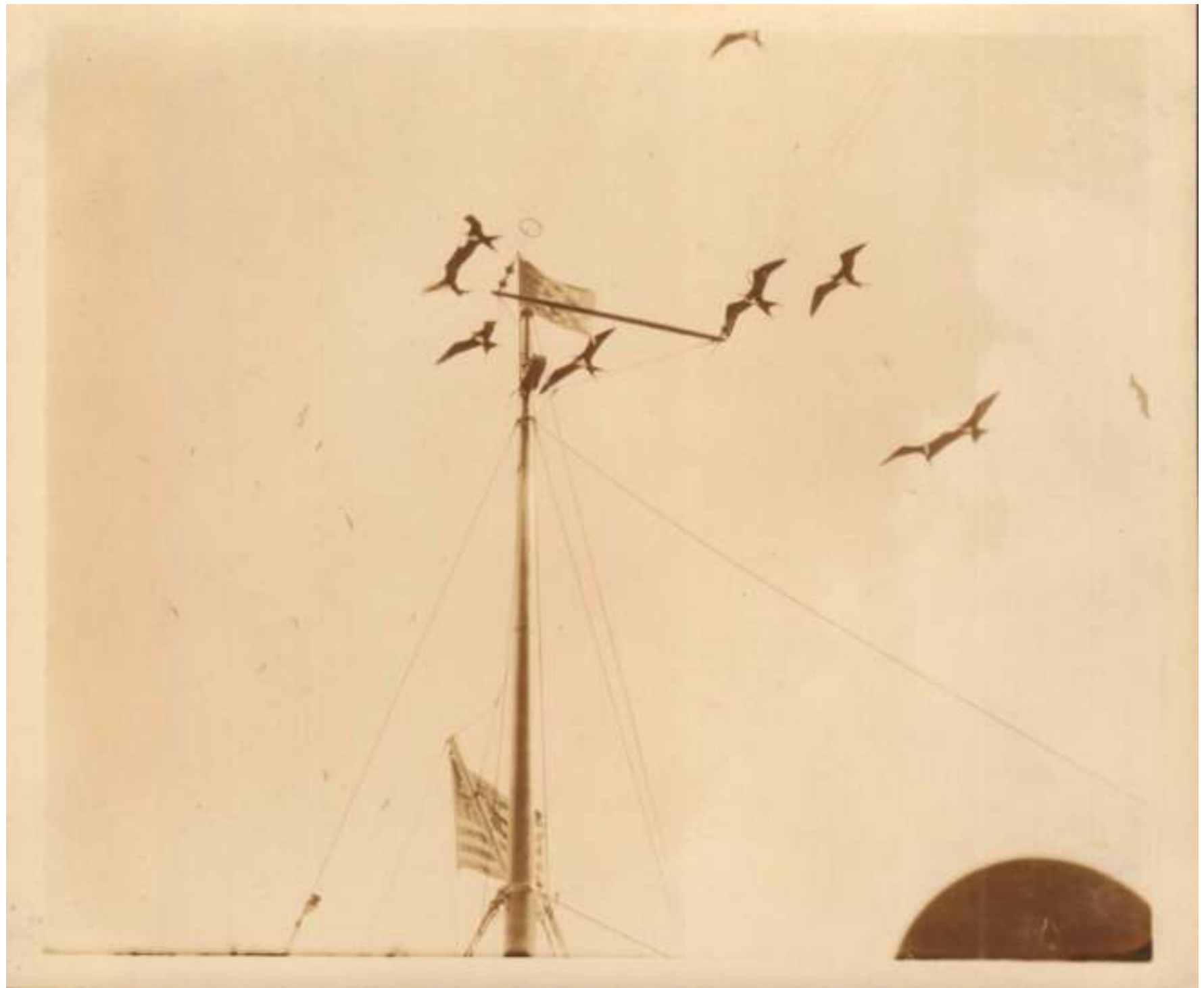
149

Beach where Frigate Birds
nest. Tower I.



150

Frigate Birds, Tower Island



151

Frigate Birds, Tower Island



152

Frigate Birds over Nourmahal,
Tower I.



153

Frigate Birds over Nourmahal,
Tower I., Galapagos



154

Larus fuliginosus,
Tower Island



155

Larus fuliginosus,
Tower Island



156

Larus fuliginosus,
Tower Island.



157

Tower Island



158

Creagrus furcatus,
Tower Island



159

Tower Island



160

Creagrus furcatus,
Tower I.



161

Creagrus furcatus,
Tower I.



162

Creagrus furcatus,
Tower I.



163

Creagrus furcatus,
Tower I.



164

Sula dactylatra (adult),
Tower Island



165

Sula dactylatra (adult),
Tower Island



166

Two *Sula piscatrix*
and R. Huntington



167

Swydam Cutting, Tower I.
& *Sula piscatrix*



168

Booby, Tower I.



169

Sula piscatrix, Tower I.



170

Booby, Tower I.



171

Sula piscatrix, Tower I.



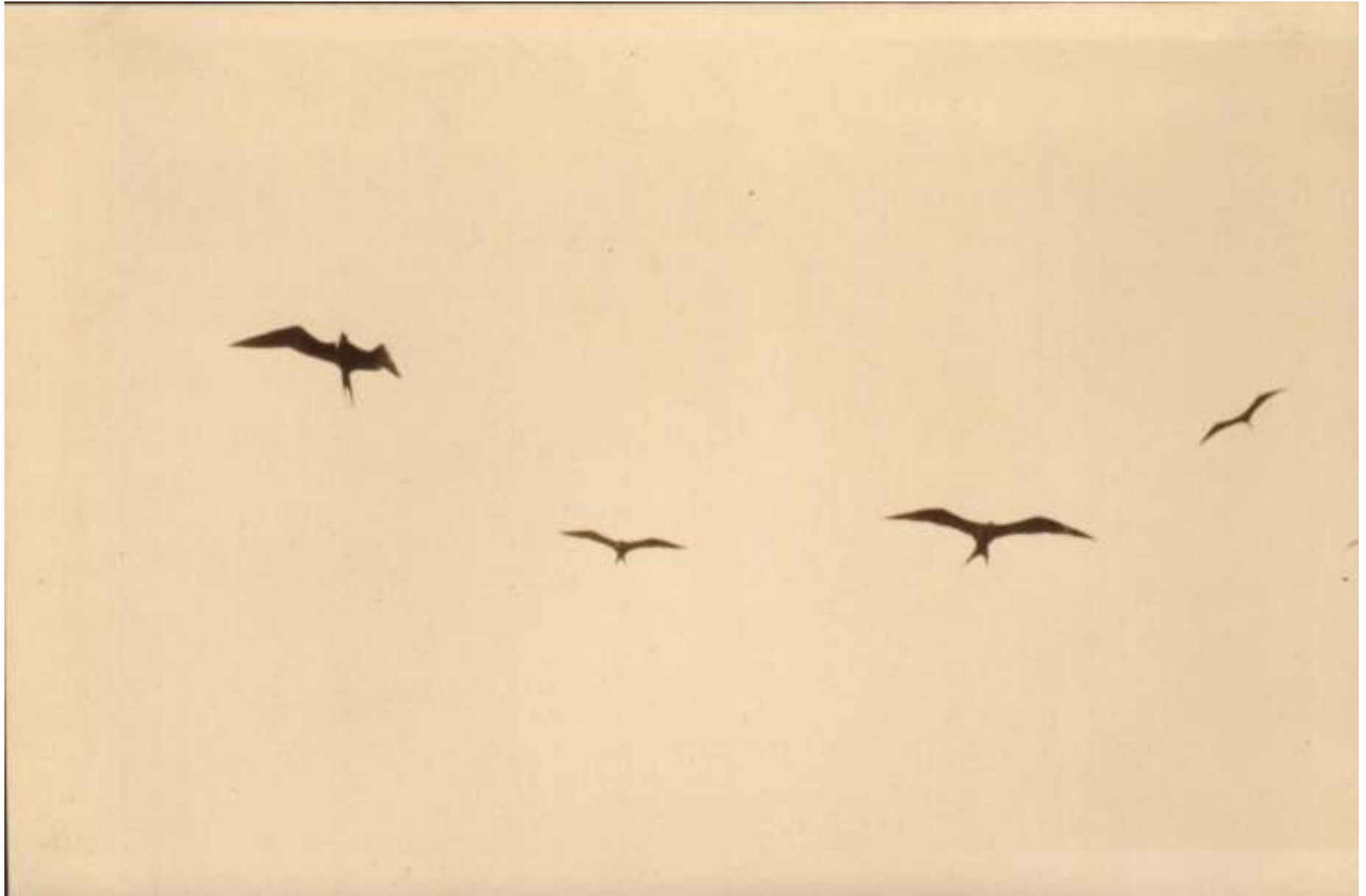
172

Male Frigate Bird, Tower I.



173

Frigate Bird - male.
Tower Island



174

Frigate Birds soaring over
breeding colony at Darwin Bay



175

Male Frigate Bird with
gular sac inflated. Tower I.



176

Frigate Bird colony. Tower I.



177

Frigate Birds, Tower Island



178

Frigate Bird colony, Tower Island



179

[Female] Frigate Bird,
Tower I.



180

Frigate Bird colony. Tower I.



181

Tower Island



182

Tower Island



183

Frigate Bird,
Tower Island



184

Frigate Bird,
Tower Island



185

Tower Island



186

Male & female Frigate Birds,
Tower I.



187

Tower Island



188

Pair of Frigate Birds,
Tower I.



189

Tower Island



190

Frigate Birds, Tower
Island, Galapagos



191

Male Frigate Bird,
Tower I.



192

Frigate Bird,
Tower Island



193

Male Frigate Bird,
Tower Island



194

Male Frigate Bird,
Tower I.



195

Male Frigate Bird,
Tower I.



196

Frigate Bird, Tower I.



197

Frigate Bird, Tower I.



198

Male Frigate Bird,
Tower Island



199

Tower Island



200

Frigate Bird, Tower Island



201

Male Frigate Bird,
Tower I., Galapagos



202

Frigate Bird, Tower Island



203

Female Frigate Bird,
Tower I.



204

Tower Island



205

Female Frigate Bird on nest,
Tower I.



206

C. L. Hay and Frigate Bird,
Tower Island



207

Frigate Birds on nest,
Tower I.



208

Remains of Frigate Birds from
breeding colony on Tower Island



209

Yacht Nourmahal
off Cape Charles



210

Sailor with young *Otaria jubata*
on yacht Nourmahal



211

Yacht Nourmahal
off Cape Charles



212

Penguin. Albemarle
Island. Galapagos



213

Conolophus on Nourmahal.
Indefatigable I.



214

Conolophus on Nourmahal



215

Testudo porteri.

Indefatigable Island, Galapagos.

C. H. T[ownsend] photo



216

Bronson drawing tortoise



217

Testudo porteri on Nourmahal

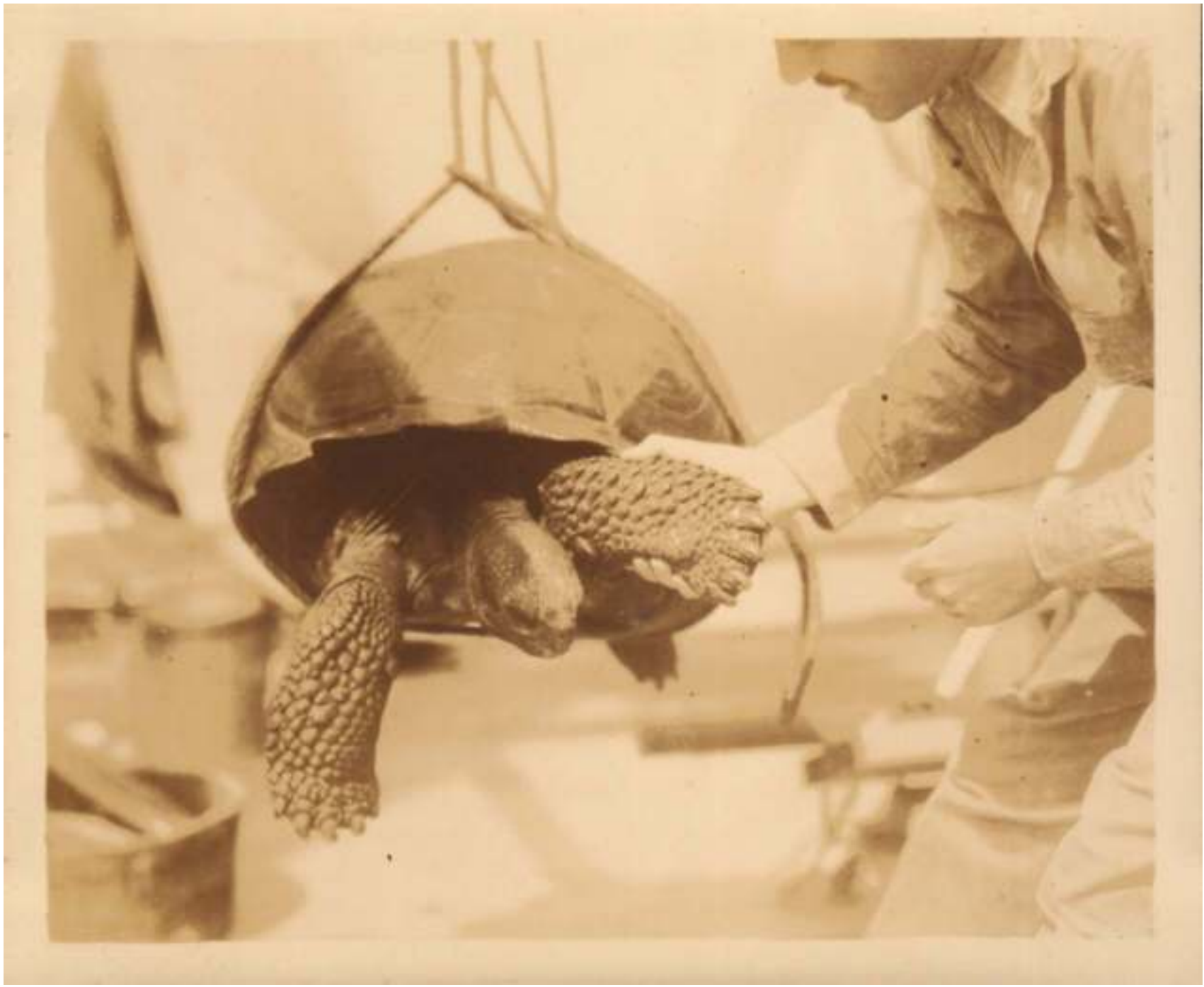


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Testudo porteri.

Indefatigable Island, Galapagos.

C. H. T[ownsend] photo



219

Testudo porteri on Nourmahal



220

Conolophus on Nourmahal



221

Cocos I. from south



222

Cocos Island from south



223

Chatham Bay, Cocos I.



224

Cocos I. from S.



225

Sanborn dr[...]ng camera.
Chatham bay, Cocos I.



226

Chatham Bay. Cocos I.



227

Chatham Bay. Cocos I.



228

Nourmahal seen from hill
above Chatham Bay, Cocos I.



229

Tree ferns on hill above
Chatham Bay, Cocos I.



230

Looking out on Wafer
Bay, Cocos I.



231

Looking up brook at Wafer
Bay, Cocos I.



232

Nourmahal in Wafer Bay,
Cocos I.



233

Wafer Bay, Cocos I.



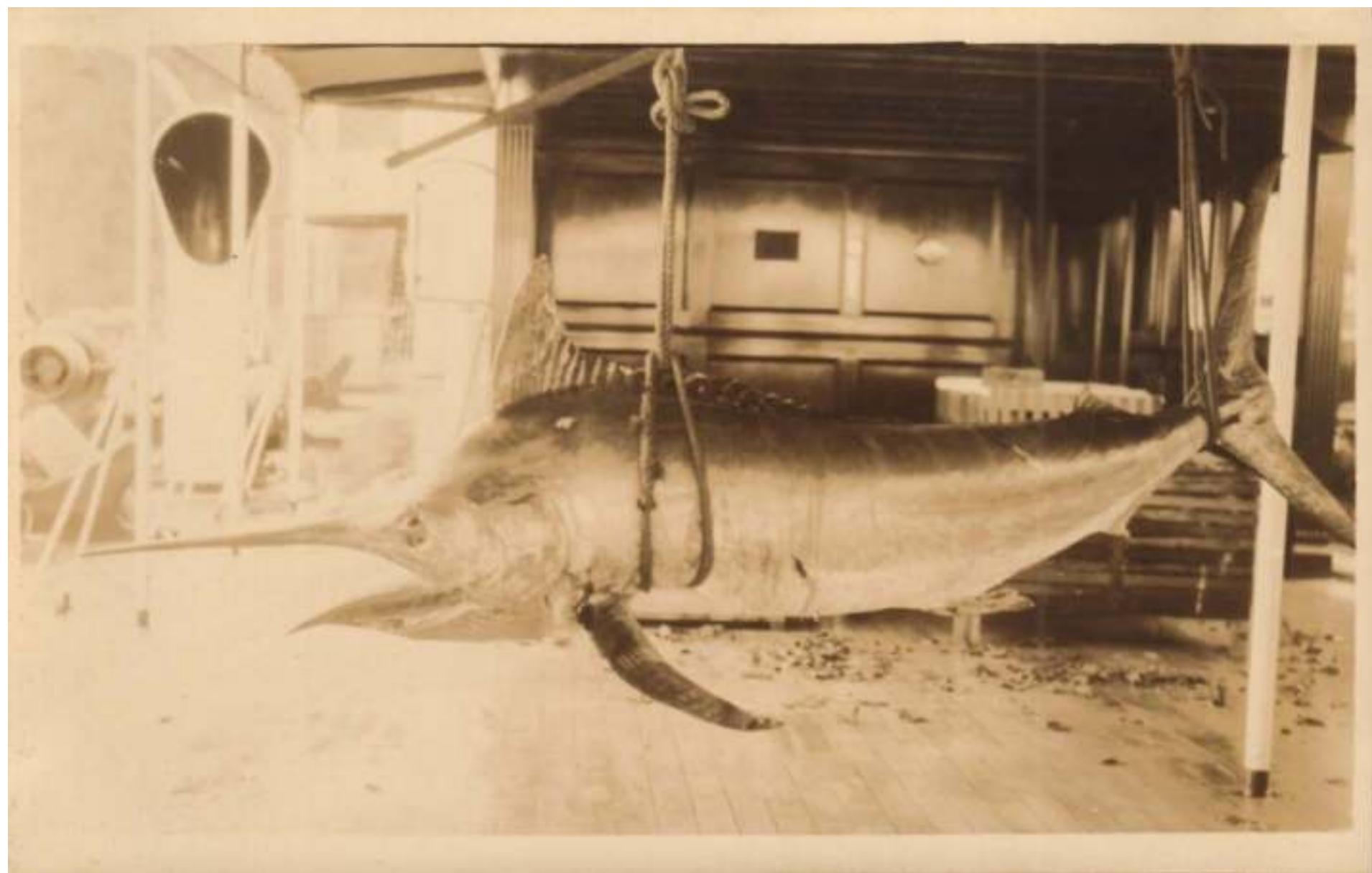
234

Cocos Island



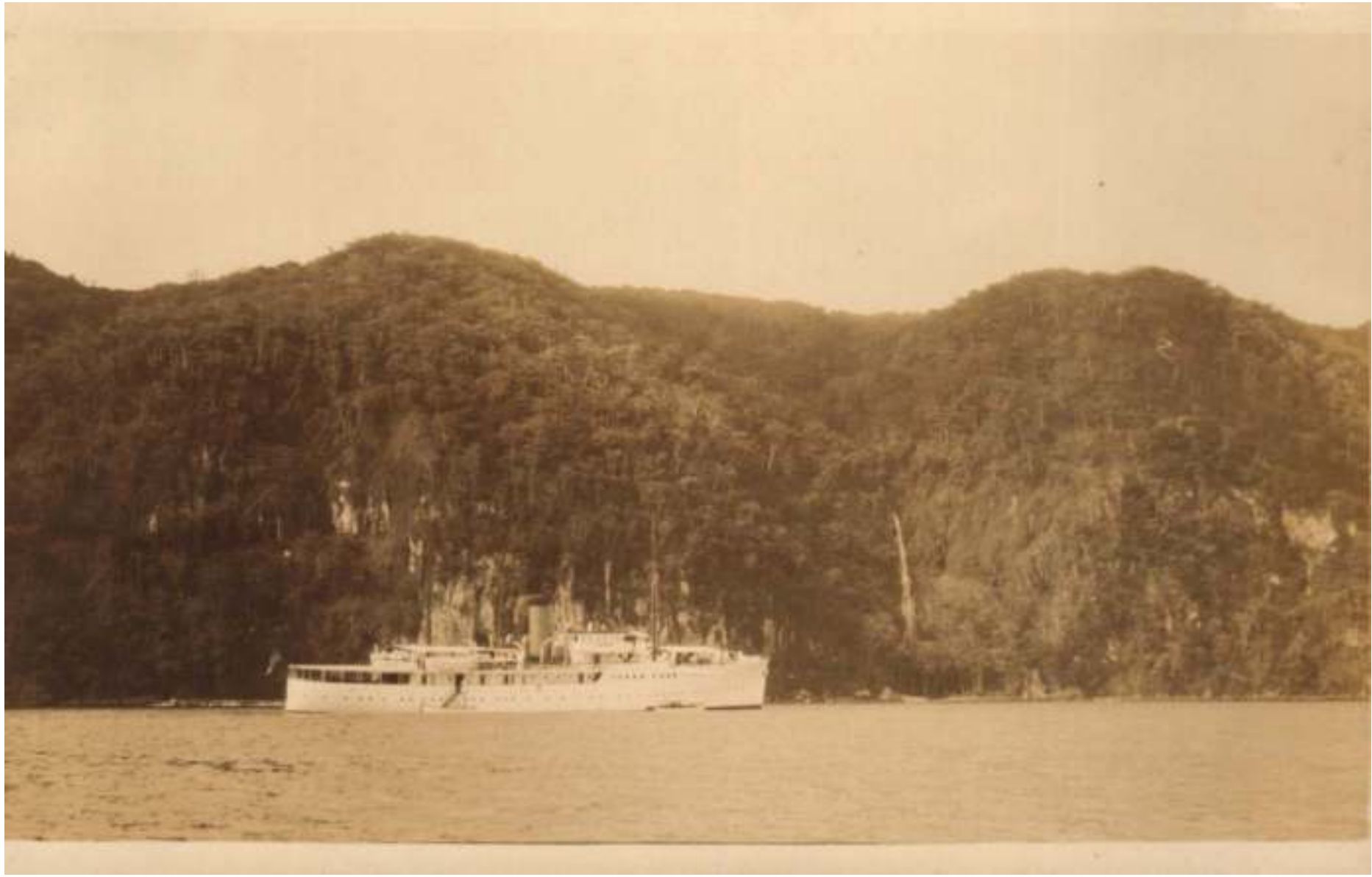
235

Wafer Bay, Cocos I.



236

Marlin swordfish. Cocos I.



237

Nourmahal in Wafer Bay,
Cocos I.



238

Wafer Bay. Cocos I.



239

Looking up stream at head
of Wafer Bay, Cocos I.



240

Wafer Bay. Cocos I.



241

Cocos Island



242

Wafer Bay. Cocos I.



243

Cocos (?), Sunset.
Chatham Bay (?)



244

Señora Island. Pearl Islands



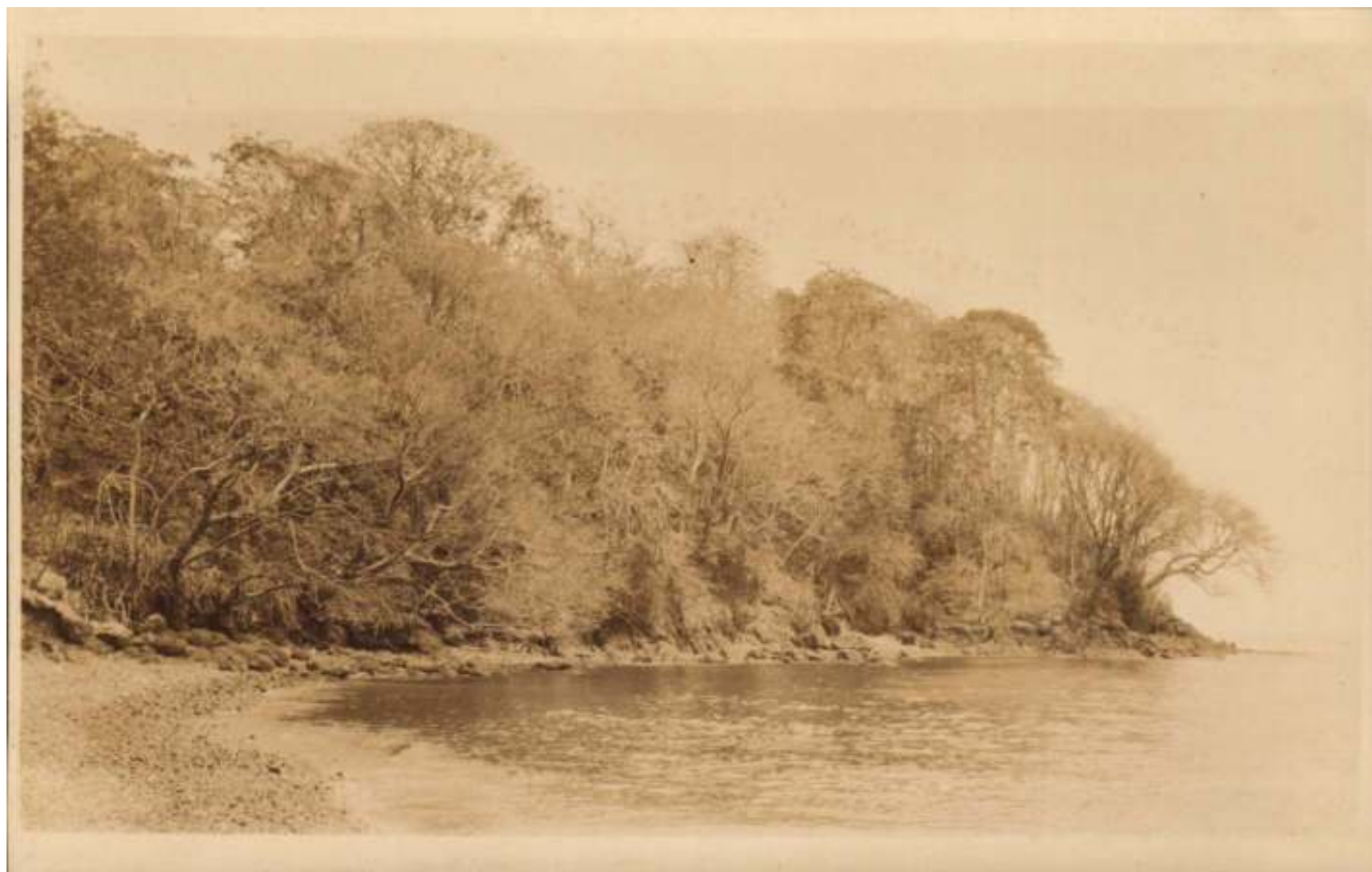
245

Señora Island. Pearl Is.



246

Cormorants nesting in tree.
Pearl Island



247

Phalacrocorax vigua nesting in
numbers in this tree. Pearl I.



248

Wafer Bay. Cocos I.



249

Cocos I.



250

Wafer Bay. Cocos I.



251

Pedro Gonzales Island



252

Pedro Gonzales Island



253

Pedro Gonzales Island



254

Pedro Gonzales Island



255

Brown Pelicans. Pedro Gonzales I.
Pearl Island



256

Brown Pelicans. Pedro Gonzales I.,
Pearl Island



257

View on Pedro Gonzales Island



258

Brown Pelicans, Pearl Island



259



Hills to west of Pacific entrance
to Panama Canal





260

Fortified islands at Pacific
entrance to Panama Canal



261

Steamer off landing
at Barro Colorado



262

Gas car at Frijoles, Canal Zone



263

Frijoles, Canal Zone



264

Dr. Chapman's house,
Barro Colorado



265

Barro Colorado



266

Barro Colorado



267

View from tower to N.E.
Barro Colorado



268

View from tower on highest
point of Barro Colorado



269

View from laboratory,
Barro Colorado



270

Barro Colorado Island



271

Barro Colorado



272

Cecropia tress just below
laboratory. Barro Colorado



273

Garden Key.
Dry Tortugas



274

Garden Key.
Dry Tortugas



275

Old fort, Garden Key.
Dry Tortugas.
Fort Jefferson, “a penal station
during Civil War”.



276

Old fort, Garden Key.
Dry Tortugas



277

Old fort Jefferson, Garden Key.
Dry Tortugas



278

Bird Key. Dry Tortugas



279

Bird Key. Dry Tortugas,
Florida. *Sterna fuliginosa*.
Photo by James Chapin



280

Sterna fuliginosa,
Bird Key, Dry Tortugas



281

Sterna fuliginosa,
Bird Key, Dry Tortugas,
off S. Florida



282

Sooty terns, Bird Key,
Dry Tortugas, off S. Florida



283

Anous stolidus,
Bird Key, Dry Tortugas



284

Bird Key, Dry Tortugas



285

Miami from Municipal Pier n° 3



286

Miami from crow's nest
at Municipal Pier n° 1



287

Miami



288

Miami



289

Ing. pulling Nourmahal
from dock. Miami, Florida



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Mr. Ritter and "Dore"
"at home". Charles Id., Galapagos.
April, 1932.
Gift of H. S. Swarth



Fundación
Charles Darwin
Foundation
GALAPAGOS