kinds, by little weasels, and by larger and smaller sabertooth cats of several species. Harboring and burrowing animals are found in the rabbit, the squirrel, and a small species of insectivore.

These and their contemporaries formed a varied and a well-balanced community of mammals in middle Oligocene time. They had acquired most of the habits of living and of feeding found among land mammals of the present day.

Some of the descendants of these animals migrated to the Old World and introduced the stocks of horses, camels, and rhinoceroses to the wide plains and valleys of Europe, Asia, and Africa. Others crossed over the narrow connections with South America and brought to that continent the stocks of horses and lamas, of tapirs and rodents, of fox-like wolves, and the larger cats which gave to that continent in later times a more cosmopolitan phase of mammalian life than it had previously enjoyed.

All of this bears unmistakable evidence that North America was a fertile breeding ground for many sturdy races of mammals which have developed and maintained their existence in this favored part of the earth through millions of years.

### VENEZUELA JUNGLE REPORT FROM MUSEUM EXPLORER

(Editor's Note:—Somewhere in the deepest and most remote parts of the Venezuelan jungle, Mr. Llewelyn Williams, of Field Museum's botanical staff, is trudging on foot and traveling swift-running, rock-strewn streams in dug-out canoes, in the interests of science. For the first time since he plunged last autumn into the region known as the Venezuelan Guiana, he has reached an outpost of civilization from which to send a report to Lieutenant-Colonel Clifford C. Gregg, Director of the Museum. After sending his report, from which excerpts follow, Mr. Williams immediately departed into the jungle again, this time in a different direction, along the upper reaches of the Orinoco River.)

# BY LLEWELYN WILLIAMS CURATOR OF ECONOMIC BOTANY

After a long and arduous trip I am able to report that we managed to bring to this point a large collection of plant and wood specimens, as well as other forest products. This was accomplished without mishap despite the many rapids that were negotiated, the frequent heavy showers experienced, and inadequate transportation.

We left Puerto Ayacucho on January 17, traveling overland to Sanariapo, above the dangerous rapids of Atures, thence along the Orinoco River to San Fernando de Atabapo, and then followed this stream (Atabapo) to its headwaters. From Yavita, on the Temi, after making collections, we traveled overland to the River Pimichin, and down this stream until we reached the Guainía, which forms the source of the Rio Négro. Collections were made along the Guainía from the Colombian border to the Brazilian frontier. In addition, excursions

were made along the lower Casiquiare, the stream San Miguel flowing diagonally in the direction of the upper Casiquiare, and the forest flanking the Yavita-Pimichin trail.

The material assembled at the various centers was embarked in large dugouts, falcas, with roofs made of palm leaves to protect the specimens from the heat and rains. The entire cargo, forming 40 loads, was then transported overland by Indians from Pimichin to Yavita, at which point several canoes were obtained and other Indians hired for the journey downstream to San Fernando. Here we transferred the cargo into larger boats, able to withstand the strong currents and rapids of the Orinoco, to Sanariapo, thence overland to this place. With the exception of three brief spells of fever I managed to keep good health throughout, despite the fact that we had to take with us all the food necessary for myself and the peons.

#### RUBBER TREES ABUNDANT

The region studied is one of the most interesting, floristically, of the entire territory. It is estimated that seven-eighths of its entire area is covered by rain forests of tall trees and a wide variety of palms. One of the most notable features of these forests is the abundance of latex-yielding trees, chief of which is rubber (*Hevea*), represented by several species, followed by chicle, masarandy, balata, uququirana, marima, etc.

Plants furnishing fibers are also especially well represented, the principal one being the chiquichiqui palm, known in Brazil as piassaba: its fiber is durable in contact with water and almost incorruptible when placed in the ground, being especially suitable for brooms and tow ropes. Another fiber furnished by a palm is cumuare, from the young leaves of which the Indians remove a fine, tough, yellowish fiber, greatly esteemed for making hammocks. The fiber is sometimes dyed black or dark brown with the crushed leaves of a plant of the trumpetcreeper family. The color, being indelible, holds indefinitely and is not affected by the action of climatic elements. Another useful fiber is curagua, obtained from the leaves of a plant of the pineapple family, and employed principally in the making of fishing lines and nets.

Many woods are encountered in these forests. They range from the heavy parature, a leguminous species with a rich reddish brown heartwood, to the light-colored palo de boya, almost as light as balsa-wood, and used by the Indians for rafts and for fishing floats.

#### INDIANS AND THEIR CUSTOMS

The region is inhabited almost entirely by Indians, of which there are many tribes, the principal ones being the Baniba, the Piapoco, the Puinave, the Guahibo, the Kuripako, the Karros, the Uarekena, and the Baré. The Baniba are excellent woodsmen and expert tree climbers. Most of the Indians are nomadic in habits, and during

the dry months they travel far in search of game and fish.

In Maroa I had occasion to witness a typical Indian festival, an event to offer thanksgiving for the catch secured during the dry period. The festival is held in the middle of March, shortly before the rainy season begins. The principals, the lluiz (chief), mardomo, mardoma, etc., are selected the year before and when the festival is inaugurated these persons set up two posts, known as mastres, laden with fruit. On the last, or ninth day, the retiring officers offer a feast to the newly-appointed officials. the meal composed mostly of manioc and cassava, prepared from yuca roots, which constitute their staple food. Fish and game meat are also eaten. At sunset on the same day the fruit-bearing posts are felled, each woman holding office giving a blow with an ax, followed by the men, and the job is finished by the chief.

In the upper Guainía the Kuripako Indians hold a feast, known as dabukuri. This ceremony takes two forms: an offering of certain articles, such as fruit, fish, or canoe paddles, or dances in which the young men are subjected to lashing with a long whip made of vine, to the accompaniment of music played on the yapururo, a long instrument made from the hollow stem of the mavi palm.

I intend next to leave on the second stage of the explorations, to collect around Tamatama, at the bifurcation of the Orinoco and the upper Casiquiare, where *Hevea* rubber trees are said to abound. Thence I will proceed farther up the Orinoco, and also along the River Padamo, before returning downstream to reach the Ventuari region and the mountain ranges in the area traversed by the Sipapo River.

# NESTING BIRDS and the Vegetation Substrate

This is an informing little book dealing with the common birds of the Chicago area and their relation to the plant communities in which they nest.

Written by Mr. William J. Beecher, Assistant in the Department of Zoology, it is an account of eight years' study of the nesting birds of the Fox Lake region near Chicago.

"This book is highly recommended to local bird students," says Mr. Emmet R. Blake, Assistant Curator of Birds, "but the basic principles illustrated by the data make it equally valuable elsewhere." Illustrated with an aerial photograph, and text figures. \$1.

THE BOOK SHOP of FIELD MUSEUM is sole distributor.



Williams, Llewelyn. 1942. "Venezuela Jungle Report From Museum Explorer." *Field Museum news* 13(6), 5–5.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/25719">https://www.biodiversitylibrary.org/item/25719</a>

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/365046">https://www.biodiversitylibrary.org/partpdf/365046</a>

## **Holding Institution**

Field Museum of Natural History Library

# Sponsored by

University of Illinois Urbana-Champaign

## **Copyright & Reuse**

Copyright Status: In copyright. Digitized with the permission of the Chicago Field Museum.

For information contact dcc@library.uiuc.edu.

Rights Holder: Field Museum of Natural History

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <a href="https://www.biodiversitylibrary.org">https://www.biodiversitylibrary.org</a>.