



FRAGMENT FROM AN OFFICIAL PHOTOGRAPH, UNITED STATES ARMY AIR CORPS, OF A SOUTH AMERICAN RAIN FOREST

# SOUNDS OF A TROPICAL RAIN FOREST IN AMERICA

PRODUCED FOR THE AMERICAN MUSEUM OF NATURAL HISTORY

DRY SEASON—Violaceous Jay, Black Howler Monkeys, Toucan, Rufus Motmot, Macaw, Barbets, Guans, Parrots, Cicadas, Crickets, Tinamou, Chachalaca, Curassow.

RAINY SEASON—Parakeet, Tree Toads, Bufo Marinus, Three Wattled Bell Bird, Rain Sequence.

SCIENCE SERIES • FOLKWAYS RECORDS & SERVICE CORP. • NEW YORK FX 6120



FOLKWAYS FX 6120

# Sounds Of A Tropical Rain Forest In America

Archival Property  
Smithsonian Institution  
Office of the Assistant Secretary  
for Public Service

DRY SEASON-Violaceous Jay, Black Howler Monkeys, Toucan, Rufus Motmot, Macaw,  
Barbetes, Guans, Parrots, Cicadas, Crickets, Tinamou, Chachalaca, Curassow.

RAINY SEASON-Parakeet, Tree Toads, Bufo Marinus, Three Wattled Bell Bird,  
Rain Sequence.

Descriptive Notes are Inside Pocket

Library of Congress Catalogue Card No. R 60-523

©© 1960 FOLKWAYS RECORDS AND SERVICE CORP.  
632 BROADWAY, N.Y.C., 10012 N.Y., U.S.A.

FOLKWAYS FX 6120



FOLKWAYS RECORDS Album No. FX 6120

© 1965 Folkways Records and Service Corp., 701 Seventh Ave., NYC USA



FRAGMENT FROM AN OFFICIAL PHOTOGRAPH, UNITED STATES ARMY AIR CORPS, OF A SOUTH AMERICAN RAIN FOREST

# SOUNDS OF A TROPICAL RAIN FOREST IN AMERICA

**PRODUCED FOR THE AMERICAN MUSEUM OF NATURAL HISTORY**

**DRY SEASON**—Violaceous Jay, Black Howler Monkeys, Toucan, Rufus Motmot, Macaw, Barbetes, Guans, Parrots, Cicadas, Crickets, Tinamou, Chachalaca, Curassow.

**RAINY SEASON**—Parakeet, Tree Toads, Bufo Marinus, Three Wattled Bell Bird, Rain Sequence.

**SCIENCE SERIES • FOLKWAYS RECORDS & SERVICE CORP. • NEW YORK    FPX120**



In the dense tropical rainforest of eastern Peru live several related tribes of primitive Amazon Indians. Their homeland, called the Montaña, stretches eastward from the cloud-covered slopes of the Andes, a region of rugged mountains and swift-flowing streams. The rainforest, the mountains, and the rapids have isolated tribes from one another and limited the areas suitable for habitation.

In spite of the lush vegetation, soils are poor for farming and game is scarce. Animal and human enemies lurk on every side. Until the rubber boom brought the white man in numbers at the turn of the century, these tribes lived much as they had before the discovery of the New World.

This exhibition tells the story of primitive man's adaptation to life in a hostile environment—the Montaña of the Amazon headwaters.

INTRODUCTION BY MOSES ASCH  
PRODUCTION DIRECTOR FOLKWAYS RECORDS

THIS RECORD IS SOMEWHAT A CHALLENGE AND AN EXPERIMENT. IN ORDER TO SHOW EVERY DAY LIFE OF A PEOPLE THAT "ADAPT LIFE IN A HOSTILE ENVIRONMENT", WHO "LIVE UNTOUCHED TODAY BY WHITE MAN'S CIVILIZATION", NOT ONLY DID THE VISUAL EXHIBIT HAVE TO BE "COMPLETE MATERIAL MANIFESTATION" OF A NATIVE CULTURE BUT THE SOUNDS OF THE "ENVIRONMENT" HAD TO BE PROJECTED BOTH AS TO TRUTH AND ACTUALITY AND TO THE PROPER DYNAMIC AND FREQUENCY OF SOUND AS HEARD AT DIFFERENT TIMES OF THE DAY DURING THE TWO PREDOMINANT SEASONS OF THE YEAR.

THE AMERICAN MUSEUM OF NATURAL HISTORY IN NEW YORK THROUGH THE ANTHROPOLOGY DEPARTMENT ASKED US TO UNDERTAKE THIS ASSIGNMENT. THE RECORD IS THE RESULT OF SIX MONTHS RESEARCH AND WORK. CHRONOLOGICALLY SPEAKING THIS IS THE WAY WE WENT ABOUT IT.

DR. HARRY TSCHOPIK, ASSISTANT CURATOR OF ANTHROPOLOGY, MADE AN APPOINTMENT FOR US WITH MR. JOHN TEE-VAN, EXECUTIVE SECRETARY OF THE NEW YORK ZOOLOGICAL SOCIETY (BRONX ZOO), WHERE WE GOT THE FOLLOWING INFORMATION IN AN INFORMAL QUESTION AND ANSWER STYLE OF MEETING.

PARROTS, CICADAS, BLACK HOWLER MONKEYS, TOUCAN, MACAW, WERE THE PREDOMINANT ANIMALS HEARD. JAGUARS WERE HUNTED BUT THESE ANIMALS SELDOM MAKE NOISE. RAINS ARE SUDDEN AND COME RACING ACROSS THE TOP OF THE FOREST LEAVES AND CAN BE HEARD FROM A DISTANCE AND SOUNDS LIKE A DRUM BEATING FROM AFAR.

THE ZOO HAD RECORDED THREE WATTLED BELL BIRDS, JAYS, TOUCANS. DR. ALLEN AND DR. KELLOGG OF THE CORNELL ORNITHOLOGY DEPARTMENT HAD RECORDINGS OF BLACK HOWLER MONKEYS AND OTHER SOUNDS.

WE THEN MET WITH DR. T.C. SCHNEIRLA HEAD OF THE ANIMAL BEHAVIOR DEPARTMENT OF THE AMERICAN MUSEUM OF NATURAL HISTORY WHERE THE FOLLOWING INFORMATION WAS GIVEN US.

ANIMALS BEHAVE IN THE FOLLOWING MANNER IN A RAIN FOREST. THE FIRST SOUNDS HEARD WERE: AT DAWN, BIRDS EVERY TWO TO THREE SECONDS; THEN MONKEYS BETWEEN SEVEN TO EIGHT A.M., THEN A MIXTURE OF BIRD AND MONKEY NOISES. UNTIL NOON SOUNDS ARE INTERSPERSED WITH LONG PERIODS OF SILENCE. AT NOON THERE IS MORE NOISE AS ANIMALS GATHER FOOD FOR LUNCH. PARROTS FLY IN FLOCKS AT INTERVALS OF PERHAPS THE FOLLOWING ORDER: 1-1,2,3; 1-1,2,3,4; -1, BETWEEN TEN A.M. AND FOUR P.M. SCREECHING BARK OF MONKEYS IS ONE TO TWO SECONDS APART. SOUNDS ARE HEARD AT A DISTANCE OF ONE-THIRD OF A MILE. ANIMALS, LIKE HUMAN BEINGS IN THE TROPICS, HAVE A SIESTA IN THE AFTERNOON WITH LITTLE SOUNDS GOING ON. FROM FIVE TO EIGHT P.M. THERE IS MORE ACTIVITY WHEN THE TOAD AND CRICKET TAKE OVER. IN THE MIDDLE OF THE DAY THE GUAN CACKLES. TOUCAN IS HEARD FROM TEN-THIRTY A.M. TO THREE P.M.; TINAMOU LATE IN THE DAY, AFTER SIX P.M.; MONKEY CHATTER ALL DAY; DOVE OR PIGEON SOUNDS EARLY IN THE MORNING. BELL BIRD IS HEARD AT DARK; PEEP OF TREE TOAD BEFORE RAIN. RAIN SOUNDS LIKE DRUM-LIKE SURF, DRIPS AND SLAPS. AFTER THE RAINS TREES FALL. DURING THE RAINS LITTLE GOES ON. LATE EVENING OR BEFORE RAIN FISH JUMP.

WITH THE INFORMATION GATHERED, THE NEXT STEP WAS TO RECORD THOSE SOUNDS THAT WE NEEDED AND WERE AVAILABLE. MR. TEE-VAN PERMITTED US TO RECORD IN THE ZOO VERY EARLY IN THE MORNING BEFORE THE PEOPLE CAME. AND WE HAD THE SERVICES OF MR. HERBERT KNOBLOCH OF THE EDUCATION DEPARTMENT OF THE ZOO. DR. KELLOGG OF CORNELL SENT US A RECORD AND TAPE OF SOUNDS THAT HE HAD RECORDED OF THE ANIMALS THAT LIVE IN SUCH AN ENVIRONMENT DURING BOTH SEASONS, FROM RECORDINGS MADE DURING A THIRTY HOUR PERIOD IN THE RAIN FOREST AT COLORADO ISLAND.

AFTER HEARING THESE RECORDS MADE ON THE SPOT, IT WAS EASY TO SEE THAT THERE IS ALWAYS UNDERBRUSH SOUNDS THAT COULD BE USED AS A DEPARTURE POINT FROM WHICH A DYNAMIC RANGE OF VOLUME COULD BE PROJECTED.



AS A DRAMATIC PRESENTATION, AND BECAUSE ENOUGH SOUNDS WERE AVAILABLE IT WAS DECIDED THAT THE APPROACH WOULD BE -- FOR EVERY HOUR OF THE DAY FROM ONE TO TWO MINUTES OF SOUND WOULD BE USED ON THE RECORD. THUS IN SIXTEEN MINUTES OF PLAY AN IDEALIZED CONDITION WAS POSSIBLE IN DEPICTING A DAWN TO DUSK PERIOD.

FIRST A TEST RECORD WAS MADE AND PLAYED FOR ALL PEOPLE CONNECTED WITH THE PROJECT AND CRITICISM NOTED MAINLY THAT THE SOUNDS WERE TOO BUNCHED UP AND THERE WERE TOO MANY OF THEM. THEN ANOTHER TEST RECORD WAS MADE WITH LONGER PERIODS BETWEEN SOUNDS AND THIS RECORD WAS ACCEPTED BY ALL. FROM TAPE WE MADE THE RECORD THAT IS BEING USED BY THE MUSEUM AND IS SOLD.

AS MORE INFORMATION WILL BE AVAILABLE, PLEASE SEND US YOUR NAME AND ADDRESS AND YOU WILL RECEIVE THIS ADDITIONAL INFORMATION.

The exhibit is the first major showing in the United States of material from the Upper Amazon. It is based on the Peruvian collection of Raul de los Rios, a planter, and depicts the life of the "Men of the Montaña," a cultural group of eight tribes who are known to anthropologists as the "hillbillies of the Upper Amazon."

The Montaña, according to Dr. Harry Teschopik Jr., supervisor of the new exhibit, live untouched today by white man's civilization. They are in about the same primitive state that they had attained three or four hundred years ago.

In the exhibit, which opens today, visitors will find themselves face-to-face with lifelike and life-size native hunters and fishermen in simulated lush jungle settings.

At the entrance, a hunter draws a five-foot barbed arrow designed for warfare, another aims a blowgun with a poison-tipped barb.

The exhibit hall is dark. Pervading all is a series of recordings, part of them made in the Bronx Zoo, which cast a jungle spell over the modern display magic of the museum. One recording is of the drumming of a tropical rain on jungle leaves; the rain starts, increases until it seems to seep into the shoe soles, and then slowly stops.

Then the jungle sounds of a sunny day begin. The plaintive cry of the bell-bird, the melodic song of the swainson toucans, the calls of the crested guans and the eerie wail of a howler monkey resound through the new exhibit. The recordings are to be played continuously while "Men of the Montaña" is on display.

Dr. Harry L. Shapiro, chairman of the museum's department of anthropology, reported that the exhibit is an attempt to present the "complete material manifestation" of a native culture.

"Through the unusual use of lighting, color, sound and arrangement and through the intrinsic beauty of each item in this extraordinary collection, the life of these remote primitive people—their daily customs, their tribal ceremonies, their economic needs, their struggle against a hostile environment—is unfolded as a real and moving story," Dr. Shapiro reported.

## Jungle Noises Aid Exhibit on Peru's Indians

Monkeys Howl, Rain Beats  
to Set Realistic Mood at  
Natural History Museum

By John O'Reilly

Howling monkeys, the steady beat of tropical rain, the rasping chirps of South American katydids and other jungle noises were among the sound effects which greeted visitors yesterday at the opening of a new Peruvian exhibit at the American Museum of Natural History.

N.Y. HERALD TRIBUNE

NEW YORK TIMES, NOVEMBER 28 1951

## DISPLAY ENHANCED BY JUNGLE SOUND

Primitive People of the Upper  
Amazon Depicted in Peruvian  
Rain Forest Exhibit

A dank glade in the Peruvian forest at the upper end of the Amazon River, complete with the sounds of an eight-day rain, peepers and crickets, has been placed on exhibition at the American Museum of Natural History, Seventy-ninth Street and Central Park West.

### TECHNICAL DATA:

#### THE DRY SEASON

- BAND 1. CRICKET AND DOVE
- BAND 2. VIOLACEOUS JAY
- BAND 3. BLACK HOWLER MONKEYS
- BAND 4. PARROT
- BAND 5. SWAINSON TOUCAN
- BAND 6. CICADAS
- BAND 7. GREAT RUFUS MOTMOT
- BAND 8. CICADA, SPOTTED CHACHALACA,  
GREAT TINAMOU, WATTLED GUAN,  
RED WATTLED CURASSOW
- BAND 9. TOUCAN AND JAY
- BAND 10. MONKEY CHATTER
- BAND 11. TOUCAN BARBETES
- BAND 12. FLOCK OF PARROTS
- BAND 13. WAGLERS' TOUCAN
- BAND 14. MACAW TALK, WITH CRICKETS
- BAND 15. CRESTED GUANS IN THUNDERSTORM

#### BAND 16. CHESTNUT HEADED TINAMOU AND CRICKETS

#### THE RAINY SEASON

- BAND 1. CRICKETS AND PARAKEET
- BAND 2. CRICKETS AND MOURNING DOVE
- BAND 3. SMALL TREE TOAD
- BAND 4. PEEPERS
- BAND 5. FLIGHT OF PARROTS
- BAND 6. GIANT TOAD (BUFO MARINUS)
- BAND 7. MANY TOADS
- BAND 8. RAIN SEQUENCE WITH CRICKETS  
AND TOADS
- BAND 9. THREE WATTLED BELL BIRD
- BAND 10. BLACK HOWLER MONKEYS
- BAND 11. TREE FALL WITH SCREAMING  
MONKEYS, PARROTS AND MACAW
- BAND 12. TREE TOAD
- BAND 13. BIG TOAD

RECORDED IN THE FIELD BY P.P.KELLOGG AND A.A.ALLEN OF THE LABORATORY OF ORNITHOLOGY, CORNELL UNIVERSITY, PETER BARTOK, MOSES ASCH.

RECORDED IN THE NEW YORK ZOO BY HERBERT KNOBLOCH, FREDERIC RAMSEY, JR.

PRODUCTION DIRECTOR AND EDITOR, MOSES ASCH ASSISTED BY FREDERIC RAMSEY, JR.

MASTERS MADE AT PETER BARTOK STUDIOS, N.Y.

NOW AVAILABLE: FOLKWAYS RECORDS ALBUM NO. FPX 121 SOUNDS OF THE SEA  
ACTUAL SOUNDS OF FISH SPECIES RECORDED IN ISOLATED TANKS AND AT  
VARYING DEPTHS -- FROM 5 FEET IN SHELTERED AREAS TO 2,000 FATHOMS  
200 MILES OUT -- IN TROPICAL WATERS OF THE ATLANTIC AND PACIFIC  
OCEANS. RECORDED BY THE NAVAL RESEARCH LABORATORY.



SCIENCE: JUNIOR-SENIOR HIGH SCHOOL

JUNIOR HIGH SCHOOL

♦ 6101 SCIENCE IN OUR LIVES.

Narr. by author-scientist Ritchie Calder. Inc. aspects of science devel.; origins, terms, evolution, & man's relationship to land. Inc. text. 1-12" LP

♦ 6124 SOUNDS OF ANIMALS.

How animals express their emotions & wants through sounds: puma, lion, elephant, chicks, goat, sheep, etc. Good study of animal behavior. 1-12" LP

6130 SOUND PATTERNS.

Compiled by Moses Asch. Natural, man-made, mus., human & location sounds of the world. Basic intro. to sound for students of all levels. 1-12" LP

♦ 6136 THE SCIENCE OF SOUND.

Prod. by Bell Telephone Labs. (Abridged version of 6007.) Demos. var. phenomena inc. how we hear, frequency, pitch, Doppler effect; more. Acquaints upper elem-h.s. students with sound. 1-12" LP

6161 HERE AT THE WATER'S EDGE.

From the sound track by Leo Hurwitz & Charles Pratt. Rec. in & around Port of N.Y. Inc. water sounds & men on shore; notes inc. 1-12" LP

♦ 6166 SOUNDS OF NORTH AMERICAN FROGS.

Docu., & field rec. by Charles M. Bogert in U.S. & Mexico. Study of biological significance of 92 frog voices; inc. var. calls & sounds. Illus. docu. text. 1-12" LP

6178 SOUNDS OF INSECTS.

Rec. by Albro T. Gaul. Courtship & protective calls, sounds in response to stimuli or by-product of motion; inc. cicadas, crickets, & beetles. 1-12" LP

♦ 6200 VOICES OF THE SATELLITES.

Rec. & notes by T. A. Benham. Tracking signals from U.S. & Russian satellites; also inc. heartbeat of Leika, first dog in space. 1-12" LP

6431 INTRODUCTORY HUMAN BIOLOGY Vol. 1.

A basic course by George E. Caraker. inc. *The Cell, Reproduction, Basis of Heredity, Human Inheritance, & Structure of Human Body*; text & dictionary of terms inc. 1-12" LP

SENIOR HIGH SCHOOL

♦ 6007 THE SCIENCE OF SOUND.

Prod. by Bell Telephone Labs. Demos. of acoustic phenomena inc. how we hear, frequency, pitch, vibration, resonance, Doppler effect, & masking distortion; others. Acquaints h.s.-col. students with sound. 2-12" LPs

6100 SOUNDS OF FREQUENCY.

Notes & rec. by Peter Bartok. Test rec. for checking equipment: frequency, response, & distortion. Demos. RIAA curve & SINE wave. 1-12" LP

6115 THE BIRD'S WORLD OF SONG.

By Hudson & Sandra Ansley. Songs of wren, field sparrow, mockingbirds; others; rec. with sound microscope. Scientific transcrip. of vocal expressions. Docu. rec. in Maryland. 1-12" LP

6116 THE LYREBIRD: A Documentary Study of Its Song.

Rec. in Australia. Demos. lyrebird's social life & ability to compose. 1-12" LP

♦ 6120 SOUNDS OF A TROPICAL RAIN FOREST IN AMERICA.

Dawn-to-Dusk in 32 rec. min. Prod. for Amer. Museum of Natural History. Illus. animal, bird, & natural sounds found in dry & rainy seasons. 1-12" LP

6122 SOUNDS OF THE AMERICAN SOUTHWEST.

Rec. by Charles M. Bogert. Dawn-to-Dusk; wild animals & natural sounds, inc. rattlesnakes, owls, toads, thunderstorm, flash-floods; more. Rec. in varying locations; in dry & rainy season. 1-12" LP

6123 VOX HUMANA.

Alfred Wolfsohn's experiments in extension of human voc. range; rec. in England; intro. by Henry Cowell. Inc. nine-octave range, voice versus instru., double & multiple stopping; more. 1-12" LP

6125 SOUNDS OF SEA ANIMALS Vol. 2.

Rec. & narr. by W. N. Kellogg, Oceanographic Inst., Florida State U. Study of underwater sounds prod. by fish species & porpoise, rec. at normal & reduced speeds. 1-12" LP

6161 HERE AT THE WATER'S EDGE.

From the sound track by Leo Hurwitz & Charles Pratt. Rec. in & around Port of N.Y. Inc. water sounds & men on shore; notes inc. 1-12" LP

♦ 6201 MAN IN SPACE.

Docu. rec. of Alan B. Shepard's 1961 Mercury flight from countdown to evaluation. Inc. conversation to Mercury control center during flight. 1-12" LP

6250 SCIENCE FICTION ELECTRONIC SOUND EFFECTS.

Rec. by Mel Kaiser; inc. rocket blast-off & cosmic bombardment indicator. 1-12" LP

6401 THE FIRST ENCOUNTER.

By Arcangelo Calobrisi, M.D., F.A.P.A. Discussion of contemp. psychiatry in U.S.; role & techniques of therapist. For h.s.-col. intro. to psychology. Inc. complete text. 1-12" LP