## HOME TRAINING OF YOUNG BY BIRD PARENTS

# BY AUSTIN L. RAND

A new exhibit in Boardman Conover Hall (Hall 21—Birds of the World) shows stages in the growing up of three kinds of young birds that have very different types of infancy.

The young sparrow at hatching is a blind, nearly naked little thing. It is almost helpless, able to do little but keep right side up and to open its mouth wide and hold it



#### FINAL TOUCHES

Installation of the exhibit illustrating stages of the growth of young birds is completed by Assistant Taxidermist Carl W. Cotton (left) and Leon R. Aboulafia, under the supervision of Dr. Austin L. Rand, Curator of Birds (right).

up for the parent to stuff food into. This type of hatchling bird is referred to as altricial. It is only by a slow process of development and growth in the nest, during which it is cared for by the parents, that the young bird becomes a feathered creature, interested in the world about it, able to hop and fly, and later, when it leaves the nest, to feed itself.

On the other hand the young quail, when it hatches from the egg, is down-covered, has its eyes open, and is shortly able to run about and pick up food for itself as it follows the parent. Such juvenile birds are said to be precocial.

#### 'HOME TRAINING'

The young quail at hatching is in a stage of development comparable to that of the young sparrow when it leaves the nest. Both may be under the care of the parents for a time, during which the young bird, influenced by the adult, may seek food in certain places and shelter in others and may learn to avoid certain enemies. Thus a certain amount of "teaching" and "learning" takes place, a process that eliminates many of the errors in the trial-and-error learning through which the young bird becomes adjusted to its environment.

The sparrow is representative of altricial birds and the quail of precocial, but there are birds whose development and behavior are intermediate between that of the infancy of these two. The common tern illustrates this. The young are down-covered at hatching and soon are able to run about, but for a long infancy they depend on their parents for food.

There are many other variations of these three main types of behavior. The altricial young of petrels are hatched in a dark burrow underground, where they are cared for by the parents until nearly full-grown and very fat. Then the parents desert them. The young in their subterranean burrow complete their fledgling period by living on their fat and, after perhaps weeks unattended by parents, they come out of their nest burrow all alone into a world they have never seen, fly away over a sea they have never before known, and quite without parental guidance take up a way of life that is characteristic of the species.

#### THEY GO IT ALONE

Equally remarkable is the mound builder, or megapod, that buries its eggs and has them incubated by the heat of the earth. The young of these birds at hatching are fully clothed with down and feathers, are able to fly shortly, and are completely independent of their parents, with whom they have nothing to do. The fact that the young megapod and the young petrels venture out all alone into a world that is new to them and behave appropriately is a good indicator of how well developed is the instinctive behavior of these species.

This exhibit, planned in the Division of Birds, was begun by Kenneth Woehlck, formerly Assistant Taxidermist on the Museum staff, and was completed by Carl W. Cotton, Assistant Taxidermist, with the aid of Leon R. Aboulafia of Tel Aviv, a special student from Israel. Mr. Aboulafia, who was in Chicago Natural History Museum studying museum methods, returned last year to his country where he will put into effect the techniques learned here.

## **NEW MEMBERS**

The following persons became Museum Members from November 15 to December 14:

#### Associate Members

L. Martin Krautter, Mrs. John T. McCutcheon.

### **Sustaining Members**

Edgar J. Uihlein, Jr.

#### **Annual Members**

Edwin Goff Cooke, Samuel E. Entsminger, Herman M. Finch, Mrs. David S. Frank, W. P. Frye, J. Leslie Hart, Russell P. Hughes, Ross H. Kidston, Glenn Knotts, Rev. F. W. Lickfield, Wilson V. Little, Miss Agnes McGarry, Edwin Moll, Albert W. Paul, Richard L. Snideman, Bert Edward Sommers, Robert G. Williams.

Eskimo winters average 11 degrees below zero.

## ZOO'S FAMOUS 'BUSHMAN' BECOMES OWN MONUMENT By COLIN CAMPBELL SANBORN

CURATOR OF MAMMALS

BUSHMAN of Lincoln Park Zoo, who died a year ago, has been mounted for permanent preservation at Chicago Natural History Museum and placed on exhibition. He thus is in the unique position of becoming his own monument. This makes pertinent some observations on the subject of gorillas in general.

Published references to gorillas based mainly on stories of natives appeared as long ago as 1625. The gorilla was not again mentioned until 1819, and it was not until 1847 that any actual specimens came to the hands of scientists.

It was in that year that Thomas S. Savage, an American missionary returning from Africa, stopped at the Gaboon River with the missionary stationed there, Rev. J. L. Wilson, who showed him the skull of a gorilla. Dr. Savage, being familiar with the chimpanzee, recognized the skull as that of a new animal and with Rev. Wilson's help secured four skulls and some bones of the animal. Dr. Savage and Dr. Jeffries Wyman, Hersey Professor of Anatomy in Harvard University, studied this material and gave the world the first description of the animal, which they named Troglodytes gorilla. The name gorilla was taken from the account of Hanno, who, in his account of the Carthaginian explorations, described "wild men" found on the coast of Africa

Since the original discovery, and with the further exploration of Africa, no less than seventeen other supposed types of gorillas have been described, each one from a new locality being thought to be different. However, with a greater amount of material available for comparison, the supposed distinguishing characters proved to be merely normal variation in the species. Today only two kinds of gorillas are recognized the coast gorilla, *Gorilla gorilla gorilla* Savage and Wyman, and the mountain gorilla, *Gorilla gorilla beringei* Matschie.

The coast gorilla is found in that part of West Africa known as the Cameroons and French Equatorial Africa. The mountain gorilla lives in a narrow strip of highland forest, usually about 7,000 feet above sea level, in the eastern Belgian Congo.

#### WEIGH UP TO 350 POUNDS

Both gorillas are large animals, old males standing about six feet and in the wild weighing 350 pounds or more. The girth of the great chest is 63 to 64 inches, or more than five feet. The powerful arms have a girth of 18 inches and a length of 34 inches and the distance from finger tip of one arm to finger tip of the other is about eight feet. The mountain gorilla differs from the coast gorilla by its longer and thicker coat, which



Rand, Austin Loomer. 1952. "Home Training of Young by Bird Parents." *Bulletin* 23(1), 5–5.

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