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## VARIED BIRD INHABITANTS OF AN AFRICAN DESERT SHOWN IN NEW GROUP

BY RUDYERD BOULTON Curator of Birds

In the alcove of African birds recently opened in Hall 20, three habitat groups show the range and variation in climate and vegetation that are such important factors in the distribution of animals on the African continent. One of these, the village weaverbird group, was described in the May issue of FIELD MUSEUM NEWS. Birds of the Kalahari Desert, shown in the second group, form a colorful part of this series. Speci-

mens for this group were collected by the the Vernay-Lang Kalahari Expedition (1930), and presented to the Museum by Mr. Arthur S. Vernay, of New York and London.

Generally speaking the life zones of Africa present a remarkably simple picture, al-though local conditions introduce complexity of detail. The low-lying central portion of the continent, the drainage basin of the Congo River, is covered with a luxuriant rain-forest more than 700,000 square miles in extent, un-broken except for clearings made by the natives for their little gardens. Wherever the altitude of isolated mountains provides suitable climatic conditions of lower temperature and excessive rainfall, areas of mountain rain-forest

occur. Surrounding the huge central forest, and sharply demarcated from it, are concentric zones of hotter and drier country that progressively change from savanna to thorny forests, and finally to true barren desert. In one of these outer dry and hot zones, the semi-desert savanna, lies Gomodino Pan, the site represented in the Museum's Kalahari Desert group.

A "pan," in South African terminology, is a slight depression in the center of a

plain. It is filled with water during the rainy season, and may be even marshy. In the dry season, the area of water shrinks and may entirely evaporate. Pans are often brackish or even saline, as the Great Makarikari Salt Pan. Over large parts of Bechuanaland the only available water is that which stands in these depressions, and around them much of the bird and animal life of the so-called Kalahari Desert is congregated.

In the center of the Museum group a pair of black-bellied bustards display interest the water in flocks. Sand-grouse are curious desert birds which resemble both pigeons and quail, and have several remarkable habits. The regions that they frequent are very arid, and they limit their visits for water to one trip every day or two. They come in large flocks as punctually as trains on schedule, drink prodigious quantities of water in a few seconds, and whirl away into the desert.

Several fundamental types of animal coloration are shown by the six species of

birds in the group. Counter-shading is perhaps the most universal pattern of color in the animal kingdom. Where an animal receives the most light it is darkest, and where it receives the least light it is lightest. In this way the shadow that a bird or animal casts upon itself compensates for the lighter coloring, and at a distance it appears uniformly colored and inconspicuous. For this reason 99 per cent of all animals are darker on their backs and lighter on their under parts.

All of the birds in the group except two are counter-shaded. These two, the little Namaqua dove and the black-bellied bustard, so strongly follow the principle of "ruptive marking" that counter-shading is almost eliminated. A ruptive mark, genoully white on black-pally white on black-

erally white on black or vice-versa, is a very contrasting pattern that cuts across and breaks up the silhouette or outline of the animal. The outrageously grotesque patterns and designs used in camouflaging ships during the great war were developed from the ruptive markings of animals. At a distance the eye tends to see the design rather than the outline, and the bird, animal, or ship looks like something else.



Birds of the Kalahari Desert

One of the three new habitat groups of African birds recently completed in Hall 20. Specimens in this exhibit were collected by an expedition led by Mr. Arthur S. Vernay. Birds mounted by Staff Taxidermist Arthur G. Rueckert; background by Staff Artist Charles A. Corwin; accessories by Preparator Frank H. Letl.

in a small sand lizard which has attracted the attention also of a pair of scarletbreasted bush-shrikes. A two-banded courser is scooting away from the commotion.

Three yellow-throated sand-grouse rest in the shade of a clump of red aloes and mopane bush before flying to the pan for their daily drink of water. Other sandgrouse can be seen in the distance circling

# MORE FIELD MUSEUM EXPEDITIONS TO BE RADIO-DRAMATIZED

Six more programs remain to be given on Wednesday evenings during July and August in the radio series, "From the Ends of the Earth," presenting the work of Field Museum expeditions in dramatized form. As in May and June, the broadcasts will begin at 9 P.M. Chicago daylight saving time, and station WGN will be the local outlet; also, they will be carried at the corresponding hour in other time belts on sta-

tions of the Mutual Broadcasting System.

The departure of certain Museum staff members on new expeditions in the past few weeks made necessary some deviations from the schedule announced tentatively in the June issue of FIELD MUSEUM NEWS. The following schedule for the July programs is announced subject to further variations or substitutions—there will be a program on each date even if not that listed:

July 7—The Making of a Zoologist
July 14—From King Charles III of Spain

(1759-88) to Field Museum (the story of research in the Museum's botanical laboratories on a plant collection made by a historic expedition)

July 21—Hunting Birds with the Straus West African Expedition

July 28—Finding and Excavating Fossils of Prehistoric Animals (postponed from June 16)

The University Broadcasting Council is cooperating with the Museum in the presentation of these programs.



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