GENERAL NOTES

Reappearance of Newell's Shearwater in Hawaii.—In 1931, Peters (Check-list of Birds of the World, Harvard Univ. Press, Vol. 1, p. 58) considered the Newell's Shearwater extinct. The bird was described as *Puffinus newelli* but is now considered *Puffinus puffinus newelli* by Murphy (Amer. Mus. Novit. 1586: 11, 1952). The last of seven known preserved specimens in the world had been taken in the 1890's. Native Hawaiians had apparently collected adult shearwaters for food on Molokai in 1906 (Bryan, Bishop Mus., Occ. Papers, 4: 54, 1908) but found them absent in 1907. There seem to be no further records of the species, known to Hawaiians as the *Ao*, until Fisher (Condor, **53:** 31–42, 1951) reported seeing three flying at sea between Kauai and Niihau in August of 1947. David Woodside and Joseph King report having seen several dozen shearwaters in Hawaiian waters between 1951 and 1954, that, judging from their descriptions, appear to have been Newell's Shearwaters. In spite of this evidence of the continued existence of the species, it is gratifying to be able to report a recently found specimen.

At 4:00 A.M., May 22, 1954, an adult *Ao* flew into a room of a sugar refinery near Aiea, Oahu. It was given to the Honolulu Zoo where it lived for over a month, seemingly in good health, but died June 30. Its skin is now in the American Museum of Natural History and its nearly complete skeleton, in the Bishop Museum. Brief notes and measurements seem of value because the bird has probably never been observed in captivity or photographed, and is extremely rare in collections. The bird was retiring and gentle, never attempting to bite as do some shearwaters or petrels. It soon learned to take fish from its keeper or to come to its pool for fish and ate two to four dead smelt (5″ to 6″ long) every day, swallowing them headfirst. Henshaw (Auk, **17:** 246, 1900) in his original description of *Puffinus newelli*, did not have first-hand knowledge of a live specimen. He describes the color of the feet and tarsus, where not black, as light yellow, and the beak as black and light brown. It may be significant that in the recent living bird the light-colored parts of the legs and feet were grey or pinkish-grey and the beak uniformly dark slate-colored. The wingspread and length of the *Ao* have apparently never been recorded; they were 32 inches and 14 inches in the live bird. The bird weighed 11 ounces and was in good flesh. It was a female, the ovary being 3/8 inch long and the ovules about 1/32 inch, and the oviduct readily visible. The regular museum skin measurements were: exposed culmen, 31 mm.; tarsus, 45 mm.; wing (chord), 231 mm.; middle toe and claw, 51 mm.; and tail, 82 mm.

Judging from the several records of the Newell's Shearwater in recent years, one may assume that the form is still breeding, at least in small numbers, somewhere in the Hawaiian Islands. Intensive search of the mountainous cliffs as on Kauai or Maui, may well reveal its nesting burrows.—FRANK RICHARDSON, *Bernice P. Bishop Museum, Honolulu, Hawaii.*

A New Form of Corapipo from Cerro Marahuaca, Amazonas, Venezuela.—The following new race of *Corapipo gutturalis* is described on the basis of material which I collected during the course of an investigation of the birds of Cerros Marahuaca and Duida in Territorio Amazonas, Venezuela. I propose that it be known as:

Corapipo gutturalis carminae, subsp. nov.

Type: Adult female, No. 444,143, U. S. Nat. Mus., Camp Jaime Benítez, 5000 feet elevation, Cerro Marahuaca, Amazonas, Venezuela, May 18, 1950, Ventura Barnés, Jr., collector.

NEWELL'S SHEARWATER. Captive bird at the Honolulu Zoo, June, 1954. Photograph by Fran Hall.

Subspecific characters: Female similar to that of *Corapipo gutturalis gutturalis* (Linnaeus) [*Pipra gutturalis* Linnaeus, Syst. Nat., ed. 12, vol. 1, 1766, p. 340 (Cayenne).] but with the entire dorsal surface, sides, and flanks darker, duller green; throat, breast, and abdomen clearer white.

Measurements: wing 55.8, tail 27.6, culmen from base 8.9, tarsus 15.3 mm.

Geographic distribution: Known from Cerro Marahuaca, Amazonas, Venezuela; in the upper portion of the sandstone meseta.

Remarks:—An immature male was taken at the same time as the type, with the dark plumage of the adult appearing on the head and wing coverts, but otherwise like the female, is likewise characterized by dark coloration. The location marks a considerable extension of range for the species, that hitherto has been recorded from French, Dutch, and British Guiana. The new form is easily recognizable from its dark coloration. The known localities in French, Dutch, and British Guiana from which the typical form *Corapipo gutturalis* has been recorded are all located in the Tropical Zone, as far as I am aware. This new form is found in the upper limits of the Subtropics of Cerro Marahuaca where it inhabits the humid rain forests of the upper terrains. It is my belief that the drastic change of environment afforded by the upper portions of Cerro Marahuaca was the the main factor which determined the evolution of the newly discovered geographical race.

This bird is named for my wife Carmiña, who accompanied me in many of my collecting trips.

I wish to express my sincere appreciation to Dr. Alexander Wetmore for examining my specimens and for his critical comments relating to them, some of which are included in this work, and to Dr. Herbert Friedmann my sincere appreciation for his revision of my specimens from Mt. Duida and Mt. Marahuaca. VENTURA BARNÉS, JR., *Box 3293, Mayaguez, Puerto Rico.*

The Behavior of Birds Under Stress.—The study of animal behavior is one of the most primitive of human observations. Humans have been forced to study animal behavior for the procuring of food and at times for self preservation. The recorded behavior pattern dates back to antiquity, Aristotle [Thompson, D'Arcy W. (1910). The works of Aristotle 4, Historia animalium (Oxford)] wrote on the subject. More recently we have developed a most voluminous literature on the behavior of animals in their natural habitat as well as in the laboratory. The subject has been attacked by physiologists, endocrinologists, psychiatrists, and physiochemists, as well as zoologists, for the reports in this country as well as continental Europe show extensive studies in the natural habitat as well as many laboratory-controlled experiments.

The following field observation may be of interest in showing the unusual behavior of wild birds under stress. At my county place, a bird feeding station is in operation, and among the birds which visit it there is a large number of Red-wings. Fox squirrels and chipmunks also come to the feeding station. Much of the scratch feed is spread on the ground, and there is ample for all the visitors. On more than one occasion the birds and the chipmunks in particular have gotten along most harmoniously until my dog, a spaniel, was allowed out the side door of my cabin some 75 feet away. The dog sat still and did not make a dash for the birds or the chipmunks. The Red-wings under stress on the sight of the dog attacked the two chipmunks with whom they were feeding in harmony prior to the dog's appearance.

A few years ago, I visited a small island (Shoe Island) part of the Beaver Island group in Lake Michigan. The island is about 100 feet by 50 feet, about 3 feet above