## THE CONDOR

birds from south of the Isthmus of Tehuantepec in size (see table) and some individuals of the larger, more northern race, *B. j. calurus* in color. Adults of the three southern populations, although similar in size, are quite different in color (see fig. 1). Birds from Costa Rica and western Panamá (*B. j. costaricensis*) are darkest dorsally; ventrally, the white breast contrasts with the strong rufous color of the "belly band," which may be marked with sooty streaks varying in width from fine shaft streaks to almost tear-shaped spots. The flags are dark rufous with very little or no transverse barring.

B. j. kemsiesi, occupying the highlands of Chiapas, Guatemala, Honduras, El Salvador, and northern Nicaragua, is somewhat paler above than is *costaricensis* and much paler below than either that race or the more northern population. The "belly band" is ill-defined or absent and the streaks greatly reduced or absent. The flags are faintly barred with pale rufous.

The birds occurring in the area from Jalisco to Oaxaca apparently belong to an undescribed race which may be called

## Buteo jamaicensis hadropus new subspecies

Type.—Adult male, no. 109350 Mus. Vert. Zool., taken at Chilpancingo, Guerrero, México, on March 2, 1940, by W. W. Brown; testes "enlarged."

Diagnosis.—Adults differ from those of Buteo jamaicensis kemsiesi in having a band of rufousbarred feathers across the abdomen that contrasts with the unbarred white or pale buff breast, in being more heavily streaked below, and in having darker rufous flags, which are usually barred with whitish. They differ from adults of B. j. costaricensis in having a lighter back and barred "belly band" and flags. Pale individuals of B. j. calurus may resemble specimens of the new race in the color of the underparts, but they can readily be distinguished by their larger size. In addition, light-phase examples of calurus have smaller dark tips to the feathers of the back and of the sides of the head so that the light central parts of the feathers are more in evidence, giving the bird a strongly mottled appearance. Measurements of the type of hadropus are as follows: wing (arc), 372 mm.; tail, 196; tarsus, 91.5; culmen (from cere), 27.3.

Range.—The highlands of southern México from Oaxaca north and west at least as far as Jalisco. Presumably intergrades with B. j. calurus and B. j. fuertesi in northwestern México.

## WING LENGTHS (IN MILLIMETERS) OF RED-TAILED HAWKS FROM SOUTHERN MEXICO AND CENTRAL AMERICA

	Males			Females		
Subspecies	Number	Range	Mean	Number	Range	Mean
costaricensis	6	352-393	376	8	376-408	395
kemsiesi	8	368382	375	6	362-402	389
hadro pus	20	348-390	379	13	377-420	397

Adults in the dark phase are of infrequent occurrence: I have seen one dark example of hadropus (USNM 144148 from Mt. Zempoaltepec, Oaxaca) and two of kemsiesi (AMNH 393613 from San Lucas, Guatemala; and AMNH 101089 from San Rafael del Norte, Nicaragua). All three of these birds are black above and below but have concealed light markings on the "tertials" and scapulars. In addition, the two kemsiesi have the sooty black on the flags and on the under tail coverts mixed with rufous.

It might be expected that examples of *hadropus* from Oaxaca would approach *kemsiesi* in ventral coloration. However, three adults from that state in the United States National Museum average redder below than examples from Guerrero and Michoacán in that collection.—ROBERT W. STORER, *The University of Michigan Museum of Zoology, Ann Arbor, Michigan, July 21, 1961.* 

Horned Lark Captured in Flight by Loggerhead Shrike.—In the evening on March 31, 1961, accompanied by three biologists from the California Academy of Sciences, I camped about 3 miles northwest of Rancho Cantina, on the Vizcaino Desert in central Baja California, México. Several flocks of Horned Larks (*Eremophila alpestris*) had been seen during the afternoon, with from ten to nearly 100 birds in a flock. At dusk about forty birds went to roost in a spiny thicket of *Lycium californicum* about fifty yards from our camp.

Shortly after daybreak on April 1 the Horned Larks flushed in obvious alarm, whirled back and forth a few seconds, then dove back into the thicket. We first thought a fox had startled the birds, but further observation showed a Loggerhead Shrike (*Lanius ludovicianus*) harrying them. On the third or fourth flight of the flock, the shrike caught a lark and the two birds fluttered to the ground where they struggled violently about half a minute.

The shrike killed the Horned Lark, laboriously carried it approximately twenty feet, and impaled it on two spiny branchlets of the Lycium shrub. The shrike abandoned its prey when approached closely but perched about twenty feet away while I examined the dead lark.

The top of the Horned Lark's head had been stripped of feathers and the skull torn open half way across from its left eye. Nearly half of the brain had been eaten, although not over two minutes had elapsed after the shrike lodged the carcass in the shrub.

Although the Loggerhead Shrike is a stronger, heavier bird than the Horned Lark, it seems remarkable that it should be able to overtake and kill a full grown, agile Horned Lark that was presumably in normal health before the attack. The panic exhibited during the violent flight of the flock each time the shrike made its approach, and the rapidity with which the smaller birds returned to the shrubby cover, indicated familiarity with the danger presented by the hunting shrike.

The field work of our party was supported by a grant from the Belvedere Scientific Fund. We are grateful to its Trustees and to its President, Mr. K. K. Bechtel, for the financial aid that made the trip possible.—IRA L. WIGGINS, Natural History Museum, Stanford University, Stanford, California, July 27, 1961.

Black Swift Breeds in Utah.—A ten-year study of the geographical and ecological distribution of the Black Swift (*Cypseloides niger*) in Colorado (Knorr, Wilson Bull., 73, 1961:155–170) resulted in the discovery of 27 active breeding colonies.

The Black Swift is not known to occur in the vast area between the Colorado Rockies and western Nevada, so it seemed desirable to search this area for the purpose of adding to the meager knowledge of the species. I chose to begin in the Wasatch Mountains of Utah because the precipitous nature of these mountains and my experience with the bird led me to believe that it should breed there.

Bridal Veil Falls in the Provo area seemed a likely spot to begin since the term "Bridal Veil" as applied to waterfalls is descriptive of the Black Swift's nesting environment. I went first to the Aspen Grove Recreational Area east of Mt. Timpanogos and immediately upon arrival I saw Black Swifts sailing around in the air above Aspen Grove in the company of White-throated Swifts (*Aëronautes* saxatalis). Here behind a thin cascading falls two Black Swift nests were discovered, each containing a feathered young bird. The size of the colony is unknown.

Four more sites were located farther down Provo Canyon. One was located at Upper Falls and one each at the two cascades between Upper Falls and Bridal Veil Falls. A nest in the colony at Bridal Veil Falls was visible from the tourist parking area on Highway 189 below the falls.

All the nests were found on August 22, 1959, and nests were observed again during the summers of 1960 and 1961. Everything about the sites seemed typical except that the nests appeared to have more fern incorporated with the moss than nests in Colorado. I do not believe this discovery constitutes a breeding range extension because Black Swift breeding sites are ancestral by virtue of their unique and narrow ecological requirements. Unless one knows how and where to search, the bird can be entirely overlooked.—OWEN A. KNORR, Department of Biology, University of Colorado, Boulder, Colorado, July 1, 1961.

Nesting of the Hooded Oriole in Sacramento, California.—Since early April of 1961 Hooded Orioles (*Icterus cucullatus*) have been observed in Capitol Park, Sacramento. On July 21 a nest was found in a California fan palm (*Washingtonia filifera*) on N Street near Tenth Street. Young were heard at that time, and an adult male was seen near the nest. The writer is very familiar with the nests of this species, having observed a number of them in southern California. Records known to the author of the nesting of the Hooded Oriole as far north as Solano County are found in the American Ornithologists' Union (Check-list of North American Birds, Fifth Edition, 1957:532) but the occurrence of breeding orioles of this species in Sacramento represents a further northward extension of range.—MILTON MOORE, Sacramento, California, July 28, 1961.