

ability that most sight reports of *L. fuscus* in the eastern United States are correct as to species and are referable to *graellsii* is enhanced by the fact that this form migrates along the Atlantic coast of Europe and that New World sight records are from the Atlantic watershed at latitudes frequented on the usual Old World wintering grounds.—JOSEPH R. JEHLE, JR., 385 Grove Street, Clifton, New Jersey.

A Possible United States Breeding Area for the Violet-crowned Hummingbird.—On a field trip to the Guadalupe Mountains of southeastern Arizona and adjacent New Mexico, July 23 to 25, 1957, my brother John and I identified as many as six Violet-crowned Hummingbirds (*Amazilia verticalis*), and one was collected. This Mexican species is reported as "casual" in the United States (A.O.U. Check-list, 5th ed.: 306, 1957). The only previously known United States specimens are: one from Palmerlee, Huachuca Mountains, Arizona, July 4, 1905 (Bishop, Auk 23: 337, 1906); another taken by H. H. Kimball near Paradise, Chiricahua Mountains, Arizona, July 16, 1925 (Journ. Wash. Acad. Sci. 37 (3): 103-104, 1947); and an adult female collected by A. R. Phillips near Patagonia, Santa Cruz Co., Arizona on August 20, 1948 (personal letter).

Our first bird was seen on the 24th about a mile above the Johnson Ranch in Guadalupe Canyon, New Mexico. It pugnaciously chased from the area a male Broad-billed Hummingbird (*Cyananthus latirostris*). After the chase we could not locate it again. Later the same day we saw another Violet-crowned Hummingbird in this canyon about 2 miles into Arizona from the state-line. It acted in the same manner as the first bird, except that it landed in a dead tree directly in front of us, so close that I could not shoot for fear of completely destroying it. We had an excellent study before it flew. All salient characters, including the clear white underparts, violet crown, and green back and tail, were carefully noted.

On the 25th we returned to the Arizona site. After waiting some time with no result, we went about a mile further up the canyon, where a Violet-crowned Hummingbird streaked over us heading for a blooming agave. The bird seemed nervous, and, as we approached, it darted into a grove of large sycamores. A Violet-crowned Hummingbird along with several Broad-billed Hummingbirds and Black-chinned Hummingbirds (*Archilochus alexandri*) were observed feeding at the agave. The Violet-crowned Hummingbird always appeared and left in the same direction. It came to the agave to feed every five to ten minutes. The bird acted in a manner suggesting that it was feeding young. When finally collected the bird proved to be a fine adult female with slightly enlarged ovaries and evidence of a recent brood patch. On the way back to our truck, a distance of two miles, we located three other individuals of this species. A violent rainstorm, the worst in many years, prevented further field work.

The greenish tail and the white wing edge of our bird agrees with Wetmore's (Jour. Wash. Acad. Sci. 37(3): 103-104, 1947) description of *elliotti*, and Eugene Eisenmann of the American Museum of Natural History has examined the specimen and confirms the racial identification. This bird is now in the Fish and Wildlife Service collection at the U. S. National Museum.—SEYMOUR H. LEVY, Route 9, Box 960, Tucson, Arizona.

Function of Cryptic White in the White-necked Raven.—Courtship and hostile displays of birds frequently involve the use of contrasting colors and bold patterns. Common species in the United States that use black-and-white patterns in display include the Inca Dove (*Scardafella inca*), Mockingbird (*Mimus poly-*

glottos) and Phainopepla (*Phainopepla nitens*). The cryptic white on the White-necked Raven (*Corvus cryptoleucus*) has not been shown to have a function in the behavior of the species, but it is unlikely that the white is in fact without meaning. The observations below indicate a hostile (more precisely, agonistic) function of the concealed white.

A first-year male White-necked Raven, after having been held captive for about one month while a broken wing was healing, was introduced into an outdoor aviary in Mesilla, New Mexico, in September 1957; there it met five other White-necked Ravens, which had been wing-clipped captives for one to two years. This group of birds had established a working social organization and the introduction of the new bird seemingly disturbed this order. There ensued forceful exhibitions of aggression, both on the part of the original five birds and the newcomer. The typical display of hostility involved a bird assuming a horizontal posture with the neck moderately extended, and with the feathers of the head and neck fully erected. With the feathers so erected a vast area of black-tipped white was exposed; this white area was made clearly evident to an antagonist as the displaying bird posed obliquely to the immediate front of the antagonist. The posture was accompanied by an intermittent, aggressive, low-pitched *caw*.

The dominant member of the original group was the most aggressive bird. However, after this bird had established dominance (over the newcomer) it did not display the cryptic white to the same extent as it had done previously; its associates maintained a full display of the white whenever the newcomer approached them. The newcomer was continually in a state of hostile display and remained so throughout the course of observation. There were a few minor skirmishes and the newcomer was once jostled off its perch while thus engaged.

In the situations just described the display of the cryptic white occurred only in aggressive and defensive behavior. Thus, the white, in conjunction with the horizontal threat posture, may serve as a signal of aggressiveness, and even of willingness to engage in physical contact, as long as an agonistic relationship remains equivocal.

In spring in 1956 and in 1957 I observed wild White-necked Ravens on numerous occasions (they are abundant in the Mesilla Valley). At no time did I see the cryptic white used in a courtship situation. Blake (*Auk*, 74: 95-96, 1957) has postulated such epigamic function of the concealed white, but I was unable to find support for this.—RICHARD F. JOHNSTON, *Museum of Natural History, University of Kansas, Lawrence, March 17, 1958.*

Nest of Mockingbird in Pile of Fence Rails.—On May 20, 1954, a farmer friend showed me an unusual nest of a pair of Mockingbirds (*Mimus polyglottos polyglottos*) near Lexington, Virginia. It was situated in a pile of fence rails in the open and contained three half-grown young. The nest was placed among the ends of the rails, three feet from the ground, and entirely exposed. A thick cedar bush some twenty feet away would have offered a much more normal site. The nest was unusually wide and bulky, made of the usual sticks and rootlets, with some sheep's wool. Alexander Sprunt, in his comprehensive article on the Eastern Mockingbird in Bent (*U. S. Natl. Mus. Bull.*, 195: 295-314, 1948), does not list any such location, although in the same volume (p. 318) the western race (*M. p. leucopterus*) is reported to build in brush piles and in the corners of rail fences in Texas.—J. J. MURRAY, 6 *White Street, Lexington, Virginia.*