

IGURE 1. Cross-section of a barb of a throat feather of Querula purpurata. 800 ×.

after the application of heat, have an orange-yellow to yellow color in the core. The pigment has not faded in sections which were mounted in xylol-balsam, several years ago. A cross-section of a barb showing this phenomenon is shown in Figure 1.— R. M. STRONG, *Chicago Natural History Museum, Chicago 5, Illinois.* 

Vestigial Claws on the Wings of the Kiskadee Flycatcher, Pitangus sulphuratus caucensis.1—In a collection of Colombian birds made by Father Antonio Olivares are 13 specimens of the Kiskadee Flycatcher, all taken within a radius of 15 miles of Cali, Colombia. Of these 13, three were taken at one place, Arroyo Hondo, and may well have been members of a closely knit group, perhaps even of one family, although one of them was collected a month before the other two, the latter birds being collected together. Each of these three (each an adult male) has a noticeable, exposed digital claw on each wing; the other 10 specimens, taken in the general vicinity of Cali and at Jamundi, some 15 miles away, show no sign of any such claws. A very extensive series of most of the races of this flycatcher has been examined and no additional cases of vestigial wing claws were noted. In his survey of the occurrence of such structures, Fisher (Amer. Midl. Nat., 23 (1): 234-243, 1940) found no wing claws on any passerine bird, although he examined some 241 specimens of 68 genera of some 20 families of the order. In other groups of birds he found the presence or absence of wing claws could not be looked upon as an ordinal, familial, generic, or even specific character in all cases. The apparent implication in the present record is that not only may vestigial wing claws appear occasionally in passerine birds, but that in this case the character may even have been an hereditary trait, inasmuch as it is present in each of three birds collected in one place, and is otherwise absent. It would seem hardly likely to be a mere accidental coincidence.

The claws are fairly straight, curved slightly terminally, measure 2.5-3.5 mm. in length, and lie flat, parallel to the alular quills. The large size of the claws (which was what made them conspicuous and thereby attracted attention) is brought out by comparing with the figures given by Fisher. They equal, or even exceed in size, claws recorded by him from various species of gulls.

The present note is written at the request of the collector, who is preparing a general report on his collection.—HERBERT FRIEDMANN, United States National Museum, Washington, D. C.

Genera of Birds Bearing Vestigial Claws on the Wings.—Fisher (Amer. Midl. Nat., 23 (1): 234–243, 1940) has summarized the known occurrence of claws on the digits of birds' wings. Wing claws have not been recorded by Fisher for the six genera listed below. Claws were noted in the genera listed while I was preparing skeletons for the scientific collections at the University of Michigan Museum of Zoology. All of the specimens listed in the table (except the two of *Buteo*) were

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received from the Detroit Zoological Park where they had been captives. In the specimens examined I found wing claws only on digit one. Unfortunately, I kept no detailed record of the condition of the claw; my notes merely indicate its presence or absence. However, in all of the genera listed, the claw was sufficiently well developed that it could be seen readily (after the feathers were parted or removed) without the use of optical aids.

Anatidae, Coscoroba, one adult.

Accipitridae, Accipiter cooperii, one fully-grown immature, and Buteo jamaicensis, two fully-grown immatures.

Gruidae, Anthropoides virgo, one adult, and Balearica, one adult.

Rallidae, Laterallus leucopyrrhus, one adult.—HARRISON B. TORDOFF, Museum of Natural History, University of Kansas, Lawrence, Kansas.

**Captive Raven Carries Food to Non-captive Black Vulture.**—During the week of February 4, 1951, the temperature in Washington, D. C., dropped to 14 degrees above zero F. The city and The National Zoological Park were covered with snow and a sheet of ice. During this cool weather a visitor to the Zoo informed me of the unusual behavior of a Northern Raven, *Corvus corax principalis*, and a Black Vulture, *Coragyps atratus*. The Raven is caged in a roomy outside enclosure and daily is given a varied mixture of food consisting of grain, boiled egg, mockingbird food, bread crumbs, and raw hamburger meat. The visitor informed me that he had seen the Raven pass out through the bars of the cage, a beak full of hamburger to a non-captive Black Vulture. Wishing to verify this observation, I stationed myself some 100 feet away to await developments.

I saw the Raven retrieve a hidden ball of meat and thrust it through the bars of the cage. Immediately a vulture dropped from a nearby tree and accepted the food from the beak of the Raven. The Raven walked away uttering a low guttural call.— MALCOLM DAVIS, *The National Zoological Park, Washington, D. C.* 

The Number of Eggs Laid by the Passenger Pigeon, Ectopistes migratorius. —It has been customary to state that the Passenger Pigeon laid one or two eggs. For example, C. W. Townsend (*in* Bent, Bull. U. S. Natl. Mus., 162: 386, 1932) wrote: "The passenger pigeon laid either one or two eggs in a set, probably more often only one." There are three reasons for limiting the number to one: (1) Captives never laid more than one egg to a set; (2) Capable ornithologists never found in the wild more than one egg in a single nest, or small groups of nests, where the chances of two females laying in the same nest were reduced to a minimum in comparison with colonial nestings; and (3) The best evidence is biological. Mr. Willard informed Prof. C. F. Hodge (Forest and Stream, 74: 812, 1910) that in dressing thousands of wild birds for the market only a single developed egg was ever found. C. O. Whitman (Pigeons, 3: 6, 1919) found that five to eight days were required for the deposition of a second egg when the first was broken or removed.—A. W. SCHORGER, 168 N. Prospect Ave., Madison, Wisconsin.