

FROM FIELD AND STUDY

Raptorial Hosts of *Protocalliphora*.—Recently Work and Hill (Condor, 49, 1947:74-75) reported larvae of *Protocalliphora* parasitizing the Sparrow Hawk (*Falco sparverius*) and the Golden Eagle (*Aquila chrysaetos*). It was stated in that report that no mention of any raptorial birds as hosts for these flies had been found in the ornithological literature. Since then several references to raptorial hosts have been uncovered, but none of these mentions either the Sparrow Hawk or the Golden Eagle. The earlier references are as follows: Burtch (Auk, 37, 1920:293) reports removal of maggots from the ears of three seventeen-day old Cooper Hawks (*Accipiter cooperii*) in New York. He suggests that the maggots may have been screwworm fly larvae (*Comptosmia macellaria*). However, according to Hall (The Blowflies of North America, 1948:137) this name is an old synonym for *Callitroga americana*, the screwworm fly which is the common cause of myiasis in domestic and wild animals and known to be entirely parasitic on mammals. Hence, it is probable that Burtch was dealing instead with bird nest screwworm fly larvae (*Protocalliphora*). Sargent (Auk, 55, 1938:82-84) found *Protocalliphora* larvae "in great numbers" in the nests of Red-tailed Hawks (*Buteo jamaicensis*), Red-shouldered Hawks (*Buteo lineatus*), and Cooper Hawks (*Accipiter cooperii*), in New York. They were commonly found in the ear canals of the two species of *Buteo*, but never in the ears of the Cooper Hawks. Shannon and Dobrosky (Jour. Wash. Acad. Sci., 14, 1924:250) report a nest of the Long-eared Owl (*Asio otus*) parasitized at McElroy Lake, Paha, Washington.

I communicated recently with C. F. W. Muesebeck, Division of Insect Identification, Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture, in regard to published records of raptorial hosts for *Protocalliphora*. He was able to find no references further than those mentioned above, excepting Hall's monograph on the blowflies (*op. cit.*). This work, which has just been published, lists the three species of hawks and the one owl mentioned above and, in addition, the Swainson Hawk (*Buteo swainsoni*). It has not been possible to account for the original source of the record of the Swainson Hawk.

According to Hall (*op. cit.*), North American blowflies which have been referred to as *Protocalliphora* are now correctly referred to the genus *Apaulina* (new genus) and given the common name of bird nest screwworm flies. The name *Protocalliphora* is now applicable only to a genus of closely related European forms. Hall recognizes ten species of *Apaulina* and states that the habits of all species are similar. The larvae of all are obligate blood-sucking parasites upon nestling birds. There is apparently little, if any, host specificity, and probably any species of *Apaulina* will attack any of the known host species within its distributional area.

In summary, seven species of raptores, including five species of hawks, one eagle, and one owl, have now been reported as hosts for the bird nest screwworm flies, which have recently been placed in the new genus *Apaulina*.—HAROLD M. HILL, *Ann Arbor, Michigan, March 5, 1948*.

A New Western Race of the Nighthawk.—An apparently new race of Nighthawk was discovered during the course of the Carnegie Museum expedition to Idaho in 1947. It may be called

***Chordeiles minor twomeyi*, new subspecies**

Type.—No. 131,534, Carnegie Museum, adult male; collected two miles southwest of Melba, elevation 3,000 feet, Owyhee County, Idaho, on June 23, 1947, by A. C. Twomey; original number 12,258.

Description.—Similar to *Chordeiles minor sennetti* but underparts more suffused white and barring darker and more distinct, with less buff ochre undertone; scapulars lighter with greater contrast in grays and browns; interscapular region darker, with less buffy intermixture.

In *sennetti* there is more ochraceous tawny and lighter brown, compared with the darker blackish-brown of *twomeyi*. The over-all whiteness of the underparts, with their more distinct and darker vermiculations, and the lighter scapulars, with their strong contrast against the darker browns, serve to define this race and make it easily separable from *sennetti*.

Measurements.—Wing, 199-202 (200.6) mm.; tail, 104.5-106.0 (105.1); culmen from base, 7.5-8.0 (7.66); tarsus, 13-14 (13.6).

Specimens examined.—Four; the type and a topotype; one from Lowman (7 miles east), Boise County, Idaho; and one from Adel (9 miles south), Lake County, Oregon.