Wilson Bull., 93(1), 1981, p. 110

Protocalliphora infestation in Broad-winged Hawks.—In spring and summer 1978, during study of the productivity of the Broad-winged Hawk (*Buteo platypterus*) in Chautauqua County, New York, we discovered infestation of nestlings by dipteran larvae later identified as *Protocalliphora avium* Shannon and Dobroscky (Calliphoridae). This is the first reported occurrence of infestation of the Broad-winged Hawk by this ectoparasite. Bohm (Wilson Bull. 90:297, 1978) listed *Protocalliphora* spp. in Great Horned Owls (*Bubo virginianus*), Longeared Owls (*Asio otus*), Red-tailed Hawks (*Buteo jamaicensus*), Red-shouldered Hawks (*Buteo lineatus*) and Cooper's Hawks (*Accipter cooperii*).

Larvae were first noticed and collected from the ear cavities of nestling broad-wings from 18–26 days old. Each nestling in 3 broods of 2 averaged 9 larvae (range 2–15) per pair of ear cavities. Three nestlings in an additional brood, killed by a predator at 6–9 days of age, were not infested. The infested nests were widely separated, and the nest-sites were variable in characteristics.

The nestlings appeared to suffer no major deleterious effects from infestation by the bloodsucking larvae. However, bleeding was observed in the ear cavities, the skin around the ear openings was swollen and scabs sometimes covered the ear cavities. No behavioral abnormalities were noticed. Bohm (1978) stated that infestation by these dipterans caused no serious harm to large species, but did cause some mortality in small passerines. Because mortality is known in small birds, and because at least 1 other ectoparasite (Mexican chicken bug [Haematosiphon indorus]) is known to cause nestling mortality in raptors (Platt, Wilson Bull. 87:557, 1975), Protocalliphora might be expected to cause or contribute to mortality of small or undernourished nestling Broad-winged Hawks, and potentially other raptor nestlings. The effects of ectoparasites should be looked for in bird species showing brood reduction strategies for growth and reproduction (see O'Conner, Living Bird 16:209–239, 1977) in which the young are often undernourished and weak, and this includes raptors.

We wish to thank Allen Benton, Robert Bohm and especially C. W. Sabrosky for their aid in identifying the larvae.—SCOTT CROCOLL AND JAMES W. PARKER, Dept. Biology and Environmental Resources Center, State Univ. Coll., Fredonia, New York 14063. Accepted 30 Oct. 1979.

Wilson Bull., 93(1), 1981, pp. 110-111

Herring Gull attacks and eats adult male Oldsquaw.—Herring Gulls (Larus argentatus) have been observed preying on a wide variety of small adult birds (Witherby, Jourdain, Ticehurst and Tucker, The Handbook of British Birds, Vol. 5, H. F. and G. Witherby Ltd., London, England, 1952; Harris, Ibis 107:43–53, 1965). Such prey items are almost always small passerines or shorebirds, and as such are much smaller than the gulls themselves. Harris (1965) mentions Herring Gull predation on Manx Shearwaters (*Puffinus puffinus*), Razorbills (*Alca torda*) and Common Puffins (*Fratercula arctica*), and Peter Fetterolf (pers. comm.) has observed Herring Gulls preying on juvenile Ring-billed Gulls (*L. delawarensis*). Few, if any, instances of Herring Gulls preying on birds larger than these have been reported. This note reports an instance of predation on an adult male Oldsquaw (*Clangula hyemalis*) by an adult Herring Gull. The average weight of an adult male Oldsquaw in December is about 580 g (Peterson and Ellarson, Wilson Bull. 91:288–300, 1979). The average weight of an adult Herring Gull is 1098 \pm 151 g, based on a sample of 15 male and 11 female specimens at the Royal Ontario Museum, Toronto, Canada.