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**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 Dobrosky (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*), Long-eared Owls (*Asio otus*), Red-tailed Hawks (*Buteo jamaicensis*), Red-shouldered Hawks (*Buteo lineatus*) and Cooper's Hawks (*Accipiter 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 blood-sucking 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.*

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**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.

Daily mid-December populations of Oldsquaws in the inner harbor at Toronto, Ontario, average about 1500 individuals (Alison, M.Sc. thesis, Univ. Toronto, Toronto, Ontario, 1970). On 28 December 1978, at 10:23, while watching Oldsquaw behavior at about 1000 m from the 30 m Toronto Harbor Police observation tower with a 20× spotting scope, I observed an adult Herring Gull attack an adult male Oldsquaw. The gull dived at and struck the duck from a height of 20–30 m. Similar attacks were observed at 11:00, 11:19 and 11:55 and others may have occurred. The Oldsquaw was never observed diving or flying and swam only when attacked. At 12:06, all the Oldsquaws (>100 individuals) within 1500 m flocked and flew in a tight 50–100 m diameter circle above the stricken duck. The Herring Gull, having apparently killed the duck, was seen using its bill to bite and pick at the carcass, apparently feeding; after about 3 min the flock of circling Oldsquaws began to disperse. The gull alternately swam within 3 m of the Oldsquaw carcass or fed on it until 12:47, at which time the gull departed. At 13:01, either it or another Herring Gull landed beside the carcass and remained within 3 m of it occasionally feeding until 14:17, when the gull departed. No subsequent visits to the carcass were made by Herring Gulls or any other birds, and by 14:40 the duck was no longer visible. Presumably it sank; Schorger (*Wilson Bull.* 59:151–159, 1947) reported that Oldsquaws with completely water saturated plumage have negative buoyancy.

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**Red-legged Kittiwakes forage in mixed-species flocks in southeastern Alaska.**—

The foraging behavior of Red-legged Kittiwakes (*Rissa brevirostris*) away from their breeding sites is virtually unknown. Between 1–7 September 1978, we observed adult and juvenile Red-legged Kittiwakes foraging in a mixed-species flock of adult Mew Gulls (*Larus canus*), juvenile Bonaparte's Gulls (*L. philadelphia*) and juvenile Glaucous-winged Gulls (*L. glaucescens*) in the lower Green's Creek drainage on Admiralty Island in southeastern Alaska.

During ebb tide the exposed delta mud flats at Green's Creek are used by thousands of gulls and shorebirds, particularly during spring and fall migration. The lower portion of Green's Creek is used by spawning salmon during late July through September: hundreds of humpbacked salmon (*Oncorhynchus gorbusche*) were present during our observations.

We observed 5 mixed-species flocks of about 50 individuals each at the open meadow bordering Green's Creek, always during ebb tide; never when the stream bank and adjacent meadow were flooded. The flock composition was nearly constant: Glaucous-winged Gulls, 10%; Mew Gulls, 25%; Bonaparte's Gulls, 35%; and Red-legged Kittiwakes, 30% (adults, 10%; juveniles, 20%). (The identification of the kittiwakes in the flocks was difficult at first; however, the juveniles were discriminated from juvenile Bonaparte's Gulls by the kittiwakes' well-marked, dark cervical collar, their dusky eyes, and unbarred tail. The adult kittiwakes differ from adult Mew Gulls by their solid black wing tips and red legs.) Glaucous-winged Gulls arrived first and remained near the deep, still water or the gravel shore, coming closest to the forest edge. Mew Gulls arrived next, followed soon by Bonaparte's Gulls. Red-legged Kittiwakes were the last to arrive, and they frequented the faster stream riffles and stayed farthest from the forest edge. Mew and Bonaparte's gulls always stayed between the Glaucous-winged Gulls and Red-legged Kittiwakes. None of the gulls or kittiwakes left the stream banks, nor flew into the forest. We observed no interactions between species.