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Subadult intrusion and probable infanticide at a Cooper's Hawk nest.—We made the following observations from a tree blind 5 m from a Cooper's Hawk (*Accipiter cooperii*) nest in Portage County, Wisconsin. On 26 June 1987, a subadult female Cooper's Hawk in juvenal plumage landed within 3 m of the nest where an adult female was feeding her four young (12–14 days old). The adult looked at the subadult but resumed feeding the nestlings. The subadult called ("kek") and leaned toward the nest as if she would fly to it, but the adult did not exhibit aggressive or defensive behavior. After about 18 min, the adult finished feeding the young and flew from view; almost immediately the yearling flew to within 0.5 m of the nest and landed on a nest support branch. The young moved away from the subadult as it walked toward them with its wings partially extended and crown feathers raised. It lunged and then flew to another nest support branch behind the young. There it resumed a threat posture and pushed itself through the young, knocking one from the nest. JMP immediately retrieved the fallen bird and returned it to the nest where it died less than 1 h later, apparently due to the fall. In the meantime, the fourth young hawk (a "runt") disappeared from the nest. We believe the subadult removed it. On two other occasions later that day (while the adult female was not in view), and again on 27 June, a subadult female Cooper's Hawk landed within 2 m of the nest but flew from view within 1 min.

This observation is similar to one we made on 24 June 1984 at another Wisconsin nest. In that instance, we watched a subadult Cooper's Hawk which likewise elicited no detectable defensive behavior from an adult female, even though it approached to within 3 m of the nest and called for 3–4 min before departing. As in the other case, the adult female showed no defensive behavior. The lack of agonistic response from adults to a nearby subadult could be due to the adult and subadult being related, or to a tendency for nesting females not to attack subadults.

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American Dipper nestlings parasitized by blowfly larvae and the northern fowl mite.— Blowfly larvae of the genus *Protocalliphora* (Diptera: calliphoridae) and many mites of the genus *Ornithonyssus* (Acari: Dermanyssidae) are obligatory, bloodsucking parasites of birds. The former parasitizes nestlings of nidicolous birds (especially passerines) and the latter parasitizes all ages of birds (particularly poultry). Both genera have little host specificity and have been reported from a diverse variety of birds (Bennett 1957, Hall 1965, Baker et al. 1967, Whitworth 1976, Gold and Dahlsten 1983, Garrison et al. 1986). To the best of my knowledge, this note is the first published record of either the blowfly larvae (*Protocalliphora aenea* and *P. braueri*) or the fowl mite (*Ornithonyssus sylviarum*) on the American Dipper (*Cinclus mexicanus*). However, the fowl mite has been reported from the European Dipper (*C. cinclus*) (Spitznagel 1985).

Dipper nestlings and nests were examined manually for parasites during nesting or shortly after fledging along Dinkey Creek (a 10 m wide snowmelt stream in mixed conifer forest at 1067-1081 m elevation) and its tributaries, Fresno County, California. Fly larvae and pupae were removed from nestlings or nests, respectively, and reared to maturity.

In 1984, I found a single nestling and its nest (statant cupped or dome type nest) infested with approximately 400 *O. sylviarum*. Both nymphal and adult stages (about 1 mm in length) were collected from the feathers and skin of the nestling, but most mites were in the nest.

From 1984 to 1987, I found 7 of 17, 3 of 19, 0 of 5, and 1 of 4 nests, respectively, parasitized by *P. aenea* or *P. braueri*. Specimens identified in 1984 and 1985 are *P. aenea*; 1987 specimens are *P. braueri*. Nests parasitized in 1985, 1986, and 1987 were parasitized in 1984. Two to six blowfly larvae (about 7 mm in length) per nestling were embedded subcutaneously on the head, wings, and legs. Ten to 40 puparia were found in some nests after fledging. In one case, only one of four nestlings was parasitized.

Additional unpublished records of *P. aenea* parasitizing the American Dipper include: two specimens from Utah (Whitworth 1976) and 89 males and 110 females from Gunnison County, Colorado collected by C. L. Remington in 1960 (C. W. Sabrosky, pers. comm.).

I attributed mortality of one nestling (14 days old) in 1987 to *P. braueri* parasitization. This nestling was infested with two larvae in a wing and five larvae in the head which caused limited movement of the mandible and probably impaired hearing and vision. However, other parasitized fledglings (as indicated by a swollen area with a round scab which covers the larva's emergence hole) did not appear to be seriously impeded.

The effects of *Protocalliphora* parasitism upon nestling survival range from no observed distress to death (Gold and Dahlsten 1983). Bennett (1957) and this paper attributed nestling mortality to *Protocalliphora* parasitism. Even when mortality is not observed in nestlings, the loss of blood may contribute to nestling stress and possibly reduce post-fledging survival (Bennett 1957, Whitworth 1976, Gold and Dahlsten 1983).

P. hirudo (a synonym of *P. braueri*; Sabrosky, pers. comm.) is reported as an obligatory, subcutaneous parasite, whereas other nearctic species are reported as intermittent ectoparasites (Bedard and McNeil 1979, Gold and Dahlsten 1983, Garrison et al. 1986). However, my observations indicate that *P. aenea* (and *P. braueri*), at least in the dipper, are subcutaneous parasites, and that they pupate in the dipper's nest.