

The large availability of suitable sites apparently facilitated non-repetitive selection. In the 11th and 12th years, the female apparently failed to lay eggs. A new female appeared in 1976 and laid eggs in 1977, 1978, and 1979, continuing the pattern of selecting new nest sites each year. However, two second (repeat) clutches were laid in previously used sites. Specifically, the 1978 second clutch was laid in the 1977 nest site, and the 1979 second clutch was laid in the site used for the first clutch in 1978. This pattern, i.e., the second choice of nest site having been the first choice the year before, I have termed the "fall-back-one" behavior.

The only historical event common to both second clutch sites is egg laying. I suggest that preference for location of the second clutch is for a site where egg laying and associated behavior have been ritualized in the nearest past. Previous nesting success at that site is incidental. If the "fall-back-one" behavior pattern is, in fact, common in peregrines, it should aid in predicting the location of second clutches.

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Carnus hemapterus NITZSCH FROM SWAINSON'S HAWK

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The wingless ectoparasitic fly (*Carnus hemapterus*, Nitzsch) was first reported on North American birds by Bequaert (1942) although in Europe, *C. hemapterus* seems to be fairly generally distributed. Bequaert (1942) identified the fly from 2 birds, a nestling flicker (*Colaptes cafer*) collected at Penn Yann, New York and a Screech Owl (*Asio otus*) taken in Florida. Capelle and Whitworth (1973) have since reviewed the distribution of *C. hemapterus* in North America, citing records for 9 host species, including 3 woodpeckers, starling (*Sturnus vulgaris*), Black-billed Magpie (*Pica pica*) and American Kestrel (*Falco sparverius*). Main and Wallis (1974) found *C. hemapterus* on nestling Osprey (*Pandion haliaetus*) in Massachusetts and Wilson (1977) found Pileated Woodpecker (*Dryocopus pileatus*) nesting material to contain the parasites. These records, seem to indicate that *Carnus* is widespread in the United States. Its distribution, however, will be unclear until there is a systematic study of bird ectoparasites in this country.

Bequaert (1942) reports the *C. hemapterus* has been observed on 12 families and 26 species of birds in Europe. Seven raptor species, White-tailed Eagle (*Haliaeetus albicilla*), Imperial Eagle (*Aquila heliaca*), Peregrine Falcon (*Falco peregrinus*), Kestrel (*F. tinnunculus*), Saker (*F. cherrug*), Barn Owl (*Tyto alba*), and Tengmalm's Owl (*Aegolius funereus*) have been noted as host.

In July of 1980, while examining nestling Swainson's Hawks (*Buteo swainsoni*), we found that 12 of the 15 nestlings we studied were parasitized by *C. hemapterus*. The flies occurred in groups of 3 to 5 and were found only in the axillary region of the hawks. No flies were attached and on being disturbed they moved from the bare axillary region to nearby feathered areas. The exact nature of the diet of *C. hemapterus* is unknown. Noller (1920) reports that the fly sucks blood from its host, while Hendel (1928) felt that *Carnus* feeds most probably on skin secretions. We observed dried blood spots on the hawks axillary region which is supportive of Noller's (1920) claim. The true diet of the fly is presently in question, but the fly could act as a vector of certain avian blood parasites.

Our findings are of interest, since few records have been reported for *C. hemapterus* in non-cavity nesting birds or from long-distance migrants like the Swainson's Hawk. Our report is also the first record of this dipteran parasite on the Swainson's Hawk.

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THREE ADULT BALD EAGLES AT AN ACTIVE NEST¹

by

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Although Bald Eagle (*Haliaeetus leucocephalus*) trios have been observed at nests in Alaska (Sherrod et al. 1976, Heglund and Reising 1980), we are unaware of similar reports in the coterminous United States. Here we describe 4 observations of 3 adult eagles at a nest on the Chippewa National Forest, north central Minnesota. The nest was observed 93 times between March and October in 1976-1978. All observations were made from fixed-wing aircraft.

On 7 April 1976, an adult eagle was observed in the nest in incubating posture; 2 others, 1 in adult plumage and 1 with an off-white head similar to Southern's (1967) plumage F, were perched next to the nest. On 22 June 1977, an adult with a nearly white head was in the nest with 2 nestlings, another adult was in the nest tree, and a third adult was in a tree approximately 100 m to the south. On 7 April 1978, an adult was in incubating posture while 2 others were perched together in the nest tree. On 30 June 1978, 2 adults and 1 nestling were in the nest and a third adult was perched 200-300 m to the north. One fledgling was produced in 1976, 2 in 1977, and 1 in 1978. Because our observations were brief, we were unable to determine the nature of interactions among the eagles involved. It is not clear to us, therefore, what role, if any, the 3rd adult played in the nesting effort.

Sherrod et al. (1976) reported 3 sites occupied by trios on Amchitka Island, Alaska. Three Amchitka nests were also occupied by trios in 1980 and one of these contained 4 eggs (Heglund and Reising 1980). Both Herrick (1934:106) and Bent (1937:325) reported 4-egg clutches for the Bald Eagle, and Bent suggested that the eggs may have been produced by more than 1 female.

The data suggest that Bald Eagles are occasionally polygynous. Detailed behavioral observations of trios are required to test this hypothesis, however.

The Amchitka population apparently has not experienced the level of reproductive failure reported for eagle populations elsewhere (Sprunt et al. 1973, Sherrod et al. 1976) and the Chippewa population appears to be recovering rapidly from effects of contamination (Fraser 1981). The 4-egg clutches reported by Herrick (1934) and Bent (1937) were laid well before the earliest report of widespread Bald Eagle nest failures (Broley 1950). Perhaps trios occur most frequently at nests in healthy Bald Eagle populations. If so, trios may become more common in the coterminous states if Bald Eagle reproduction and survival improve.

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