

## PREDATION ON BIRDS BY THE WHITE HAWK (*LEUCOPTERNIS ALBICOLLIS*)

Oliver Komar

Natural History Museum and Biodiversity Research Center, and Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, Kansas 66045, USA.  
*E-mail:* okomar@ku.edu

### Depredación de aves por el Aguililla Blanca (*Leucopternis albicollis*).

**Key words:** Mist netting, predation, Blue-crowned Motmot, *Momotus momota*, Swainson's Thrush, *Catharus ustulatus*, White Hawk, *Leucopternis albicollis*.

The White Hawk (*Leucopternis albicollis*) and other members of its genus are considered to specialize on reptilian prey (Slud 1964, Brown & Amadon 1968, Zhang & Wang 2000). The White Hawk's diet also includes insects, crabs, birds, mammals, amphibians, and fish (Slud 1964, Brown & Amadon 1968, Haverschmidt & Mees 1994, Draheim 1995). Bird prey items identified in the literature include several species of toucans (Brown & Amadon 1968, Skutch 1971, Sick 1993, Draheim 1995), a tinamou (Lamm 1974), two species of owls, and a wren (Draheim 1995, Draheim *et al.* in press). Draheim *et al.* (in press) reported that of 210 prey items delivered to incubating White Hawk adults or nestlings in Guatemala, 5.7% (12) were birds. The closely related Gray-backed Hawk (*Leucopternis occidentalis*) has been observed preying on crakes, jays, doves, and domestic chickens, and 10% of prey items delivered to nests were avian (Vargas 1995). Here I present several incidents of White Hawks attacking birds, and report findings from a search for stomach content infor-

mation of White Hawk specimens in museum collections.

I captured birds with mist nets and made field observations during December 2001 to February 2002 in Parque Nacional El Imposible, southwestern El Salvador (13°51'N, 89°59'W). Mist nets measured 12 m x 2.6 m, with 36 mm mesh. Museums surveyed for stomach content information on specimen tags included the Natural History Museum and Biodiversity Research Center of the University of Kansas (Lawrence, KUNHM), the Field Museum of Natural History (Chicago), the Peabody Museum of Natural History, Yale University (New Haven), and the Museum of Natural Science, Louisiana State University (Baton Rouge).

During the late afternoon of 13 February 2002, a White Hawk entangled itself in a mist net placed across a streambed. Fifty centimeters away, an almost completely defeathered body of a recently killed Blue-crowned Motmot (*Momotus momota*) lay on a small boulder in the middle of the stream. All of the mot-

mot's flight feathers and most of its contour feathers had been removed. Many feathers were strewn across the ground 10–15 m away, suggesting that the hawk had defeathered the bird in a tree above the stream. The skin was mostly intact, but had been ripped on the breast, and showed puncture wounds consistent with talons on the back. The defeathered motmot weighed 122 g and was preserved in formalin and alcohol (KUNHM 94085). Although the mist net was not torn, and no motmot feathers were in the net itself, I cannot rule out the possibility that the hawk had plucked the motmot from the mist net.

Also entangled in the mist net, and within a few centimeters of the hawk, was a live Swainson's Thrush (*Catharus ustulatus*). I suppose that the White Hawk was attracted to the net by the struggling thrush, and subsequently became entangled. Apparently the hawk had already defeathered the motmot when it discovered the thrush, and probably landed on the boulder with the motmot, and then attempted to jump onto the thrush, but instead became entangled in the net.

White Hawks have been observed on other occasions attacking birds caught in mist nets. A. T. Peterson (pers. com.) observed a White Hawk feeding on several passerine birds (*Pipra mentalis*, *Manacus candei*) from mist nets in the Chimalapas region, Oaxaca, southern Mexico. Several other passerines in adjacent nets were mortally wounded by hawk attacks that same week, perhaps by the same individual that had been seen near the nets.

Apart from literature reports of observations of predation on birds summarized above, there is little documentation of bird-eating by White Hawks. Several literature accounts of stomach contents for the species, summarized in Draheim *et al.* (in press), do not report birds as prey items. Of 60 White Hawk specimens in the museum collections I consulted, only one included stomach content information (mammal remains) on the label.

The observations reported herein document specific avian prey items of the White Hawk. They establish that, at least occasionally, White Hawks will completely defeather a medium sized avian prey item before consuming it, or before bringing it to a nest or a dependent juvenile. The motmot weighed about 16–18% of the body weight of a White Hawk, and thus should be able to provide most, if not all, of the daily food needs for the hawk (Thiollay 1994). The hawk may not eat motmots or thrushes on a regular basis, if these were prey items only because they had been trapped in the mist net. Perhaps White Hawks prey on birds opportunistically, attacking birds when they are injured or trapped.

The genus *Leucopternis* belongs to the Accipitridae family, and many genera of the Accipitridae family contain species that prey upon a large variety of vertebrates and invertebrates (Thiollay 1994). A generalist feeding strategy may be ancestral in the accipitrid clade, in which case *Leucopternis* species would be expected to have a diverse diet that includes birds.

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