SWALLOW-TAILED KITE (Elanoides forficatus) CAPTURES AN ADULT BROWN-HEADED NUTHATCH (Sitta pusilla)

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Accounts of predators taking adult Brown-headed Nuthatches (Sitta pusilla) are restricted to nest predators that kill adults while the adults tend nests (Cox and Slater 2007, Withgott and Smith 1998). Withgott and Smith (1998) suggested that accipiters may prey on free-flying adult nuthatches because nuthatches broadcasted alarm notes when these raptors were discovered, and Morse (1967) reported instances where American Kestrels (Falco sparverius) attacked mixed-species flocks that included Brown-headed Nuthatches. However, several long-term studies (Norris 1958, Morse 1967, Cox and Slater 2007, Lloyd et al. 2010) have failed to provide direct evidence of predators taking adult nuthatches not engaged in nesting activities.

On 16 March 2008 I was re-sighting color-marked adult nuthatches on Tall Timbers Research Station (Leon Co.; 30.66° N, 84.22° W). The group I was monitoring contained 4 adults, and a couple of individuals were foraging on pine cones that were clustered at the end of a small limb on top of a loblolly pine (*Pinus taeda*). As I observed an adult through a spotting scope, a Swallow-tailed Kite (*Elanoides forficatus*) swooped into view, grabbed the nuthatch, and flew off. I watched the kite through binoculars as it flew away and saw small feathers fall as the kite reached down with its bill several times.

The observation is consistent with the hunting behavior Swallow-tailed Kites use to capture other small vertebrates in the forest canopy (Meyer 1995). Meyer et al. (2004) found that birds made up approximately 30% of the items that adult kites fed their young, but most of the birds taken were nestlings and fledglings, not adults. A Pine Warbler (*Dendroica pinus*), which co-occurs with nuthatches and frequently forages and nests on distal portions of pine limbs, was included in the food items reported by Meyer et al. (2004), but the risk of raptor predation is likely lower than others sources of nuthatch mortality. Nuthatches have high annual survivorship (ca. 0.7; Cox and Slater 2007), and Norris (1958) and Cox and Slater (2007) found that most mortality occurred during the nesting season when adults were tending nests. Even so, this is the first instance where a predator has been observed capturing an adult nuthatch away from the nest and confirms the threat that some raptors may pose (Withgott and Smith 1994).

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