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## RED-TAILED HAWK DEPREDATES MISSISSIPPI KITE NESTLING AT DAWN

Nesting ecology and demographics of the Mississippi Kite (*Ictinia mississippiensis*) remain unstudied in the south-eastern coastal-plain states east of the Mississippi River. The Mississippi Kite recently has expanded its breeding range eastward into peninsular Florida, where it now nests as far south as Levy and Marion counties (Kale et al. 1992, The atlas of the breeding birds of Florida final report, Florida Game and Fresh Water Fish Commission, Tallahassee, FL U.S.A.; Stevenson and Anderson 1994, The birdlife of Florida, Univ. Press of Florida, Gainesville, FL U.S.A.; Florida Fish and Wildlife Conservation Commission 2003, Florida's breeding bird atlas: a collaborative study of Florida's birdlife, http://www.wildflorida.org/bba). I report here the details of a predation event on a Mississippi Kite nest in peninsular Florida.

On 1 June 2002, I discovered a Mississippi Kite nest in a tall (33 m) loblolly pine (*Pinus taeda*) tree in a suburban neighborhood in Gainesville, Alachua County, FL. The nest was a moderately compact structure of sticks and twigs located in the central fork at the top of the tree. An adult kite sat very low on the nest holding its tail at a slight angle above horizontal, indicating incubation (K. Meyer pers. comm.). During the next 6 d, I monitored the nest opportunistically (1–25 times/d for 1–5 min/visit) because it was located near my home; an adult was sitting on the nest 92% of the time. On the afternoon of 9 June, the adult on the nest was unusually active, shifting position, and turning its head frequently. Beginning 11 June, the kite attending the nest sat higher on the nest and shifted its position more frequently, while its mate frequently chased Fish Crows (*Corvus ossifragus*) away from the nest tree These behaviors are consistent with the onset of hatching and subsequent brooding of young (Parker 1999, *In A. Poole and F. Gill [Eds.]*, The birds of North America, No. 402. The Birds of North America, Inc., Philadelphia, PA U.S.A.). On 26 June, I observed a single nestling.

At 1 min after sunrise (0634 H) on 3 July, I observed an adult Red-tailed Hawk (*Buteo jamaicensis*) hunched over the kite nest, while both adult kites circled over the nest tree alarm-calling loudly and repeatedly. The kites repeatedly swooped over the hawk, but did not strike it. At ca. 0640 H, the hawk flew off to the west, calling once as it took flight, and carrying the remains of a nestling in its talons. One kite gave pursuit, while the other kite remained near the nest tree, calling 6–15 times per min until 0700 H. At 0700 H, the kite began calling less frequently, and at 0710 H, two crows lit in the crown of the nest tree and were not chased off. I concluded my observations at 0713 H. I do not know if the hawk forced an adult kite off the nest or if the hawk attacked the nestling while the nest was unattended. However, Mississippi Kite brooding decreases markedly 12 d after hatching (Parker 1999), and given that the nestling would have been ca. 21–22 d old, it seems likely that the nest was unattended.

This predation observation is unusual from at least two standpoints. First, the Great Horned Owl (*Bubo virginianus*) has been identified as the primary predator of Mississippi Kite nestlings and adults in other parts of the kite's range (Parker 1999 and references cited therein). Corvids and raccoons (*Procyon lotor*) also are mentioned as common predators of kite eggs and nestlings (e.g., Fitch 1963, Observations on the Mississippi Kite in southwestern Kansas. Univ. *Kansas Mus. Nat. Hist. Publ.* 12:503–519; Parker 1999), but I found no published reports of Red-tailed Hawks depredating Mississippi Kite nests. Second, avian prey items taken by Red-tailed Hawks are typically gamebirds or medium-sized passerines and less frequently waterfowl (see Palmer 1988, Red-tailed Hawk *Buteo jamaicensis*, Pages 96–134 *in* R. Palmer [Ed.], Handbook of North American birds, Vol. 5, Yale Univ. Press, Hew Haven, CT U.S.A.; Preston and Beane 1993, *In* A. Poole and F. Gill [Eds.], The birds of North America, No. 52. The Birds of North America, Inc., Philadelphia, PA U.S.A.). Killing nestlings of other raptor species appears to be a rare phenomenon. It is unknown whether this predation event resulted from a spontaneous encounter or whether the Red-tailed Hawk had observed the nest on previous occasions prior to preying upon it.

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