Florida Field Naturalist 45(1):24-25, 2017.

# FIRST DOCUMENTATION OF A SWALLOW-TAILED KITE (Elanoides forficatus) PREYING ON AN INFANT SQUIRREL

DAVID L. SHERER AND MATTHEW FUIRST Avian Ecology Program, Archbold Biological Station, Venus, Florida 33960

## Email: dlsherer@gmail.com

## Email: mfuirst@gmail.com

Swallow-tailed Kites (*Elanoides forficatus*; hereafter kites) commonly breed in southern Florida and are annual migrants through the state each spring (Meyer 1995). Kites detect prey by soaring low over wetlands, grasslands, shrublands and forests and consume a variety of small vertebrate and invertebrate prey including frogs, lizards, nestling birds, snakes and insects (Robertson 1988, Meyer 1995). Breeding males provision nesting females and/or nestlings predominantly with vertebrate prey (97%), of which 67% are frogs and reptiles and 30% birds (Meyer et al. 2004), but outside the breeding season, kites consume insects almost exclusively (Lee and Clark 1993). There are few published records containing observations of kites preying on small mammals, although Meyer (1995) noted infrequent predation of bats and Robertson (1988) stated that kites may capture "rodents (rarely?)."

On 7 March 2016, at approximately 1215 EST, we observed a kite maneuvering through the pine-dominated tree canopy in the plaza at Archbold Biological Station in Highlands County, Florida. The kite initially flew in from the east and circled low over the canopy for about two minutes. The kite made one unsuccessful attack on an unidentified prey item, then exited the canopy before attacking a second time. The kite then flew from the pines carrying a small animal in its talons. Once clear of the pine canopy, we observed that the prey item was an infant eastern gray squirrel (*Sciurus carolinensis*). The entire episode lasted no longer than three minutes.

Our observation represents the first instance we know of where a kite captured a squirrel. The nest from which the squirrel was captured was approximately 11 m high in a 22 m slash pine (Pinus elliottii) covered with Spanish moss (Tillandsia usneoides). Although the wooded plaza at Archbold Biological Station is home to other potential prey of kites, such as reptiles, amphibians, and small birds, eastern gray squirrels are abundant, and may represent a viable opportunistic prey source. This may be particularly true immediately after arrival during kites' spring migration, but prior to the onset of the breeding season. Kites are known to be opportunistic predators across their range (Meyer 1995), and their highly varied diets in the tropics may serve to supplement insect prey (Gerhardt et al. 2004, Robinson 1994). In Florida, kites may opportunistically target small mammals - or similarly atypical prey such as small adult passerines (Cox 2012) - during or shortly after their migration, when other prey items may yet be scarce. Tree frog (Hyla spp.) activity in February and March is much lower than peak levels in April through June (Meshaka and Layne 2015), and most passerine species are unlikely to have begun nesting at this time (FWC 2003). In 2016, we first sighted kites at Archbold on 24 February, consistent with typical early spring arrivals (Greenlaw et al. 2014), but earlier than the breeding season which typically occurs from mid-March through early-August (Stevenson and Anderson 1994, Greenlaw et al. 2014). The earliest known laying date in Florida was 5 March (Meyer 1995). It is probable that this squirrel was consumed by the capturing bird, but possible that

### Notes

it was fed to a mate, either as part of courtship or conceivably to a female on a nest; however, it was probably too early in the season for the latter and certainly too early for the prey to have been fed to nestlings.

#### Acknowledgments

We thank Reed Bowman and Jim Cox for providing valuable feedback on previous drafts of this manuscript, Fred Lohrer for stimulating its development, and Shane Pruett for resources on previous field observations at Archbold Biological Station. We are grateful to the staff and interns at Archbold for their support, and to the organization itself for the opportunity to live and work in the unique scrub ecosystem of the Lake Wales Ridge.

### LITERATURE CITED

- Cox, J. A. 2012. Swallow-tailed Kite (*Elanoides forficatus*) captures an adult Brownheaded Nuthatch (*Sitta pusilla*). Florida Field Naturalist 40:56-57.
- FWC [FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION]. 2003. Florida's Breeding Bird Atlas: A Collaborative Study of Florida's Birdlife. < http://myfwc.com/bba>. Accessed 16 June 2016.
- GERHARDT, R. P., D. M. GERHARDT, AND M. A. VÁSQUEZ. 2004. Food delivered to nests of Swallow-tailed Kites in Tikal National Park, Guatemala. Condor 106:177-181.
- GREENLAW, J. S., B. PRANTY, AND R. BOWMAN. 2014. The Robertson and Woolfenden Florida Bird Species: An Annotated List. Florida Ornithological Society, Special Publication No. 8, Gainesville, Florida.
- LEE, D. S., AND M. K. CLARK. 1993. Notes on post-breeding American Swallow-tailed Kites, *Elanoides forficatus* (Falconiformes: Accipitridae), in north-central Florida. Brimleyana 19:185-203.
- MESHAKA, W. E., JR., AND J. N. LAYNE. 2015. The Herpetology of Southern Florida. Herpetological Conservation and Biology 10 (Monograph 5).
- MEYER, K. D. 1995. Swallow-tailed Kite (*Elanoides forficatus*). In The Birds of North America Online, No. 138 (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca, New York.
- MEYER, K. D., S. M. McGEHEE, AND M. W. COLLOPY. 2004. Food deliveries at Swallowtailed Kite nests in southern Florida. Condor 106:171-176.
- ROBERTSON, W. B., JR. 1988. American Swallow-tailed Kite. Pages 109-131 in Handbook of North American Birds, Vol. 4 (R. S. Palmer, Ed.). Yale University Press, New Haven, Connecticut.
- ROBINSON, S. K. 1994. Habitat selection and foraging ecology of raptors in Amazonian Peru. Biotropica 26:443-458.
- STEVENSON, H. M., AND B. H. ANDERSON. 1994. The Birdlife of Florida. University Press of Florida, Gainesville, Florida.