

By February adult Little Blue Herons assume the definitive alternate plumage (described in Palmer 1962) and begin acquiring breeding bare-part coloration associated with courtship: iris grayish-green; orbital skin and base of bill turquoise-cobalt; bill tip, legs and feet black. I observed no differences between the sexes. By the ninth day after pair formation, beginning with the orbital region adjacent to the feathers, these colors begin to slowly fade to the non-courtship coloration: iris yellowish-cream; orbital skin and base of the bill light gray; bill tip black; legs and feet grayish-green.

Many subadult Little Blue Herons (i.e. calico plumaged) first participate in breeding activities at age 10-13 months (Rodgers 1978, Natl. Audubon Soc. Res. Rept. No. 7: 35-39). Their breeding bare-part colors exhibit variation: iris yellowish to whitish; orbital skin and base of bill pale turquoise-cobalt; bill tip black; legs and feet grayish-green to light gray. The nonbreeding colors are similar to those of older juveniles (described by McVaugh 1972, Living Bird 11: 155-173). By 10 months of age subadults generally exhibit evidence of slate-colored feathers that give the crest, lower neck and scapular regions a grayish appearance. In addition, many coverts, some secondaries, primaries and scapular feathers are slate-colored. By 12-14 months of age, the subadult acquires the basic II plumage (described in Palmer 1962).

Grants from the National Audubon Society and AOU Josselyn Van Tyne Memorial Fund helped defray costs of my research while I was a graduate student in the Department of Biology, University of South Florida.—JAMES A. RODGERS, JR., *Tampa Bay Wildlife Sanctuaries, National Audubon Society, 1020 82nd St. South, Tampa, Florida 33619.*

Fla. Field Nat. 8(2): 47-48, 1980

Swallow-tailed Kite predation on nestling Mockingbird and Loggerhead Shrike.—Swallow-tailed Kites (*Elanoides forficatus*) have been observed taking nestlings of the following species: Mourning Dove, *Zenaidura macroura*, in Florida (Stevenson 1958); Tropical Kingbird, *Tyrannus melancholicus*, in Costa Rica (Skutch 1965); Mockingbird, *Mimus polyglottos*, in Texas (Pope 1913, Simmons 1925); Clay-colored Thrush, *Turdus grayi*, Golden-masked Tanager, *Tangara larvata*, in Costa Rica (Skutch 1965); Painted Bunting, *Passerina ciris*, in Texas (Simmons 1925). However, observers at kite nests often are not able to identify what bird species the kites are bringing to their nestlings because the prey is either unfeathered (Snyder 1974 and pers. comm.) or has been plucked (Wright et al. 1970). We here report two additional cases of Swallow-tailed Kite predation on nestling birds in Florida.

On 14 May 1978, Chester and Marsha Winegarner saw a Swallow-tailed Kite, soaring over a slash pine (*Pinus elliottii*) grove in a pasture 12 km south of Lake Placid, Highlands County, Florida, suddenly drop down onto a low myrtle oak (*Quercus myrtifolia*). The kite paused briefly before flying off with an object in its bill and a Mockingbird in hot pursuit. The oak contained a Mockingbird nest with two small nestlings located one m above ground.

On 3 July 1979, Fred and Edward Lohrer watched two Swallow-tailed Kites circling low over an isolated 5 m live oak (*Q. virginiana*) in a pasture 8 km southwest of Sebring, Highlands County, Florida. The kites were being chased by a Mockingbird and a Loggerhead Shrike (*Lanius ludovicianus*). Suddenly one of the kites flew into the crown of the tree, paused briefly with flapping wings, and then flew off in level flight holding a large screaming nestling in its feet. Two shrikes persistently chased and dove at the kite for a quarter of a mile until the kite soared upwards. The other kite flew away without visiting the nest. Although Lohrer could not inspect the nest or identify the nestling, the behavior of the shrikes and the nest location suggests the nestling was probably a shrike.

On 2 July 1979 Lohrer watched a Swallow-tailed Kite flying at an altitude of about 25 m over patches of scrub and pine flatwoods 5 km south of Lake Placid. As the kite flew over a sand pine (*Pinus clausa*) and into Lohrer's back yard it abruptly changed direction, flew to

and began circling lower over a 2 m scrub holly (*Ilex opaca arenicola*) containing an active Mockingbird nest with 2 eggs. Although no adult Mockingbird was near to harass the kite, it left the area. On 10 July, Charlotte Lohrer, from her kitchen window, observed a kite flying very low and directly to the same holly tree where it flushed an incubating Mockingbird, fluttered momentarily at the nest site and then flew off. This direct flight to the mockingbird nest-tree and the fact that kites are uncommon in the local area suggests that this could have been the same bird that was observed inspecting the nest on 2 July. On 12 July the nest was empty but not disturbed.

These events illustrate the ease with which Swallow-tailed Kites can rob nests of small birds nesting in bushes and trees. In some areas, Swallow-tailed Kite predation on birds' nests may be more frequent than the relatively few records indicate.

We thank Ralph S. Palmer, editor, Handbook of North American birds, who kindly supplied portions of a manuscript on Swallow-tailed Kites by William B. Robertson, Jr., and Noel F. Snyder and W. B. Robertson, Jr., for their helpful comments.

LITERATURE CITED

- POPE, E. F. 1913. The Swallow-tailed Kite. *Oologist* 30: 64-66.
- SIMMONS, G. F. 1925. Birds of the Austin region. Austin, Univ. Texas Press.
- SKUTCH, A. F. 1965. Life history notes on two tropical American kites. *Condor* 67: 235-246.
- SNYDER, N. F. 1974. Breeding biology of Swallow-tailed Kites in Florida. *Living Bird* 13: 73-97.
- STEVENSON, H. M. 1958. Florida region. *Aud. Field Notes* 12: 344-348.
- SUTTON, I. D. 1955. Nesting of the Swallow-tailed Kite. *Everglades Nat. Hist.* 3: 72-84.
- WRIGHT, M. H., JR., R. O. GREEN, JR., AND N. D. REED. (1970) A collection of observations and field notes on the nesting activities of the Swallow-tailed Kite (*Elanoides forficatus*) in the Everglades National Park. Privately published, copies at Archbold Biological Station and ENP libraries.
- FRED E. LOHRER AND CHESTER E. WINEGARNER, *Archbold Biological Station, Rt. 2, Box 180, Lake Placid, Florida 33852.*

Fla. Field Nat. 8(2): 48, 1980

A Forster's Tern while in flight obtaining insects from the ground.—On 6 April 1974 at Cape Canaveral, Brevard County, Florida, I watched five Forster's Terns (*Sterna forsteri*) swooping towards a large, shallow pool to take items from the surface. Sometimes, bill-snapping was faintly heard when the terns captured flying insects above the pool. The wide sandy perimeter of the pool was smooth and damp and in some places I noticed dense clusters of very small flies on the surface. One of the Forster's Terns was attracted to these clusters for a time. It hovered a short distance above them, with bill pointing well downward and wings rapidly rotating above its body. The tern was able to obtain some of the insects without alighting on the sand. This ground-feeding performance was repeated 14 times during the 10 minutes I watched the bird. It then joined its companions and the behavior was not repeated.

Bent (1921, U.S. Natl. Mus. Bull. 113) mentions Forster's Terns catching flying insects and floating insects but not catching insects from a smooth beach. Perhaps this occurs only occasionally as I can find no other account of similar behavior by Forster's Terns.—BERNARD KING, *Gull Cry, 9 Park Road, Newlyn, Penzance, Cornwall, England.*