

COOPER'S HAWK PREDATION ON LEAST TERN CHICKS ON A ROOFTOP IN PINELLAS COUNTY, FLORIDA

ELIZABETH A. FORYS¹, MONIQUE ABRAMS², AND S. JOYCE KING²

¹Natural Sciences Collegium, Eckerd College
4200 54th Ave. South, St. Petersburg, Florida 33711
E-mail: forysea@eckerd.edu

²St. Petersburg Audubon, St. Petersburg, Florida 33701

On 13 July 2003, while conducting a study to estimate productivity of rooftop nesting Least Terns in Pinellas County, Florida, we observed a Cooper's Hawk (*Accipiter cooperii*) prey on several Least Tern chicks (*Sterna antillarum*). The Least Terns were nesting on a large, low (8-m high), flat gravel rooftop that was located 1.7 km from Tampa Bay in a semi-industrialized area in central Pinellas County. For our productivity research we had monitored the rooftop from the vantage point of a 10-m bucket lift every two weeks during the breeding season. The predation occurred at the end of the breeding season when only about 15 pairs were left (down from an original 95 pairs). This colony was productive; we had previously observed a total of 47 Least Tern chicks capable of flight and beginning their juvenal molt on the rooftop. The predation was witnessed after a colony of about 15 Black Skimmers (*Rynchops niger*) had abandoned the rooftop.

We suspected the predation at mid-morning (1030) when we saw the tail of Cooper's Hawk sticking out from behind an air conditioner on the roof and the hawk appeared to be feeding on something. A few Least Terns (3-4) flew down toward the hawk, but most of the adults were off the roof, flying up in loose circles. Later that afternoon (1300), we observed the rooftop from a nearby overpass. The hawk was walking around the roof, peering under air conditioning units and systematically checking around roof structures. At one point, we observed the hawk jump on a chick and eat it. Two days later, the remaining Least Terns abandoned the rooftop.

Cooper's Hawks had been seen at this site and a second rooftop located 4 km away during a survey on 15 June 2003. During this previous survey, no predation was observed, but the adult Least Terns were highly disturbed and flew up above the roof.

We believe this is the first published record of predation of Least Terns by a Cooper's Hawk. Least Tern eggs and chicks have been prey of a variety of mammalian, avian, and invertebrate predators (Thompson et al. 1997). Most reported avian predators have been wading and shore birds, but predation by three other diurnal raptors has been recorded: Northern Harrier (*Circus cyaneus*), Peregrine Falcon (*Falco peregrinus*), and American Kestrel (*F. sparverius*). Cooper's Hawks typically nest in undeveloped forests and woodlands (Rosenfield and Bielefeldt 1993), but they are increasingly nesting in more urban environments (Boal and Mannan 1998). In highly urbanized Pinellas County, Florida, the number of Cooper's Hawks recorded during Audubon Christmas Bird Counts has significantly increased during the past 15 years (linear regression, $R^2 = 0.71$, $F = 32.2$, $P < 0.001$; Dave Goodwin, unpublished data).

While nesting in suburban and urban environments, Cooper's Hawks eat a diversity of urban-adapted birds. A recent study of Cooper's Hawks in an urban environment in Terre Haute, Indiana found that their diet consisted primarily of European Starlings (*Sturnus vulgaris*), Mourning Doves (*Zenaidura macroura*), and Rock Pigeons (*Columba livia*) (Roth and Lima 2003). In the Roth and Lima (2003) study, Cooper's Hawks appeared to select larger birds while ignoring smaller birds. Perhaps the concentration and relative ease of capture of Least Tern chicks on rooftops attracted the hawk to this smaller prey item.

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LITERATURE CITED

- BOAL, C. W., AND R. W. MANNAN. 1998. Nest site selection by Cooper's Hawks in an urban landscape: *Journal of Wildlife Management* 62:864-871.
- ROSENFELD, R. N., AND J. BIELEFELDT. 1993. Cooper's Hawk (*Accipiter cooperii*). No. 75. *In* The Birds of North America (A. Poole and F. Gill, eds.). The Academy of Natural Sciences. Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C.
- ROTH, T. C., AND S. L. LIMA. 2003. Hunting behavior and diet of Cooper's Hawks: an urban view of the small-bird-in-winter paradigm. *Condor* 105:474-483.
- THOMPSON, B. C., J. A. JACKSON, J. BURGER, L. A. HILL, E. M. KIRSCH, AND J. L. ATWOOD. 1997. Least Tern (*Sterna antillarum*). No. 290. *In* The Birds of North America (A. Poole and F. Gill, eds.). The Academy of Natural Sciences. Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C.