

**FLORIDA SCRUB-JAY (*Aphelocoma coerulescens*) PREYS ON
COMMON NIGHTHAWK (*Chordeiles minor*) EGGS**

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The diet of Florida Scrub-Jays (*Aphelocoma coerulescens*) consists mostly of arthropods and acorns, but they opportunistically take small vertebrates and may rarely prey on the nests of small birds (Woolfenden and Fitzpatrick 1984, Woolfenden and Fitzpatrick 1996, Ehrlich et al. 1988). Because breeding bird densities in oak scrub are low, it is likely that scrub-jays could not rely on other bird eggs as a regular source of food (Woolfenden and Fitzpatrick 1984, 1986). In one study, researchers led Florida Scrub Jays to nests that contained eggs, where the jays would immediately seize the eggs and carry them away for caching, without breaking them (Woolfenden and Fitzpatrick 1984). Here, I report my observations of nest predation by Florida Scrub-Jays and two methods they used to remove eggs.

Observations.—On 9 June 2008 at 0700, I observed a group of three Florida Scrub-Jays (one female and two males) on Duette Preserve in Manatee County. The group was established in April of 2008 when the female immigrated to the site and



Figure 1. Male Florida Scrub-Jay BK-SR seizes egg in open bill.



Figure 2. Male Florida Scrub-Jay SRG-K impales egg on closed bill.

began courtship with one of the male jays. The two males were both members of the 2007 cohort, although I presume that BK-SR was more dominant than SRG-K as he was observed courtship feeding the female. Furthermore, K-SGR was observed giving submissive displays to BK-SR. The three jays gradually moved into a small clearing in the scrub with sparse vegetation. The female was perched atop a sand live oak (*Quercus geminata*) serving as sentinel while the two males foraged on the ground approximately 5 m apart from one another. At 0752, BK-SR discovered an unattended Common Nighthawk (*Chordeiles minor*) nest containing two eggs. He attempted to grasp one in his bill but failed. He then tried, unsuccessfully, to do the same with the other egg. He returned to the first egg, this time successfully grasping it in his bill (Fig. 1), and flew approximately three m into a sand live oak. The other two jays immediately followed. Although the birds were then out of sight, I heard a substantial amount of “conversational gutturals” as described in Bednekoff et al. (2007), and activity that sounded like short fast movements of more than one bird, indicating there may have been a dominance struggle over the egg. At 0802, BK-SR returned to the nighthawk nest and attempted to carry away the second egg. He was unsuccessful and after 1 min he resumed foraging elsewhere. At 0812, SRG-K discovered the nest and attempted to grasp the remaining egg in his bill. After 1 min of manipulation, he impaled the egg on the end of his entire bill (Fig. 2) and flew less than one m before the other two jays began to chase him. He dropped the egg as he fled and the two others continued to chase him for about three min. During the chase, SRG-K made several attempts to return to the egg, but the other two defended it and he was unsuccessful. When the chase ended the three jays resumed foraging independently, and the chasers inexplicably did not attempt to take the egg. At 0818 SRG-K returned to the egg, cracked it open using the hole he already cre-

ated by impaling it, and began to eat it. It appeared that he ate most of the egg's contents. After leaving the egg for several minutes, he returned once and ate the remainder of the yolk. The other two jays continued to forage independently at this time. At approximately 0830, a Common Nighthawk circled low over the nest area where the three jays remained foraging, but did not land. The three scrub-jays remained in the area until I left at 0900.

Discussion.— Although the Common Nighthawk is smaller in body length (22.8 cm) than the Florida Scrub-Jay (27.9 cm) (Pranty et al. 2006), their egg is slightly longer (30.2 mm) and wider (21.7 mm) than that of the scrub-jay (20.2 × 27.1 mm; Woolfenden and Fitzpatrick 1996). Predation upon Common Nighthawk eggs by Florida Scrub-Jays may indicate that scrub-jays would eat eggs of larger birds if they were opportunistically found. Although it may be preferable for a jay to grasp eggs of other birds and cache them for later consumption, this observation suggests that jays are not limited to eggs that they can grasp. It may be possible that Florida Scrub-Jays will consume eggs of larger birds opportunistically by altering the method by which they carry prey from grasping to impaling with the bill.

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