

Short Communications

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Incubation of a foreign object by a Common Nighthawk (*Chordeiles minor*) in Florida

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ABSTRACT—Ground-nesting birds typically maintain a nest free of foreign materials but occasionally are known to incubate a foreign object, often in the presence of other eggs. In May 2012, we discovered a Common Nighthawk (*Chordeiles minor*) incubating a turkey oak (*Quercus cerris*) acorn along with 2 eggs within a mesic flatwoods forest in Clay County, Florida, USA. Herein, we report this observation and include 3 possible hypotheses for this behavior. *Received 19 June 2019. Accepted 23 April 2020.*

Key words: breeding, Caprimulgiformes, foreign object, goatsucker, incubation, nightjar.

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RESUMEN (Spanish)—Las aves que anidan en el suelo típicamente mantienen sus nidos libres de materiales extraños, si bien ocasionalmente se sabe que incuban objetos extraños, a veces en presencia de otros huevos. En mayo de 2012, descubrimos un chotacabras *Chordeiles minor* incubando una bellota del roble *Quercus cerris* junto con dos huevos en la llanura mésica del condado Clay, Florida, EUA. Aquí reportamos esta observación e incluimos 3 posibles hipótesis para este comportamiento. *Recibido 19 junio 2019. Aceptado 23 abril 2020.*

Palabras clave: Caprimulgiformes, incubación, objeto extraño, reproducción, tapacaminos.

The Common Nighthawk (*Chordeiles minor*) is a nightjar species that breeds across most of the United States and Canada. In natural settings, the species nests on the ground in open areas including open canopy and logged forests, prairies, woodland clearings, and, in urban areas, on flat gravel rooftops. Females typically lay 2 eggs, and incubation lasts 18–20 d (Brigham 1989, Brigham et al. 2011). Females do not construct a nest per se, but instead lay eggs directly on the surface in a shallow scrape (hereinafter, nest).

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On 18 May 2012 at 1852 h EST while conducting fox squirrel (*Sciurus niger*) surveys at Camp Blanding Wildlife Management Area in Clay County, Florida, USA, we flushed a female Common Nighthawk from a nest where she was incubating 2 eggs and a turkey oak (*Quercus cerris*) acorn similar in shape and size to the eggs (Fig. 1). The nest was located at approximately 30°0.829'N, 82°0.223'W within the mesic flatwoods land cover type (Florida Natural Areas Inventory 2010). The stand where the nest was located was a fire maintained, open canopy forest primarily composed of longleaf pine (*Pinus palustris*), slash pine (*P. elliottii*), and turkey oak. We visually observed the female on the nest incubating the 2 eggs and foreign object daily until 21 May 2012.

Nest sanitation is a common behavior where breeding birds remove infertile eggs, broken eggshells, and foreign objects such as leaves, gravel, feces, food debris, and other debris from their nest (e.g., Weatherhead 1984, Kemal and Rothstein 1988, Underwood and Sealy 2006, Guigueno and Sealy 2012, Evans et al. 2016). This behavior ensures high reproductive efficiency, reduces physical damage to eggs from foreign objects, decreases chances of egg infection, and can decrease risk of predation (Guigueno and Sealy 2012, Su et al. 2018).

Occasionally, ground-nesting birds retain foreign objects in their nests during part or all of incubation. Such items reported include pebbles, rocks, driftwood, bones, glass, and pine cones (Conover 1985, Hobson 1989, Langlois et al. 2012, Witteveen et al. 2015, Anderson and Brush 2016). These objects commonly vary in size and resemblance to eggs (Langlois et al. 2012, Witteveen et al. 2015). The reasons for this behavior may vary, but it has been hypothesized that the presence of foreign objects include mistaking the object for something else (e.g., food), not being able to clearly discriminate



Figure 1. Foreign object incubated by a Common Nighthawk (*Chordeiles minor*) at Camp Blanding Wildlife Management Area, Clay County, Florida, USA.

between the object and its own egg, and serving as an important incubation stimulus (Sugden 1947, Twomey 1948, Hanson and Eberhardt 1971, Coulter 1980, Conover 1985).

To our knowledge, this is the first documentation of a foreign object being incubated by Common Nighthawk and by any species in the family Caprimulgidae. We are uncertain why the female was incubating the acorn. Additionally, we are uncertain if the female moved the acorn into the nest, if it fell or rolled into the nest and was thereafter incubated along with the 2 eggs, or if the eggs were laid adjacent to the foreign object prior to initiating incubation.

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