

The Journal of Caribbean Ornithology

RESEARCH NOTE

Vol. 31:17–19. 2018

First description of Ashy-faced Owl (*Tyto glaucops*) nest
and first record of Ashy-faced Owl nesting in Palmchat
(*Dulus dominicus*) nest on Hispaniola

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First description of Ashy-faced Owl (*Tyto glaucops*) nest and first record of Ashy-faced Owl nesting in Palmchat (*Dulus dominicus*) nest on Hispaniola

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Abstract Ashy-faced Owl (*Tyto glaucops*) is a Hispaniolan endemic. Despite the fact that it is considered locally common and widespread throughout much of its range, little is known about several aspects of this species' biology, including its nesting habits. Its nest sites are described in general terms—e.g., tree cavities, caves, ledges—but no specific details, such as nest measurements, height above ground, type of substrate, or other information have been reported. We provide the first description of an Ashy-faced Owl nest and the first record of this species nesting in an active Palmchat (*Dulus dominicus*) nest.

Keywords Ashy-faced Owl, *Dulus dominicus*, nest, nesting behavior, Palmchat, *Tyto glaucops*

Resumen Primera descripción del nido de Lechuza Cara Ceniza (*Tyto glaucops*) y primer registro de nidificación de esta especie en un nido de Cigua Palmera (*Dulus dominicus*) en La Española—La Lechuza Cara Ceniza (*Tyto glaucops*) es endémica a La Española. A pesar de que es considerada común localmente y está ampliamente distribuida a lo largo de su rango de distribución, se conoce muy poco sobre muchos aspectos de la biología de esta especie, incluyendo sus hábitos de nidificación. Los sitios de cría son descritos en términos generales—e.g., cavidades en los árboles, cuevas, cornisas—pero detalles específicos tales como las medidas del nido, altura sobre el suelo, tipo de substrato u otra información no han sido previamente reportados. Brindamos la primera descripción de un nido de Lechuza Cara Ceniza y el primer registro de esta especie nidificando en un nido activo de Cigua Palmera (*Dulus dominicus*).

Palabras clave Cigua Palmera, conducta de nidificación, *Dulus dominicus*, Lechuza Cara Ceniza, nido, *Tyto glaucops*

Résumé Première description d'un nid d'Effraie d'Hispaniola (*Tyto glaucops*) et première mention de la nidification de l'Effraie d'Hispaniola dans un nid d'Esclave palmiste (*Dulus dominicus*) à Hispaniola—L'Effraie d'Hispaniola (*Tyto glaucops*) est une espèce endémique d'Hispaniola. Bien qu'elle soit considérée comme commune et répandue localement dans une grande partie de son aire de répartition, plusieurs aspects de sa biologie restent mal connus, notamment en ce qui concerne sa nidification. Ses sites de nidification sont décrits en termes généraux (e.g., cavités d'arbres, grottes, corniches, etc.), mais sans précision telle que la taille du nid, la hauteur au-dessus du sol, le type de support ou autre information. Nous faisons la première description d'un nid d'Effraie d'Hispaniola et la première mention de la nidification de l'espèce dans un nid d'Esclave palmiste (*Dulus dominicus*) occupé.

Mots clés Comportement de nidification, *Dulus dominicus*, Effraie d'Hispaniola, Esclave palmiste, nid, *Tyto glaucops*

Ashy-faced Owl (*Tyto glaucops*), a medium-sized owl of the family Tytonidae (Hinkelman 1999, Latta *et al.* 2006, del Hoyo *et al.* 2014), is endemic to the Caribbean island of Hispaniola (Dominican Republic and Haiti) and a few outlying islands (Bruce 1999). The species is found in a diverse array of habitats, including tropical to subtropical dry and moist shrublands and woodlands below 2,000 m above sea level (Raffaele *et al.* 1998, Thorstrom and Gallardo 2015). It is categorized as a species of

Least Concern due to the apparent stability of its population (BirdLife International 2016). Ashy-faced Owl has a varied diet, and its reported prey items include at least 9 species of amphibians, 23 species of reptiles, 13 species of bats, 2 species of rodents, and almost 80 species of small to medium-sized birds, although about 70% of its prey biomass consists of house mouse (*Mus musculus*) and black rat (*Rattus rattus*) (Wiley 2010).

Ashy-faced Owl is known to nest in tree cavities, on ledges, in crevices, in caves, and in man-made structures, and reported clutch sizes range from three to seven eggs (Bruce 1999, Thorstrom and Gallardo 2015). To our knowledge, the species has never been observed nesting in abandoned stick nests of other bird species, much less in an active nest of another species. Although other Hispaniolan endemics, such as Ridgway's Hawk

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(*Buteo ridgwayi*) and White-necked Crow (*Corvus leucognaphalus*), are known to nest atop active Palmchat (*Dulus dominicus*) nests (Wiley and Wiley 1981, Woolaver 2011, TIH unpub. data), we document here the first record of an Ashy-faced Owl nesting within a Palmchat nest. We also report what appear to be the first measurements ever recorded for an Ashy-faced Owl nest, although they may not necessarily be representative of nest sites presumed more typical for this species.

Results and Discussion

We were alerted to the nest on 1 May 2017, when a nestling Ashy-faced Owl was found on the ground below a coconut palm (*Cocos nucifera*) with a broken left tibiotarsus. As there were no other structures nearby and the nestling was not very mobile, we assumed that it must have fallen from a cavity within a large Palmchat nest in the coconut palm. The nestling was covered almost completely in buff-colored down feathers with some juvenile feathers emerging on the wings. We retrieved the nestling, which we subsequently rehabilitated and returned to the nest 20 days later.

Approximately 1 week after the injured nestling was found, MCS climbed the nest tree and observed two other owls in a nest, located within a small cavity inside the Palmchat nest. Both birds in the nest were larger and more developed than the injured nestling found on 1 May. One of the owls in the cavity was clearly a nestling as it was smaller than the other and partially covered in down feathers. The other owl in the cavity appeared fully feathered and it was unclear whether this was an additional nestling or an adult Ashy-faced Owl. As MCS approached the nest, the larger bird began to hiss—a common reaction of both adults and young of the closely related Barn Owl (*Tyto alba*) when they perceive a threat (Cohen 1901). No other Ashy-faced Owls were observed in the immediate area at the time the nest was discovered.

MCS climbed the nest tree on 21 May to return the rehabilitat-



Fig. 1. Ashy-faced Owl nestlings in their nest, as observed during our last climb up to the nest on 1 June. Photograph by Thomas I. Hayes.

ed nestling (younger and smaller than both of the other birds) to its nest. The two birds that had been in the nest on the previous visit were again present, a possible indication that both were indeed nestlings. TIH climbed the nest tree for a third and final visit on 1 June to check the progress of the rehabilitated nestling and take measurements. During this visit only two nestlings were present: the rehabilitated individual and the smaller of the two birds seen on previous occasions (Fig. 1). Both birds rocked, hissed, and clicked their beaks in alarm (see video). No adults or older nestlings were observed in the area around the nest tree during either the second or third climb.

We visited the vicinity of the nest on both 12 June at 2100 and 13 June at 2000. From the ground, we observed a young Ashy-faced Owl making begging sounds while perched outside of the nest on a northwest-projecting palm frond. We revisited the area on the morning of 14 June, but did not observe any Ashy-faced Owls in the vicinity of the nest; we assume that fledging had occurred.

The nest was located at 18°31'14.1"N, 68°22'14.9"W, in a coconut palm 1.93 m from the main road of Tortuga Bay within the Puntacana Resort and Club (Grupo Puntacana). The palm circumference measured 68.5 cm at breast height. The Ashy-faced Owl nest was a cavity within the stick structure of an actively used communal Palmchat nest constructed around the base of the palm fronds and fruiting bodies. The base of the Palmchat nest was 6.43 m from the ground. The entire nest structure was roughly columnar: 160 cm high, diameter 400 cm east-west and 170 cm north-south, with a 700-cm circumference. The bulk of the nest, 150 cm of the east-west diameter (from the trunk of the tree to the outside edge), was on the west side of the tree; this is where the Ashy-faced Owl nest cavity was located. The cavity had three separate entrances; two openings were rectangular and faced east, each measuring 20 cm × 10 cm; the third opening was oval-shaped, faced northwest, and measured 40 cm × 20 cm. The floor of the cavity, roughly oval-shaped, measured 100 cm × 40 cm and was lined with fur, feathers, bones of prey, and feces. The cavity was uniformly about 30 cm tall, though it tapered toward the trunk of the palm, following the natural curve of the fronds.

Although Ashy-faced Owl populations are currently considered to be stable (BirdLife International 2016), few empirical data exist to assess the species' status, and there is much to learn about the biology and behavior of this secretive species. At the minimum, surveys throughout its supposed range in both the Dominican Republic and the more deforested Haiti (Thorstrom and Gallardo 2015) are needed to determine the population size and status of this species. More in-depth studies of nest sites and nesting behavior, threats, and other ecological factors would also provide important insight into the biology of this species and its conservation requirements.

Acknowledgments

We would like to thank Grupo Puntacana and Fundación Grupo Puntacana, Picky Plant employees, Puntacana Resort and Club security, and Mojave Hayes, Brian Smucker, and Gregory Daniels for their assistance in the field. We would also like to thank Lloyd Kiff and Chris Rimmer for their helpful comments on this manuscript.

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Cite this article as:

Curti, M., C.D. Hayes, T.I. Hayes, and M. Calcaño Silven. 2018. First description of Ashy-faced Owl (*Tyto glaucops*) nest and first record of Ashy-faced Owl nesting in Palmchat (*Dulus dominicus*) nest on Hispaniola. *Journal of Caribbean Ornithology* 31:17–19. <https://doi.org/10.55431/jco.2018.31.17-19>