Revista Brasileira de Ornitologia 15(4):615-616
dezembro de 2007

Spider web as a natural trap for small birds

Charles Duca[1,3] and Wellington Modesto[2]

1. Departamento de Zoologia, Laboratório de Ornitologia, Universidade de Brasília, 70910-900, Brasília, DF, Brasil. Brasil. E-mail: chduca@ig.com.br
2. Departamento de Zoologia, Laboratório de Aracnídeos Universidade de Brasília, 70910-900, Brasília, DF, Brasil. E-mail: silvawm@unb.br
3. Corresponding author. Present address: Rua Itabira 592/302, Bloco 03, Lagoinha, 31110-340, Belo Horizonte, MG, Brasil.

Recebido em 23 de agosto de 2007; aceito em 20 de dezembro de 2007.

Resumo: **Teia de aranha como uma armadilha natural para aves pequenas.** Registramos um indivíduo de *Sporophila nigricollis* (Emberizidae) aprisionado em uma teia de aranha da espécie *Nephilengys cruentata* (Nephilidae) em uma área rural em Minas Gerais, Brasil. Embora a aranha não tenha se alimentado do pássaro, ficou evidente que as teias dessas aranhas podem ser consideradas como uma 'armadilha natural' para aves de pequeno porte, causando a morte de alguns indivíduos.

Palavras-chave: Araneae, Emberizidae, causa de mortalidade, *Nephilengys cruentata, Sporophila nigricollis.*

Key-words: Araneae, Emberizidae, mortality cause, *Nephilengys cruentata, Sporophila nigricollis.*

Some bird species look for spider webs to find food or material to build the nest. For example, some hummingbirds (Sick 1997) and flycatcher species as *Suiriri affinis* and *S. islerorum* (Lopes and Marini 2005) use spider webs as material to build their nests. However, this can be a natural trap for small birds because some spider species have webs strong enough to capture prey as large as birds and bats (e.g. McCormick and Polis 1982, Texeira *et al.* 1991).

On January 11th 2006, we recorded a male of *Sporophila nigricollis* imprisoned in a web of *Nephilengys cruentata* (Nephilidae) located 3.8 m above the ground (**Figure 1**). This record was in a farm in the municipality of Conceição do Mato Dentro (18°56'07.1"S, 43°23'59.9"W), state of Minas Gerais, Brazil. We found the individual at 12:20 h and observed it to be imprisoned during 47 min. During this time, the spider tried to bite the bird twice but failed in both attempts due to the movement of the bird when the spider approached. After this

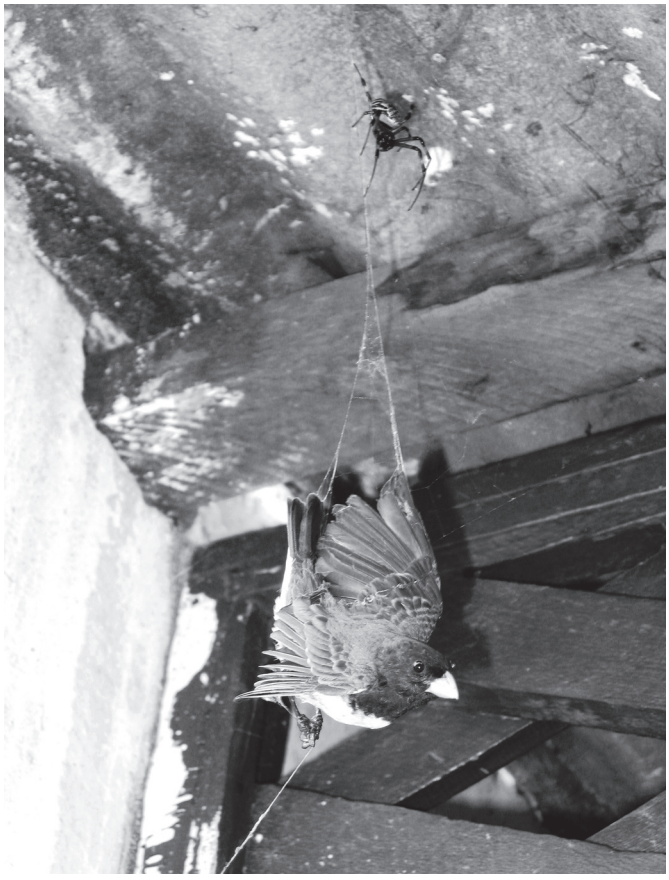

Figure 1. *Sporophila nigricolis* male imprisoned in a *Nephilengys cruentata* (Nephilidae) web.
Figura 1. Macho de *Sporophila nigricolis* aprisionado em uma teia de *Nephilengys cruentata* (Nephilidae).

Figure 2. *Sporophila nigricolis* male on the ground trying to remove the spider web from its tarsus and wings.
Figura 2. Macho de *Sporophila nigricolis* no chão tentando remover a teia de aranha presa nos seus tarsos e asas.

period, the bird freed itself and fell to the ground, where it stayed quiet for 10 min with belly up. After 10 min, it got up and started to remove strands of spider web that adhered to its tail, wing, bill and tarsus (**Figure 2**). The bird remained 54 min on the ground before managing to fly to a tree. This happened in a ranch house where there were several domestic animals, including a dog and cat, both of which approached the bird and might have killed it if we had not actively prevented this.

There are other records of birds caught in spider webs. For example, Texeira *et al.* (1991) recorded several hummingbird species as well as the passerines *Polioptila plumbea* and *Sporophila caerulescens* imprisoned in web spiders of the genus *Nephila.* These authors related that only once a *Nephila* bit a female of *S. caerulescens* but did not eat it. Here, we confirmed the possibility of spider web as a 'natural trap' for some small passerines. Although the chance of predation by spiders appears to be low, there is a possibility that birds die due to the consequences of the web on their feathers and body. In our case, the bird would probably have died if we had not intervened when the dog and cat came near it.

REFERENCE

Lopes, L. E. and M. Â. Marini (2005) Biologia reprodutiva de *Suiriri affinis* e *S. islerorum* (Aves: Tyrannidae) no cerrado do Brasil central. *Pap. Avulsos Zool.* 45:127-141.

McCormick, S. and G. A. Polis (1982) Arthropods that prey on vertebrates. *Biol. Rev. Camb. Philos. Soc.* 57:29-58.

Sick H. (1997) *Ornitologia Brasileira.* Rio de Janeiro: Editora Nova Fronteira.

Texeira, D. M., G. Luigi e I. M. Schloemp (1991) Aves brasileiras como presas de artrópodes. *Ararajuba* 2:69-74.