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LONG-BILLED HERMIT (*PHAETHORNIS SUPERCILIOSUS*) CAUGHT IN GOLDEN ORB-SPIDER (*NEPHILIA CLAVIPES*) WEB

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El Ermitaño picolargo (*Phaethornis superciliosus*) atrapado en la telaraña de la araña de oro (*Nephilia clavipes*).

Key words: Long-billed Hermit, *Phaethornis superciliosus,* golden orb-spider, *Nephila clavipes,* spider web, Costa Rica.

Graham (1997) reported incidences of three Long-billed Hermits [formerly Long-tailed Hermit] (*Phaethornis superciliosus*) and a Little Hermit (*Phaethornis longuemareus*) caught in the webs of the golden orb-spider (*Nephila clavipes*), as well as providing some other references on birds being caught in spider webs. I report another instance of a Long-billed Hermit caught in the web of a golden orb-spider.

The golden orb-spider is commonly found in second growth rain forest around Tortuguero in northeastern Costa Rica. It is the largest of the New World orb-weaving spiders in the family Araneidae (Lubin 1983, Hogue 1993), with a body length of 3 to 4 cm with an overall size exceeding 7 cm. Its orb web can be more than a half meter across and is made of an extremely strong yellowish or gold-colored silk. The silk was so strong that it was once used for the cross-hairs on gun sights (Lubin 1983).

In Tortuguero in the coastal Caribbean lowlands of northeastern Costa Rica where we were implementing the Tortuguero Integrated Bird Monitoring Program, hummingbirds are the commonest group of birds captured in mist nets at the banding stations, making up 41.7% (6887/16527) of the birds from 1994–2002 (Ralph *et al.* 2005). On 19 October 2004, we captured and banded a Long-billed Hermit. The bird was hanging passively in the mist net as hermits typically do and was in the mist net for less than 30 min. We brought it to our banding station, processed it, and released it. As it fled through the understory vegetation, it flew into the orb-web of a golden orb-spider. The hermit remained motionless upside down hanging from the web, as it typically does when caught in a mist net. As the spider approached the bird, one of the banders rescued the bird which quickly flew off, so it is not certain if the spider would have successfully fed on the bird.

Birds caught in spider webs are not common occurrences, but there are scattered records, although the spiders responsible are often not identified or cited. Anna's Hummingbirds (*Calypte anna*) were reported caught in spider webs by Bryan (1902) and Stott

(1951), and Coale (1912) reported a Yellow Warbler (*Dendroica aestiva*) captured by an unnamed spider. An American Goldfinch (*Carduelis tristis*) was reported caught in a spider (*Argiope aurantia*) web by Mackay (1929). Abbott (1931) reported four cases: a Bushtit (*Psaltriparus minimus*), two Anna's Hummingbirds, and a House Finch *(Carpodacus mexicanus*). Terres (1939) reported a Grasshopper Sparrow *(Ammodramus savannarum*) caught by a golden garden spider (*Miranda aurantia*). Common Yellowthroats (*Geothlypis trichas*) were caught in spider webs (Ross 1950, Heck & Heck 2001). Hoyt (1960) and McKenzie (1991) reported Ruby-throated Hummingbirds (*Archilochus colubris*) caught in spider webs. Miller & Gass (1985) report several other examples of hummingbirds caught in spider webs.

Although we observed the capture of a Long-billed Hermit in a golden orb-spider web, it is unclear whether the spider could have killed and eaten the hummingbird. Apparently, the golden-orb spider does not initially wrap up its prey in silk before attacking. It must come in direct contact with its prey. Thus, large strong prey such as katydids and large lepidopterans or prey with chemical defenses are a threat to this spider (Lubin 1983). Other members of the family throw silk over their prey immobilizing the prey from a distance before biting their prey. This spider is apparently reticent and unable to deal with large, aggressive prey items. If we had let the scene play itself out, the hermit may have escaped by flapping its wings.

In the fall of 2004, banding stations were operated 6 days a week from mid-August to early December, yet this was the only such occurrence observed. Graham (1997) suggests trapped birds are removed by predators or escape only to be susceptible to predation after the fact because of exhaustion. I hypothesize that hermits may learn to avoid spider webs while traplining through the forest. In this instance, the hermit was simply attempting to escape in a possibly unfamiliar area and was not aware of the presence of the spider web. Another possibility is that hermits may be more readily caught in spider webs while they are chasing each other around near leks.

Nevertheless, it is notable that both involve the same two species with Graham's observations being made at the La Selva Biological Station in Costa Rica, located approximately 55 km WSW of Tortuguero. So at least in this situation, although the event may not be common, it may occur with some regularity.

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REFERENCES

Abbott, C. G. 1931. Birds caught in spiders' webs. Condor 33: 169.

Bryan, M. 1902. Hummingbird experiences from my note book. Condor 4: 35–36.

Coale, H. K. 1912. *Dendroica aestiva* captured by a spider. Auk 29: 105.

Graham, D. L. 1997. Spider webs and windows as potentially important sources of hummingbird mortality. J. Field Ornith. 68: 98-101.

Heck, B. A., & C. H. Heck. 2001. Common Yellowthroat captured in spider's web. Bull. Oklahoma Ornithol. Soc. 34: 19–20.

Hogue, C. L. 1993. Latin American insects and entomology. Univ. of California Press, Berkeley, California.

Hoyt, S. F. 1960. A hummingbird in difficulty. J. Field Ornith. 31: 91.

Lubin, Y. D. 1983. *Nephila clavipes* (Araña de oro, golden orb-spider). Pp. 745–747 *in* Janzen, D. (ed.). Costa Rican natural history. Univ. of Chicago Press, Chicago, Illinois.

Mackay, G. H. 1929. A spider (*Argiope aurantia*) and a bird (*Astragalinus tristis tristis*). Auk 46: 123–124.

McKenzie, P. M. 1991. A Ruby-throated Hummingbird (*Archilochus colubris*) trapped in a spider's web. J. Louisiana Ornithol. 1: 54–58.

Miller, R. S., & C. L. Gass. 1985. Survivorship in hummingbirds: Is predation important? Auk 102: 175–178.

Ralph, C. J., M. J. Widdowson, R. I. Frey, P. A. Herrera, & B. P. O'Donnell. 2005. An overview of a landbird monitoring program at Tortuguero, on the Caribbean coast of Costa Rica. Pp. 831–844 *in* Ralph, C. J., & T. D. Rich (eds.). Bird conservation implementation and integration in the Americas. Proceedings of the third International Partners in Flight Conference, Gen. Tech. Rep. PSW-GTR-191, USDA Forest Service, Asiomar, California.

Ross, L. H. 1950. Northern Yellow-throat, *Geothlypis trichas*, caught in spider web. Auk 67: 521–522.

Stott, Jr., K. 1951. An Anna Hummingbird caught in a spider web. Condor 53: 49–50.

Terres, J. K. 1939. Grasshopper Sparrow caught in spider's web. Auk 56: 342.

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