

A Range Extension of the Social Wasp *Polistes bahamensis* (Hymenoptera: Vespidae)

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Three species of social wasps are found in the Bahamas (Elliott, 1985; Elliott & Elliott, 1996; Richards, 1978), all with similar ranges. *Polistes bahamensis*, *P. major* and *Mischocyttarus mexicanus* are known from all sizeable islands except Mayaguana and Great Inagua, as well as in at least the southern part of Florida. The latter two are likewise found in Cuba. *P. bahamensis* (Figure 1)—formerly treated as subspecies of *P. exclamans* (Snelling, 1983)—is tentatively recorded from Mayaguana on the basis of apparently reliable museum specimens (Elliott & Elliott, 1996), although these authors failed to find it in either Mayaguana or Great Inagua (Figure 2). Our purpose here is to record and comment on its presence on Great Inagua.

On 1 January 2011 we found *P. bahamensis* foragers flying along the sides of a road in the interior of Inagua. The road was on a causeway into Lake Windsor near the western boundary of Inagua National Park (approx. 20°59'N 73°30'W), far from houses or other buildings. We did not find any nest and cannot say

whether the wasps came from just one or several colonies.



Figure 1. An early colony of *Polistes bahamensis*, showing the single nest comb with excentric petiole and the color pattern of the wasp. Photo by Thomas Bentley. (Reproduced with permission).

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Figure 2. Map of the Bahamas in relation to neighbouring larger land masses. The Inagua Islands (Great Inagua and the uninhabited Little Inagua) are in black at the lower right. Scale: 1:4.4 million. Inset: Great Inagua, to show the position and extent of Lake Windsor. Scale 1:1 million. Map © C.K. Starr, 2011.

This record extends the known range of *P. bahamensis* to the southeastern end of the Bahamas. Its evident rarity on Mayaguana and Inagua is consistent with the general rule that widespread species tend to be more abundant toward the centers of their ranges. Similarly, Snelling (1983) recorded *P. bahamensis* as occurring "sporadically" along the Gulf Coast in northern Florida. In contrast, it is quite

common more centrally in parts of the northern Bahamas (N. B. Elliott, personal communication, 1985) and in South Florida (C. K. Starr, personal observation). What is most curious is its apparent absence from the population center of Mathew Town, Great Inagua. In the northern Bahamas and in Florida, it commonly nests on buildings and is a familiar sight around human habitations. Several Inagua residents told us that they knew it from more northerly islands but had never noticed it on Inagua, and our search in the Mathew Town area failed to turn up either wasps or nests. Under shelter, *Polistes* nests can persist for years after the wasps have abandoned them, serving as a convenient indication of a species' presence. We conclude that it is at best rare in the town and quite possibly entirely absent.

The puzzle, then, is not that *P. bahamensis* should be so uncommon at the southeastern extreme of its range but that its nesting habit on Great Inagua should have departed from the usual habit of the species. Our working hypothesis is that it is excluded from nesting in and on buildings by an unknown insect-eating bird. Just as this nesting habit makes it quite easy for human observers to find nests, it undoubtedly facilitates search by a potential predator (e.g. Hamaher, 1936). Among the plausible candidates found on the island are several species of flycatchers and tyrant flycatchers.

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