SEASONALITY OF *PSOROPHORA JOHNSTONII* (DIPTERA: CULICIDAE) ON NO NAME KEY, FLORIDA

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The mosquito *Psorophora johnstonii* (Grabham) has a very restricted distribution in the United States, being confined to extreme southern Florida. It is also known from the Bahamas, Cayman Islands, Cuba, Dominican Republic, Haiti, Jamaica, Puerto Rico, and the Virgin Islands (Gaffigan et al., undated). The records from the Virgin Islands pertain to the United States Virgin Islands, not to the British Virgin Islands (Belkin and Heinemann, 1975a, 1975b). Diéguez et al. (2006) reported this species from Guatemala, although Clark-Gil and Darsie (1983) did not. The first collections from Florida were made on Cudjoe Key in 1945 (Pritchard et al., 1947). This species is now known from 24 islands in the Florida Keys (Hribar et al., 2011). Very little is known about the life history of *Ps. johnstonii*. Larval habitats are shallow, shaded temporary rain pools (Thurman et al., 1951).

The Florida Keys Mosquito Control District deploys a series of dry ice-baited light traps throughout the archipelago to monitor mosquito abundance and species composition. Traps are placed weekly, deployed in the late afternoon and collected the following morning. The No Name Key trap site is located near dredge fill and the area was further filled in by Hurricane Georges in 1998. Dominant vegetation is Australian pine (*Casuarina equisetifolia*) and exotic grasses (Hribar, 2002). A mosquito trap has been deployed at the same site on No Name Key and hung from the same tree branch since late 1998. All mosquitoes were transported to the laboratory, killed by freezing, and identified to species. Collection records from 15 continuous years (2001-2015) were examined in order to determine patterns of abundance of *Ps. johnstonii* on No Name Key.

*Psorophora johnstonii* is not continuously present at the No Name Key trap site. As many as three years have passed between collections. The number of specimens collected per year is also not constant, varying from fewer than ten to over 500 (Figure 1). Over the 15 year period, the earliest date of collection was June 9, the 160th day of the year; the latest date of collection was November 30, the 334th day of the year (Figure 2).

This species has been collected as early as April 26 (Thurman et al., 1951). Nonetheless, most collections have been made later in the year. It can be inferred from Thurman et al. (1951) that the abundance of *Ps. johnstonii* may be dependent on rainfall. This is likely the case because *Psorophora* species generally are considered to be floodwater mosquitoes, i.e., species that depend on rainfall for formation of larval habitats (Crans, 2004).

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