A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

Massachusetts Division of Fisheries & Wildlife

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Slender Clearwing
Hemaris gracilis

State Status: Special Concern
Federal Status: None

DESCRIPTION: The Slender Clearwing (Hemaris gracilis) is a day-flying sphingid moth with a wingspan of 40-45 mm (Covell 1984). Both the forewing and the hind wing are unscaled and transparent except for reddish-brown margins and narrow lines of the same color along the wing veins. Dorsally, the head and thorax are olive green in color when fresh, fading to yellowish-green; the abdomen is banded with green concolorous with the head and thorax, reddish-brown concolorous with the wings, black, and white. The tip of the abdomen has a brush of hair-like scales that are orange medially, flanked with black. Of the three day-flying sphinx moths (Hemaris spp.) in Massachusetts, the Slender Clearwing is most easily confused with the Hummingbird Clearwing (Hemaris thysbe). However, the Slender Clearwing has a lateral reddish-brown stripe on the thorax, extending from the eye to the abdomen, that is absent on the Hummingbird Clearwing.

HABITAT: The Slender Clearwing inhabits pitch pine-scrub oak barrens and heathlands on sandplains or rocky summits and ridges, as well as acidic bogs and swamps.

LIFE HISTORY: In Massachusetts, the Slender Clearwing flies in May and June. Adults are diurnal and hover to nectar at flowers, especially blueberry (Vaccinium). Larvae feed on lowbush blueberry (Vaccinium pallidum), and probably other blueberry species, from June until pupation in July. Pupae overwinter.

GEOGRAPHIC RANGE: The Slender Clearwing is found from Labrador south to New Jersey, and west to Saskatchewan, North Dakota, Minnesota, and Illinois; it also occurs along the Atlantic coastal plain from New Jersey south to Florida (Tuttle 2007). It is rare and locally
distributed throughout its range. In Massachusetts, the Slender Clearwing is known to occur in Franklin County and adjacent northern and western Worcester County, as well as in Plymouth and on Cape Cod and Martha’s Vineyard.

**STATUS AND THREATS:** The Slender Clearwing is threatened by habitat loss and fire suppression. Other potential threats include introduced generalist parasitoids, aerial insecticide spraying, non-target herbiciding, and off-road vehicles.

**Literature Cited**