



# Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife

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## Slender Clearwing Sphinx Moth *Hemaris gracilis*

State Status: **Special Concern**

Federal Status: None

**Description:** The Slender Clearwing Sphinx is a day-flying “hummingbird moth” with wings unscaled and transparent except for reddish-brown margins; the thorax is olive in color dorsally and the abdomen is reddish-brown; there is a reddish-brown line ventrally on the thorax. Wingspan is 40-45 mm. The larva is a small “hornworm,” yellowish-green in color, with thin, yellow dorsolateral lines and pink spiracles; the venter is dark reddish to purplish-brown, and the light reddish-brown caudal horn is short; length 40-48 mm in the final instar (Williams 1979).

**Habitat:** Pitch pine-scrub oak barrens and heathlands on sandplains or rocky summits and ridges; also acidic bogs and swamps.

**Life History:** In Massachusetts adults fly from mid-May through mid-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 diapause until the following spring.

**Range:** The Slender Clearwing Sphinx is found in southern Canada from Nova Scotia west to Saskatchewan, south into North Dakota, Minnesota, Wisconsin, Michigan, Ohio, and the mountains of upstate New York and western New England, extending south along the Appalachian ridges to Pennsylvania; and along the Atlantic coastal plain from Nova Scotia south to Florida. It is very rare and local throughout this range. In Massachusetts there are currently only four known populations.

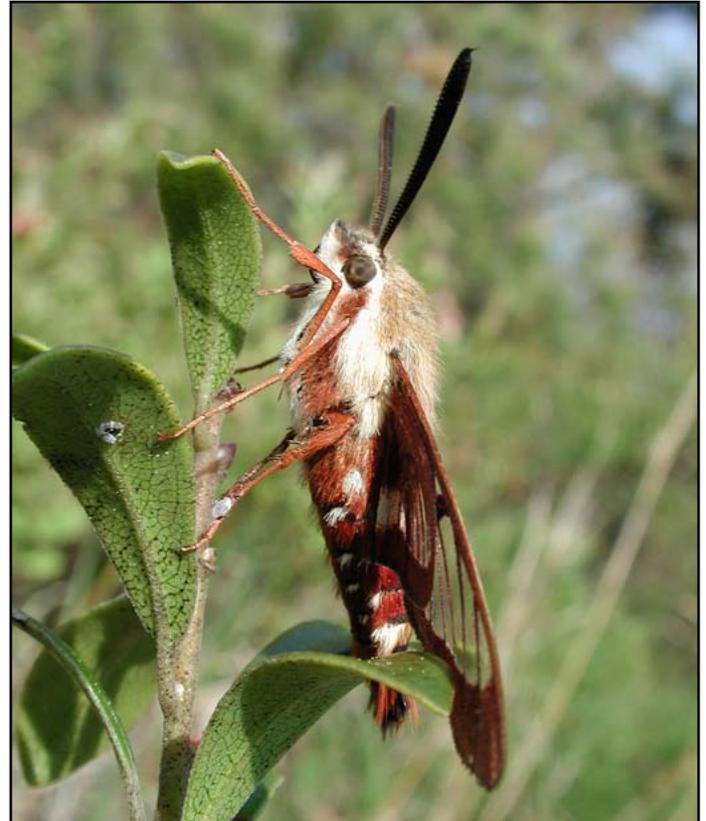


Photo by M.W. Nelson

### Adult Flight Period in Massachusetts

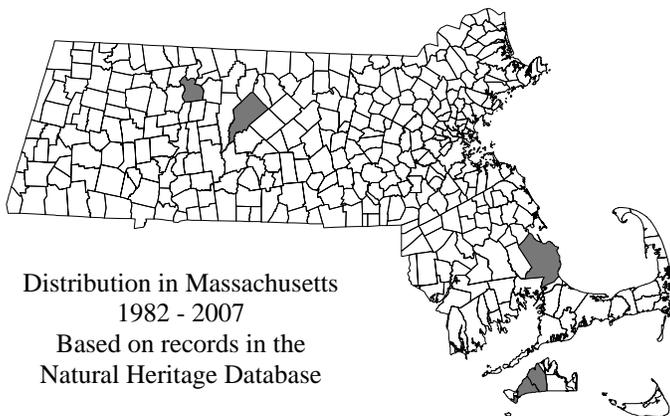
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

### Threats

- Habitat loss
- Fire suppression
- Hydrologic alteration (in bogs and swamps)
- Invasion by exotic plants
- Introduced generalist parasitoids
- Insecticide spraying

### References

Williams, B.D. 1979. Life history observations on *Hemaris gracilis* (Sphingidae). *Journal of the Lepidopterists' Society* 33(4): 254-257.



Distribution in Massachusetts  
1982 - 2007  
Based on records in the  
Natural Heritage Database

Updated June 2007  
M.W. Nelson