



**Natural Heritage  
& Endangered Species  
Program**

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*Massachusetts Division of Fisheries & Wildlife*

**Pine Barrens Zanclognatha  
*Zanclognatha martha***

State Status: **Special Concern**  
Federal Status: **None**

**DESCRIPTION:** The Pine Barrens Zanclognatha (*Zanclognatha martha*) is an erebid moth with a wingspan of 25-30 mm (Forbes 1954). The forewing is dark brown, paler proximally (in the basal area) and darker distally (in the terminal area); the postmedial and antemedial lines are very dark brown, almost black, jagged and narrow, but wider toward the costal margin. The reniform spot is a small dot, concolorous with the postmedial and antemedial lines. The hind wing is brown, paler than the forewing on average, but darker towards the outer margin; a darker brown, but faint postmedial line and discal spot are present. The head and thorax are concolorous with the proximal portion of the forewing, and the abdomen is concolorous with the hind wing. Subterminal lines of the forewing and hind wing, when present, are faint, and considerably obscured as compared to the similar *Zanclognatha protumnusalis*.



*Zanclognatha martha* ▪ Specimen from MA: Plymouth Co., Plymouth, adult female collected 4 Aug 2004 by M.W. Nelson, reared from egg, adult emerged 12 Jul 2005

**HABITAT:** The Pine Barrens Zanclognatha inhabits pitch pine-scrub oak barrens on sandplains or rocky summits and ridges, including late-successional barrens.

**LIFE HISTORY:** In Massachusetts, the Pine Barrens Zanclognatha flies in July and early August. Larvae feed on pitch pine (*Pinus rigida*) (Wagner et al. 2011). Larvae

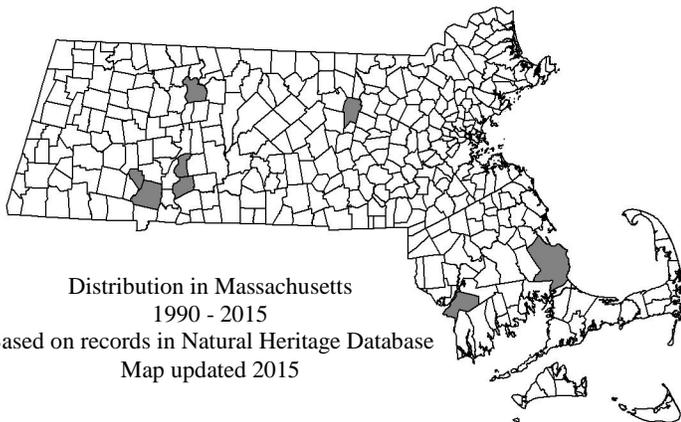
**Adult Flight Period in Massachusetts**

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

overwinter partially grown, resume feeding in spring, and pupate by June.

**GEOGRAPHIC RANGE:** The Pine Barrens Zanclognatha is spottily distributed from Maine south to Florida, and west to Wisconsin and Texas (Wagner et al. 2011). In Massachusetts, it occurs in barrens habitats from the Connecticut River Valley east to Plymouth, but is absent from Cape Cod and the offshore islands.

**STATUS AND THREATS:** The Pine Barrens Zanclognatha is threatened by habitat loss and fire suppression. Other potential threats include introduced generalist parasitoids, aerial insecticide spraying, and light pollution.



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

**Massachusetts Division of Fisheries & Wildlife**

1 Rabbit Hill Road, Westborough, MA 01581; tel: 508-389-6300; fax: 508-389-7890; [www.mass.gov/dfw](http://www.mass.gov/dfw)

Please allow the Natural Heritage & Endangered Species Program to continue to conserve the biodiversity of Massachusetts with a contribution for 'endangered wildlife conservation' on your state income tax form, as these donations comprise a significant portion of our operating budget.

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**Literature Cited**

- Forbes, W.T.M. 1954. *Lepidoptera of New York and Neighboring States*. Part III. Memoir 329, Cornell University Agricultural Experiment Station, Ithaca, New York. 433 pp.
- Wagner, D.L., D.F. Schweitzer, J.B. Sullivan, and R.C. Reardon. 2011. *Owlet Caterpillars of Eastern North America*. Princeton University Press, Princeton, New Jersey. 576 pp.

*Authored by M.W. Nelson, NHESP Invertebrate Zoologist, April 2015*

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