



Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife

1 Rabbit Hill Road, Westborough, MA 01581

tel: (508) 389-6360, fax: (508) 389-7891

www.nhesp.org

Pine Barrens Lycia

Lycia ypsilon

State Status: **Threatened**

Federal Status: **None**

Description: The Pine Barrens Lycia (*Lycia ypsilon*) is a geometrid moth with a wingspan of 30-35 mm in the male (Covell 1984); the wings of the female are rudimentary and non-functional. In the male, both the forewing and the hind wing are gray, with black, smoothly-curved postmedial and antemedial lines. On the forewing, the median area is white, bisected by a black, relatively straight and wide median line. The postmedial line is margined by a brown band distally, and brown shading is present proximal to the antemedial line. The reniform and discal spots are reduced to small, solid, black dots; the reniform spot may be obscured by the median line. White subterminal lines are present on the forewing and the hind wing, but may be obscure on the hind wing. In both sexes, the thorax and abdomen are densely hairy, gray or grayish-tan in color, with black, paired dots on the dorsum of each abdominal segment.

Habitat: In Massachusetts, the Pine Barrens Lycia inhabits open, shrubby areas within scrub oak barrens.

Life History: In Massachusetts, male Pine Barrens Lycia moths fly in May. Females ascend shrub and tree trunks and emit pheromone, waiting for males to find them by scent. The larval host plants are undocumented in Massachusetts; this species feeds on rose family plants (Rosaceae) elsewhere. Larvae are fully grown by July (Forbes 1948). Pupae overwinter.

Geographic Range: In Massachusetts, the Pine Barrens Lycia occurs on Martha's Vineyard and inner Cape Cod. Its range extends south to Florida, and west to Minnesota and Texas (Covell 1984).



Lycia ypsilon, male • Specimen from FL: Nassau Co., Fernandina Beach, collected 3 Mar 2000 by B.D. Williams

Adult Flight Period in Massachusetts

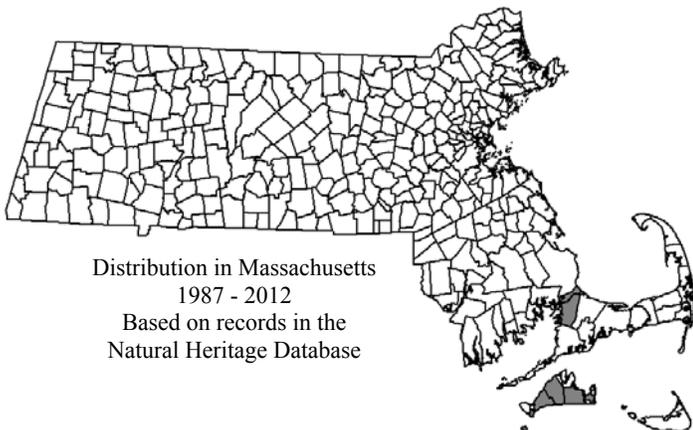
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Status and Threats: The Pine Barrens Lycia is threatened by habitat loss and suppression of fire, which is needed to maintain the open structure of its habitat. Other potential threats include invasion by exotic plants, introduced generalist parasitoids, insecticide spraying, off-road vehicles, and light pollution.

Literature Cited

- Covell, C.V. 1984. *A Field Guide to Moths of Eastern North America*. Peterson Field Guide Series. Houghton Mifflin, Boston, Massachusetts. 496 pp.
- Forbes, W.T.M. 1948. *Lepidoptera of New York and Neighboring States*. Part II. Memoir 274, Cornell University Agricultural Experiment Station, Ithaca, New York. 263 pp.

Acknowledgements: Massachusetts observation data provided by local lepidopterists, with multiple contributions by P.Z. Goldstein and M. Mello. Fact sheet authored by M.W. Nelson, NHESP Invertebrate Zoologist, October 2012.



Updated October 2012

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