



**Natural Heritage
& Endangered Species
Program**

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Massachusetts Division of Fisheries & Wildlife

**Precious Underwing
*Catocala pretiosa pretiosa***

State Status: **Endangered**
Federal Status: **None**

DESCRIPTION: The Precious Underwing (*Catocala pretiosa pretiosa*) is an erebid moth with a wingspan of 37-42 mm. The median area of the forewing is white, extending from the costal margin to the inner margin. The median area is overlaid with olive green (especially in freshly-emerged individuals), transitioning to solid olive green towards the outer wing margin. The jagged postmedial and antemedial lines are black; the former margined with a medium brown band distally, the latter with dark brown shading proximally. Both a black basal dash and a black apical dash are present. The reniform spot is a white ring, and the subreniform spot solid tan. The hind wing is bright yellow to orange, with two black bands. In Massachusetts, the Precious Underwing is most similar to the Charming Underwing (*Catocala blandula*). However, the Charming Underwing has more gray to greenish-gray over the white median area (as well as the other lighter portions of the forewing), and the white of the median area does not extend to the inner margin of the forewing.

HABITAT: In Massachusetts, the Precious Underwing inhabits acidic riparian floodplain swamps, shrub swamps, shrubby bogs, and pond shores, typically within coastal sandplain pitch pine-scrub oak barrens.



Catocala pretiosa pretiosa ▪ Specimen from MA: Plymouth Co., larva collected 17 Jun 2003 by M.W. Nelson, adult emerged 11 Jul 2003

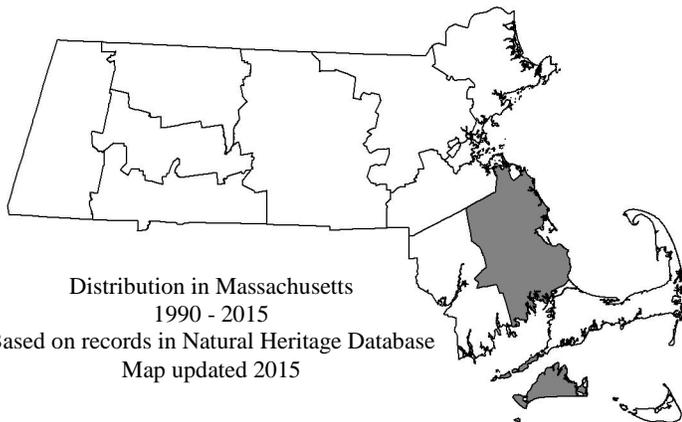
Adult Flight Period in Massachusetts

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

LIFE HISTORY: In Massachusetts, the Precious Underwing flies in July and early August. Eggs overwinter, hatching in early spring. The larvae feed on the new foliage, flowers, and fruits of chokeberries (*Aronia* spp.). Larvae pupate in June.

GEOGRAPHIC RANGE: In Massachusetts, the Precious Underwing occurs in Plymouth County and on the island of Martha's Vineyard. It is found more extensively in southern New Jersey, but the Massachusetts and New Jersey populations comprise the entire global range of this subspecies (Schweitzer et al. 2011).

STATUS AND THREATS: The Precious Underwing is threatened by habitat loss and hydrologic alteration that disrupts the natural seasonal flooding of its habitat. Other potential threats include invasive exotic plants, introduced generalist parasitoids, eutrophication or other water



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

Massachusetts Division of Fisheries & Wildlife

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pollution, river bank stabilization, aerial insecticide spraying, non-target herbiciding, excessive deer browse of larval host plants, off-road vehicles, and light pollution.

Literature Cited

Schweitzer, D.F., M.C. Minno, and D.L. Wagner. 2011. *Rare, Declining, and Poorly Known Butterflies and Moths (Lepidoptera) of Forests and Woodlands in the Eastern United States*. Forest Service, U.S. Dept. of Agriculture, Washington, DC. 517 pp.

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