



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

Sandplain Euchlaena

Euchlaena madusaria

State Status: **Special Concern**

Federal Status: **None**

Description: The Sandplain Euchlaena (*Euchlaena madusaria*) is a geometrid moth with a wingspan of 32-40 mm (Forbes 1948). Both the forewing and the hind wing are light tan proximal to the postmedial line, and darker tan with black speckling distal to the postmedial line. The postmedial line on both forewing and hind wing is prominent, a rusty, reddish-brown color, and complete and smoothly curved from the costal margin to the inner margin. The antemedial line is brown, dentate on the forewing, and weak on the hind wing. The reniform and discal spots are reduced to small, solid, brownish-black dots. Each forewing has a broad, cream-colored apical dash. The fringe of both forewing and hind wing are rusty, reddish-brown in color, matching the color of the postmedial line.

Habitat: In Massachusetts, the Sandplain Euchlaena inhabits sandplain pitch pine-scrub oak barrens, heathlands, and grasslands.

Life History: In Massachusetts, the Sandplain Euchlaena has two broods per year, the first flying from late May through late June, and the second flying in August. Larvae are probably somewhat polyphagous, but the habitat associations of the Sandplain Euchlaena in Massachusetts indicate a likely preference for lowbush blueberries (*Vaccinium angustifolium* and *V. pallidum*). Larvae from the second annual generation overwinter partially grown, completing development in the Spring.

Geographic Range: In Massachusetts, the Sandplain Euchlaena is known to occur in sandplain habitats in the Connecticut River Valley, the Shawsheen River Valley, and on Cape Cod and the offshore islands. This species ranges from Massachusetts south to North Carolina, and west to Colorado and Texas (Forbes 1948).



Euchlaena madusaria • Specimen from MA: Hampden Co., Chicopee, collected 4 Jun 2002 by M.W. Nelson

Adult Flight Period in Massachusetts

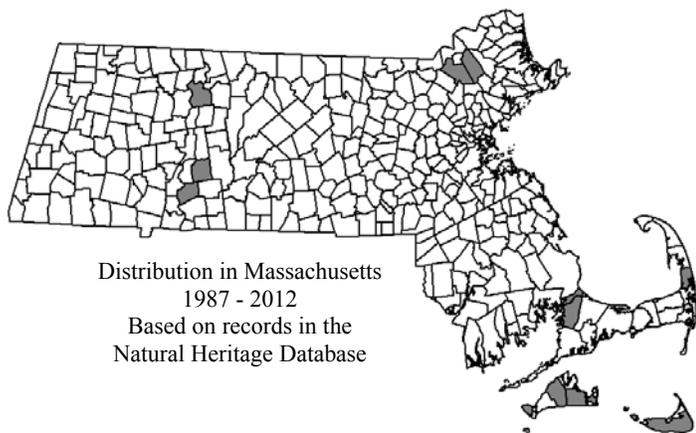
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Status and Threats: The Sandplain Euchlaena is threatened by habitat loss and fire suppression. Fire promotes growth of lowbush blueberries, and maintains the open habitat structure needed by both the Sandplain Euchlaena and its host plants. Other potential threats include invasion by exotic plants, introduced generalist parasitoids, insecticide spraying, off-road vehicles, and light pollution.

Literature Cited

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, M. Mello, and M.W. Nelson. Fact sheet authored by M.W. Nelson, NHESP Invertebrate Zoologist, September 2012.



Updated September 2012

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.