



**Natural Heritage
& Endangered Species
Program**

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Massachusetts Division of Fisheries & Wildlife

**Scrub Euchlaena
*Euchlaena madusaria***

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

DESCRIPTION: The Scrub Euchlaena (*Euchlaena madusaria*) is a geometrid moth with a wingspan of 28-40 mm (McGuffin 1981). 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 and dentate on the forewing; on the hind wing it is weak to absent. The reniform and discal spots are reduced to small, solid, brownish-black dots, occasionally obscure to absent. The forewing has a broad, cream-colored apical dash. The fringe of both the forewing and the hind wing is rusty, reddish-brown in color, matching the color of the postmedial line. The head, thorax, and abdomen are all light tan in color, matching the wings proximal to the postmedial line. In Massachusetts, the pale spring brood of the Deep Yellow Euchlaena (*Euchlaena amoenaria*) may be confused with the Scrub Euchlaena. On the underside of the hind wing of the Scrub Euchlaena, the outer postmedial line forms a wide loop as compared to the Deep Yellow Euchlaena, which has a narrow loop (Forbes 1948).



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

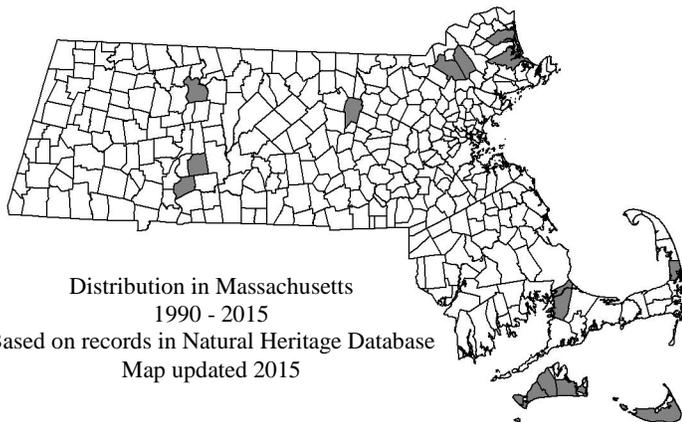
Adult Flight Period in Massachusetts

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

HABITAT: In Massachusetts, the Scrub Euchlaena inhabits sandplain pitch pine-scrub oak barrens, heathlands, and shrubby grasslands.

LIFE HISTORY: In Massachusetts, the Scrub 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 Scrub 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: The Scrub Euchlaena ranges from Nova Scotia south to Florida, and west to British Columbia and Texas (Forbes 1948, McGuffin 1981). In Massachusetts, the Scrub Euchlaena is known to occur in



Distribution in Massachusetts
1990 - 2015

Based on records in Natural Heritage Database
Map updated 2015

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

Massachusetts Division of Fisheries & Wildlife

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sandplain habitats in the Connecticut River Valley, the Nashua River Valley and the northeastern part of the state, and on Cape Cod and the offshore islands.

STATUS AND THREATS: The Scrub *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 Scrub *Euchlaena* and its host plants. Other potential threats include introduced generalist parasitoids, aerial insecticide spraying, non-target herbiciding, 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.
- McGuffin, W.C. 1981. Guide to the Geometridae of Canada (Lepidoptera). Volume II. Subfamily Ennominae, part 3. *Memoirs of the Entomological Society of Canada* No. 117: 1-153.

Authored by M.W. Nelson, NHESP Invertebrate Zoologist, March 2015

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