

SPECIES PROFILE

Broad-lined Catopyrrha

Erastria coloraria

Federal Listing: Not listed

State Listing: Not listed

Global Rank: G4

State Rank: S1

Author: NHFG

ELEMENT 1: DISTRIBUTION AND HABITAT

1.1 Habitat Description

Broad-lined catopyrrha in New Hampshire occupies pitch pine-scrub oak woodlands (NatureServe 2005), which are early-successional communities dominated by pitch pine (*Pinus rigida*) and scrub oak (*Quercus ilicifolia*) (Sperduto and Nichols 2004). The primary larval host plant of *E. coloraria* is New Jersey tea (*Ceanothus americanus*), which is necessary for the presence of this species, but other possible food sources include clover (*Trifolium* sp.) and brambles (*Rubus* sp.) (Covell 1984). *E. coloraria* has two broods during the spring and summer, with flight periods occurring from late May to mid-June and mid-July to early August (VanLuven 1994). For a detailed habitat description refer to the pitch pine-scrub oak woodland community profile.

1.2 Justification

E. coloraria, along with other pitch pine-scrub oak woodland specialists, serves as an indicator of ecological condition. In the absence of disturbance or management, *E. coloraria* populations decline and become increasingly vulnerable to extirpation. Declines are likely a reflection of the loss of the vital compositional and structural elements (e.g., heath stratum and nitrogen-fixing plants) that are lost in pitch pine scrub-oak woodlands with increasing canopy closure.

1.3 Protection and Regulatory Status

NHNHB (2005) has identified the *E. coloraria* as a species of very high importance, but it is currently not protected.

1.4 Population and Habitat Distribution

The range for *E. coloraria* extends from Connecticut in the north to Florida in the south, and west to Minnesota and Texas (Colvell 1984). In New Hampshire, a single occurrence of *E. coloraria* has been documented in Concord (1976), although, this species is presently considered extirpated from the state (Schweitzer 1983).

1.5 Town Distribution Map

A map is provided.

1.6 Habitat Map

See Karner blue butterfly and Pine Barrens profiles

1.7 Sources of Information

Technical field reports, agency data, scientific journal articles, and element occurrence databases were used to determine *E. coloraria* habitat and distribution.

1.8 Extent and Quality of Data

Lepidoptera surveys conducted at the Concord Pine Barrens have not generated any *E. coloraria* specimens. Other areas where pitch pine-scrub oak woodland habitat occurs have not been surveyed for *E. coloraria*.

1.9 Distribution Research

Additional surveys should be conducted in known and potential sites to determine distribution, habitat requirements, and life history traits of *E. coloraria*. Current populations should be monitored for trends, and new sites containing key habitat elements should be surveyed for new occurrence data.

ELEMENTS 2-4

See the Karner Blue Butterfly and Pine Barrens profiles

ELEMENT 5: REFERENCES

5.1 Literature

- Covell, C.V. Jr. 1984. Peterson Field Guides: Eastern Moths. Houghton Mifflin Company, New York, New York, USA.
- Helmbolt, K., and M. Amaral. 1994. Status of the Karner blue butterfly in New Hampshire. Pages 123-128 in D.A. Andow, R.J. Baker, and C.P. Lane, eds. Karner blue butterfly: a symbol of a vanishing landscape. Minnesota Agricultural Experiment Station. St. Paul, Minnesota, USA.
- Schweitzer, D.F. 1983. Rare Lepidoptera of the Concord, N.H. pine barrens with suggestions for a potential preserve. The Nature Conservancy, Boston, Massachusetts, USA.
- VanLuvan, D.E. 1994. Site Conservation Plan for the Concord Pine Barrens, Concord, New Hampshire. The Nature Conservancy, Concord, New Hampshire, USA.

5.2 Data Sources:

- NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. Accessed 2005 March 30.
- New Hampshire Natural Heritage Bureau. 2005. Database of rare species and exemplary natural community occurrences in New Hampshire. Department of Resources and Economic Development, Division of Forests and Lands. Concord, New Hampshire, USA.

Distribution of Broad-lined Catopyrrha in New Hampshire

Distribution

■ Known

▨ Historic



0 10 20 40 Miles

Historic = observations greater than 20 years old as reported in the NH Natural Heritage Bureau's Element Occurrence Database.

