



**Natural Heritage  
& Endangered Species  
Program**

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*Massachusetts Division of Fisheries & Wildlife*

**Buchholz's Gray  
*Hypomecis buchholzaria***

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

**DESCRIPTION:** Buchholz's Gray (*Hypomecis buchholzaria*) is a geometrid moth with a forewing length of 14-18 mm (Rindge 1973). Both the forewing and the hind wing have a dark gray ground color. The forewing postmedial line is black and toothed, curving outward from the costa and then inward in the vicinity of the radial veins. The forewing median line is diffuse and obscure. The antemedial line is black and wavy, outlining an oval area in the basal portion of the forewing that is often more darkly shaded than distal to the line. The reniform spot is a black, elliptical ring, often obscured by the median line. The hind wing has a black and toothed, shallowly-curved postmedial line. The hind wing median line is straight, but diffuse and often obscure. The discal spot is a black, elliptical ring. The head, thorax, and abdomen match the dark gray ground color of the wings.

**HABITAT:** In Massachusetts, Buchholz's Gray inhabits sandplain pitch pine-scrub oak barrens.

**LIFE HISTORY:** In Massachusetts, adult Buchholz's Gray moths fly in June and early July. Larval host plants are not well documented; captive larvae accept sweet fern (*Comptonia peregrina*) and bayberry (*Morella pensylvanica*) (Schweitzer et al. 2011). Larvae feed in July



*Hypomecis buchholzaria* ▪ Specimen from MA: Plymouth Co., Plymouth, collected 26 Jun 2002 by M.W. Nelson

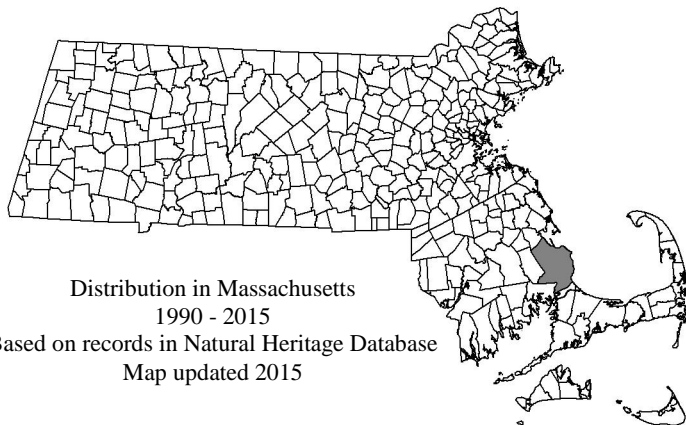
**Adult Flight Period in Massachusetts**

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

and August, pupating by September. The pupa overwinters.

**GEOGRAPHIC RANGE:** Buchholz's Gray is rare and locally distributed along the Atlantic and Gulf Coastal Plains, with populations in Massachusetts, New Jersey, North Carolina, South Carolina, Florida, Mississippi and eastern Texas (Rindge 1973). In Massachusetts, this species is only known from the pine barrens of southeastern Plymouth County.

**STATUS AND THREATS:** Buchholz's Gray is threatened by habitat loss and suppression of fire, which is needed to maintain the open structure of its habitat. Other potential threats include introduced generalist parasitoids, aerial insecticide spraying, non-target herbiciding, off-road vehicles, and light pollution.



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

**Massachusetts Division of Fisheries & Wildlife**

1 Rabbit Hill Road, Westborough, MA 01581; tel: 508-389-6300; fax: 508-389-7890; [www.mass.gov/dfw](http://www.mass.gov/dfw)

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.

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### **Literature Cited**

- Rindge, F.H. 1973. A revision of the North American species of the genus *Pseudoboarmia* (Lepidoptera, Geometridae). *American Museum Novitates* 2514: 1-27.
- 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.

*Authored by M.W. Nelson, NHESP Invertebrate Zoologist, April 2015*

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