



# Natural Heritage & Endangered Species Program

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## Faded Gray Geometer *Stenoporpia polygrammaria*

State Status: **Threatened**

Federal Status: **None**

**Description:** The Faded Gray Geometer (*Stenoporpia polygrammaria*) is a geometrid moth with a wingspan of 30–40 mm (Forbes 1948, McGuffin 1977). Both the forewing and the hind wing have a pale, whitish-gray ground color, with scattered, dark gray and brownish-gray scales. Each forewing has three relatively smoothly curved, black to brownish-black, typically complete lines (postmedial, median, and antemedial). The postmedial and median lines are widely spaced at the costal margin, curving outward and then sharply inward in the vicinity of the radial veins, becoming relatively straight and closely parallel, extending to the inner margin; the two lines are typically connected by a concolorous patch of scales at the intersection of veins  $Cu_1$  and  $M_3$  at the outer edge of the discal cell. The postmedial line is outlined with a narrow band of brownish-gray scales distally, especially near the inner margin. The antemedial line is double, and like the postmedial and median lines, widely spaced at the costal margin, curving outward and then inward to become closely parallel, extending to the inner margin and outlining an oval area in the basal portion of the wing. Distally, the forewing subterminal line is white and scalloped, sometimes obscure; the shading between the postmedial and subterminal lines is typically more pale than distal to the subterminal line. The hind wing has black to brownish-black, shallowly-curved median and postmedial lines, the latter outlined with a narrow band of brownish-black scales distally. A discal spot is present, concolorous with the median and postmedial lines. Like the forewing, the hind wing has a white, scalloped, sometimes obscure subterminal line; the shading between the postmedial and subterminal lines is typically more pale than distal to the subterminal line. The outer margins of both the forewing and the hind wing are scalloped with a line of black to brownish-black scales. Superficially, *Stenoporpia polygrammaria* resembles *Anavitrinella pampinaria*, but the latter is on average smaller and darker; details of the description above, and the image at right, should suffice to separate the two.

**Habitat:** In Massachusetts, the Faded Gray Geometer inhabits scrub oak shrubland and oak woodland.

**Life History:** In Massachusetts, the Faded Gray Geometer flies from the second week of June through the first week of July. Larvae feed on oaks (*Quercus* spp.), becoming fully grown by late August or early September. The pupa overwinters.

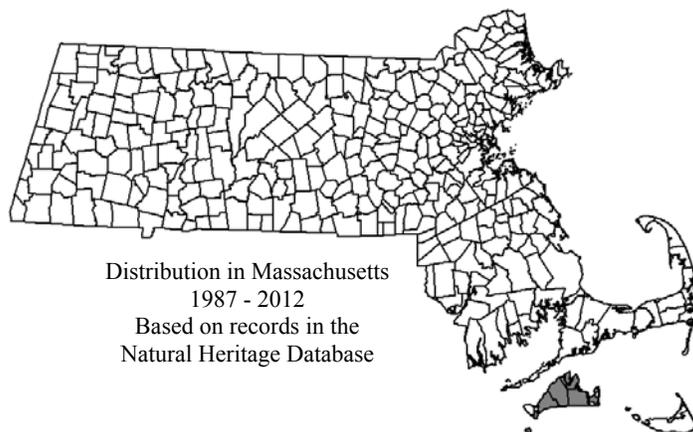
**Geographic Range:** In Massachusetts, the Faded Gray Geometer is only known to occur in on the Island of Martha's Vineyard. This species ranges from southern Maine, south to Georgia, and west to Saskatchewan and Arkansas (Rindge 1968, McGuffin 1977, Wagner et al. 2001). It is rare and locally distributed across the eastern portion of its range (Wagner et al. 2001).



*Stenoporpia polygrammaria* • Specimen from MA: Dukes Co., West Tisbury, collected 18 Jun 1998 by D.L. Wagner and P.Z. Goldstein

### Adult Flight Period in Massachusetts

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



**Status and Threats:** The Faded Gray Geometer is threatened by habitat loss and fire suppression. 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.

- McGuffin, W.C. 1977. Guide to the Geometridae of Canada (Lepidoptera). Volume II. Subfamily Ennominae, part 2. *Memoirs of the Entomological Society of Canada* No. 101: 1-191.
- Rindge, F.H. 1968. A revision of the moth genus *Stenoporpia* (Lepidoptera, Geometridae). *Bulletin of the American Museum of Natural History* 140(2): 65-134.
- Wagner, D.L., D.C. Ferguson, T.L. McCabe, and R.C. Reardon. 2001. *Geometroid Caterpillars of Northeastern and Appalachian Forests*. Forest Service, U.S. Dept. of Agriculture, Washington, DC. 239 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, October 2012.

*Updated October 2012*

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