

Stenoporpia polygrammaria Faded Gray Geometer



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Boarmiini TAXONOMIC_COMMENTS: One of 23 species in this genus that occur in North America north of Mexico (Rindge, 1968; Hodges et al., 1984), most of which are western. Only one primarily Midwestern and Northeastern species reaches North Carolina.

FIELD GUIDE DESCRIPTIONS: ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Forbes (1948); Rindge (1968); McGuffin (1977); Schweitzer et al. (2011) TECHNICAL DESCRIPTION, IMMATURE STAGES: Wagner et al. (2001)

ID COMMENTS: A medium-large Gray, with a whitish ground color shaded with light gray (Forbes, 1948; Rindge, 1968). The antemedian, median, and postmedian lines run parallel courses: curving in from the costa, making a strong bend at the cell, and running fairly straight and obliquely down to the inner margin. The postmedian and median run close together below the cell and the antemedian is also doubled. As in Protoboarmia, the lines are marked by a series of black denticles; small dark spots also mark the intersection of the lines with the costa (Rindge, 1968). Hindwings have a similar pattern, with the lines matching up with those on the forewing. The abdomen is banded dorsally with dark gray, but the dark and pale bands found in Anavitrinella and some Iridopsis on the first abdomninal segment are missing.

DISTRIBUTION: Probably confined to the Blue Ridge and monadnocks in the Western Piedmont

FLIGHT COMMENT: Schweitzer et al. (2011) state that there are two flights in North Carolina but do not provide any dates. Our records come from May and June.

HABITAT: The habitat at the Stokes County site consists mainly of Chestnut Oak Forest, dominated by Rock Chestnut Oak ($\langle i \rangle$ Quercus montana $\langle i \rangle$), with other oaks, hickories, and pines in the canopy and blueberries dominating the shrub layer. A population of Bear Oak occurs further uphill from this site.

FOOD: Wagner et al. (2001) list both red and white oaks. Rindge (1968) stated that a Canadian larva was reared on Bur Oak (<i>Quercus macrocarpa</i>), which does not naturally occur in our state. Schweitzer et al. (2011) suspected that Bear Oak (<i>Quercus ilicifolia</i>) might be the main host used in the Eastern United States, based on the association of the moth with barrens habitats where Bear Oak is a common to dominant constituent. Although the Stokes County site where one of our specimens was recorded contains a population of Bear Oak (cited by Schweitzer et al. in support of their argument), the moths were collected several hundreds of meters from where the oaks occurs and no Bear Oak is known to occur in the vicinity of the Avery County collection site. More research is needed to determine what hosts are used in North Carolina.

OBSERVATION_METHODS: We have too few records to estimate how well this species comes to blacklights.

NATURAL HERITAGE PROGRAM RANKS: GU S1S2

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: This species has apparently declined drastically in the eastern portion of its range, and is now considered historic or extirpated from New England and New York. It is also apparently very scarce in North Carolina, where only a couple of records exist.