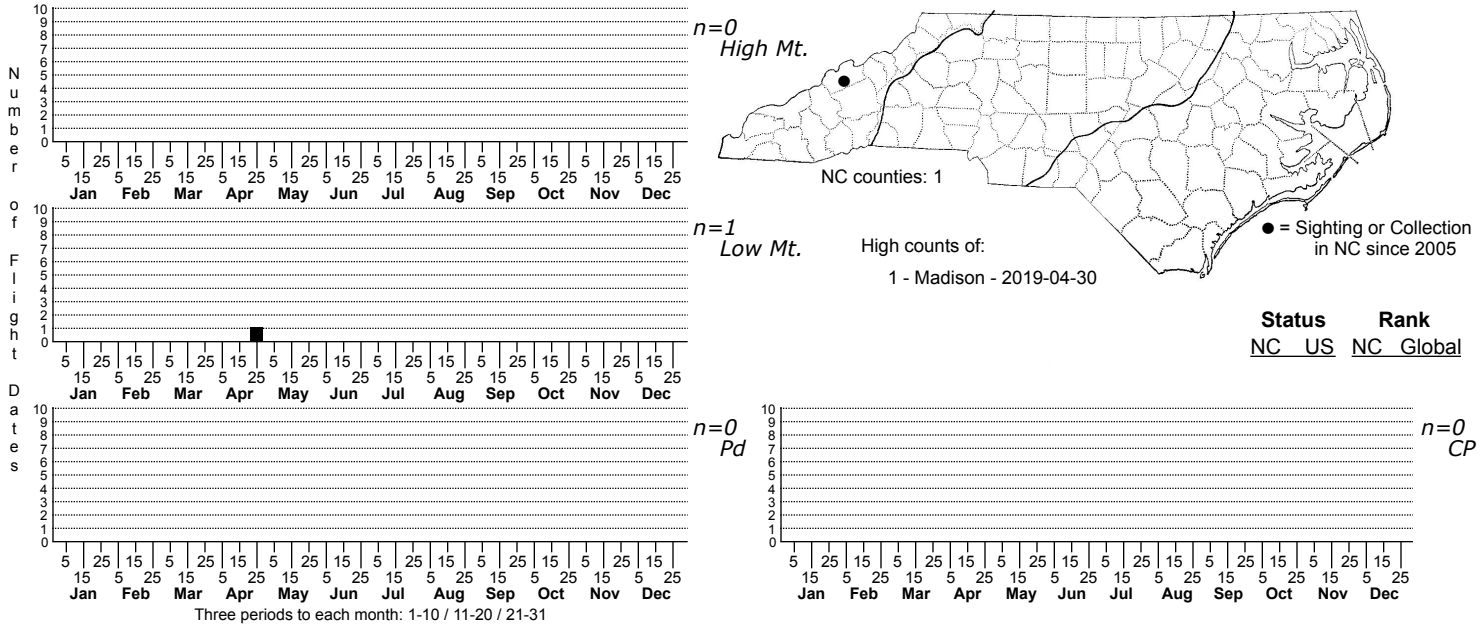
Gretchena watchungana None



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini
TAXONOMIC_COMMENTS: Gretchena is a New World genus with 12 recognized species. Eleven species occur in North America, and eight of these are endemic to eastern North America.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Kearfott (1907a)
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This species resembles several other Gretchena that occur in North Carolina in having dark dusting that is concentrated around two lighter inward bulges along the inner margin at around one-fourth and one-half the wing length. These tend to create an hourglass pattern or sorts when resting adults are viewed from above. The most distinctive external feature of this species in the hindwing, which is whitish, except for blackish-gray scaling on the margins and outer third (Gilligan et al., 2008). Our other species tend to have uniformly grayish-brown hindwings that are darker. The following detailed description is based mostly on that of Kearfott (1907a) who examined a series of 35 specimens that were mostly from the Watchung Hills in New Jersey, and the basis for the specific epithet.

The head is blackish-brown on the sides and face and whitish-gray on top, while the labial palps are whitish-gray and streaked with blackish-brown on the outside and above. The apical joint is black on the outside, with a grayish bloom within, while the antenna is brownish-gray. The thorax and forewing are mottled whitish-gray and blackish-brown. In addition to the two lighter inward bulges along the inner margin at around one-fourth and one-half the wing length, the most conspicuous mark is the grayish-white ocellus, which is large, rounded, and occupies the lower two-thirds of the outer fourth. It is crossed by four or five short, horizontal black lines or blotches near the anterior end that may be difficult to discern in worn specimens. Heavy blackish dusting and blotching is present in much of the center of the wing that contrast rather sharply with the two lighter inward bulges. The costa has a series of paired white dashes, with the subapical one being the most prominent. Many specimens also have a rounded black spot at the apex. The fringe is speckled with black except for the apical third or so which is whitish. The hindwing is whitish except for varying amounts of blackish-gray scaling on the margins and apical third. The cilia are lighter and often white, with a darker sub-basal line.

DISTRIBUTION: Gretchena watchungana is found in eastern North America, and mostly east of the Mississippi River and outside of the southeastern Coastal Plain. The range includes portions of southern Canada (Ontario; Quebec; Nova Scotia) and areas in the US from Minnesota eastward to the New England states, and southwestward through West Virginia, Kentucky, Tennessee, Virginia, and western North Carolina, to Alabama and Louisiana. As of 2024, we have a single record from a lower-elevation site in the Blue Ridge.

FLIGHT COMMENT: The adults have been collected from April through August in different areas of the range, but typically show a strong seasonal peak in April and May. As of 2024, our one record is from late-April.

HABITAT: Local populations are generally found in or near wetlands or moist ground that support alders.

FOOD: The larva are thought to specialize on alders (Alnus spp.) (Krauth et al., 1977; Miller, 1987a). Reports of this species feeding on oaks (Robinson et al., 2010) needs additional verification since the only known hosts for Gretchena species are members of the Juglandaceae (Carya; Juglans) and alders.

OBSERVATION_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR[S1S3]

STATE PROTECTION:

COMMENTS: This species appears to be rare in North Carolina, with only a single site record as of 2024. Additional information on its distribution, abundance and ecological requirements are needed before we can accurately assess its conservation status.