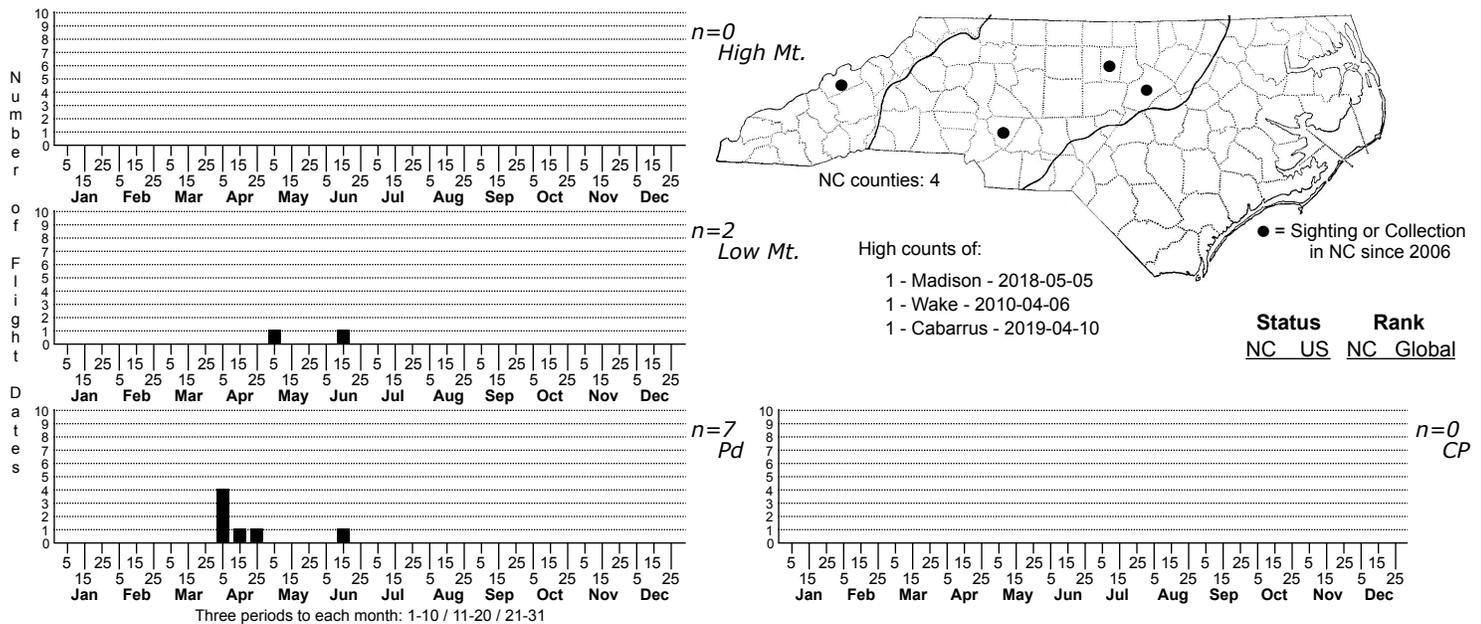


Gretchena deludana Arrowhead Moth



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: Gilligan et al. (2008)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Blair (2023)

ID COMMENTS: In this species, the ground color of the head, thorax and forewing is pale gray and is overlain with varying amount of dark brown dusting and fine mottling. The most prominent marks are thin black streaks that are present anterior to the ocellus, along the distal margin of the sub-basal fascia, and in the discal cell (Gilligan et al., 2008). When viewed from above, resting individuals typically have an hourglass pattern on the basal two-thirds, with the more basal one often resembling an arrowhead. The hindwing is light-brown and the fringe has a sub-basal, broken dark band.

Gretchena deludana closely resembles *G. bolliana*, but the black streaks on the latter are much more pronounced. *Gretchena deludana* also has a relatively short flight period in North Carolina, from April through mid-June, while *G. bolliana* flies throughout much of the year. The male genitalia of the two species are distinctive and may be needed to identify worn specimens.

DISTRIBUTION: *Gretchena deludana* is found in the eastern US and adjoining areas of southern Ontario and Quebec. In the US the range extends from Vermont and New Hampshire westward to Michigan and Illinois, and southward to Kansas, Tennessee, North Carolina, South Carolina, northern Florida, Alabama and Mississippi. As of 2024, our records are all from the Piedmont and a lower-elevation site in the Blue Ridge.

FLIGHT COMMENT: The adults typically fly from April through mid-June in most areas of the range, but have been found as early as February and as late as November in some areas. As of 2024, our records extend from early-April through mid-June.

HABITAT: Local populations are typically found in deciduous hardwood forests, mixed pine-hardwood forests and residential neighborhoods where hickories are present.

FOOD: Larvae reportedly feed on hickories, including Pignut Hickory (*Carya glabra*), Mockernut Hickory (*C. tomentosa*), and Pecan (*C. illinoensis*) (Seifert et al., 2021; Blair, 2023; Robinson et al., 2010).

OBSERVATION_METHODS: The adults are attracted to lights. More information is needed on the host plants and larval life history.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S2S4]

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

COMMENTS: This species appears to be uncommon in North Carolina, but more information is needed on its distribution and abundance before we can assess its conservation status within the state.