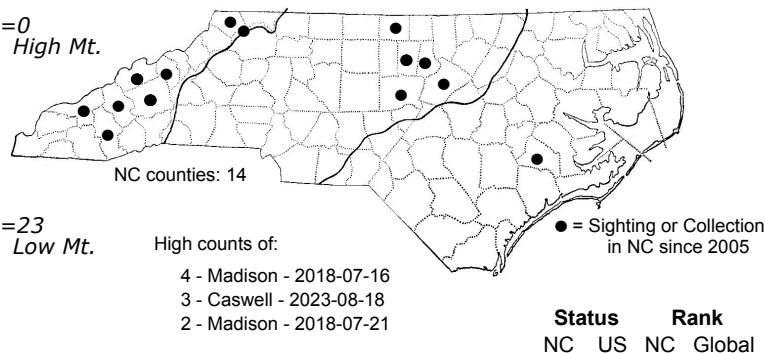
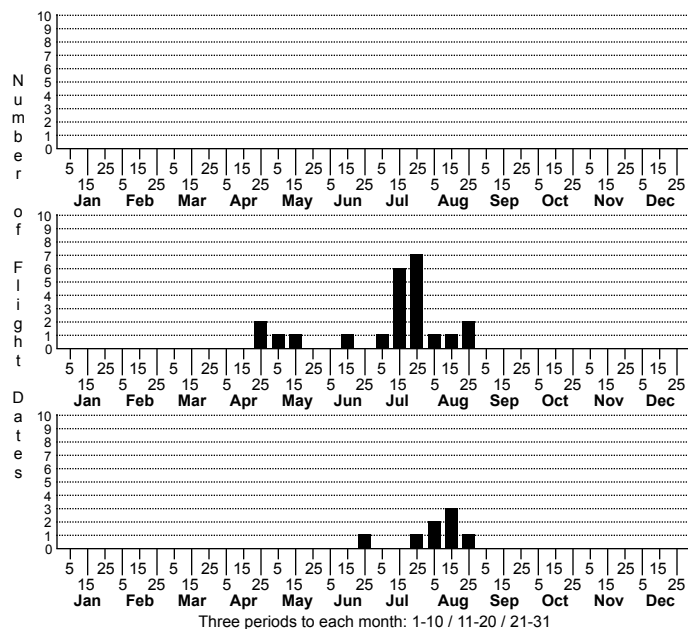


## *Brenthia pavonacella* Peacock Brenthia



FAMILY: Choreutidae SUBFAMILY: Choreutinae TRIBE: [Choreutini]

TAXONOMIC\_COMMENTS: *Brenthia* is a cosmopolitan genus with more than 80 described species and perhaps an even greater number of undescribed species (Rota, 2008). Most species are specialists that feed on a single genus of plants. *Brenthia pavonacella* is the only member of the genus found in North America north of Mexico.

FIELD GUIDE DESCRIPTIONS: Leckie and Beadle (2018)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Rota (2008)

ID COMMENTS: This is a very small and distinctive moth, particularly when seen alive with its unusual posturing behavior. The following description is based in part on that of Forbes (1923). The lower part of the face is pale, and the labial palp is white with three fuscous rings. The antenna is barred above. The forewing is fuscous and mottled with whitish scales, especially about the middle. There is a broad black sub-terminal band that has a streak of bright iridescent scales that is often broken into two or more spots. Beyond this is a narrow light brown band that meets a dark band on the fringe. The apex of the fringe is light tan to whitish. The hindwing is grayish to fuscous and lacks whitish dusting. There are three or more whitish streaks. The most conspicuous include an elliptical streak near the base, an elongated, inwardly oblique, triangular streak about mid-way along the inner margin, and a more prominent streak in the subterminal region. The fringe is gray with three large whitish blotches along its length. The abdomen is brown with whitish barring, while the legs are whitish with darker banding on the tibiae.

DISTRIBUTION: *Brenthia pavonacella* is found in the eastern US and adjoining areas of Tamaulipas, Mexico (Heppner, 1985a). The range extends from New York and vicinity southward to Georgia, Florida and Alabama, and westward to Texas, Oklahoma, Illinois, and Minnesota. There are numerous records of this species occurring in the Neotropics, but they appear to be cryptic species that closely resemble *B. pavonacella* (Rota, 2008; Heppner, 1985). This species can be found statewide in North Carolina in areas where the host plants occur locally.

FLIGHT COMMENT: Adults are active from March through September in areas outside of North Carolina, with a peak in activity from May through September. As of 2020, our records extend from late April through early August. Local populations appear to be single brooded in the Coastal Plain and Piedmont, and possibly double brooded in the mountains.

HABITAT: Populations appear to strongly dependent on tick-trefoils as hosts. Many of these species prefer partially shaded habitats such as open woods, woodland pathways and roadsides, old fields, and pine savannas.

FOOD: Tick-trefoils (*Desmodium* and *Hylodesmum* spp.) are believed to be the primary hosts (Rota, 2008), but the specific species that are used are largely undocumented. Forbes (1923) also listed Hog Peanut (*Amphicarpaea bracteata*) as a host. Other listed hosts from tropical locations (Robinson et al., 2011) probably are for other *Brenthia* species that were mistaken for *B. pavonacella*. We do not have any feeding records in North Carolina.

OBSERVATION\_METHODS: The adults are attracted to lights. They are also active during the day and can be spotted resting on foliage near the host plants.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S3S4]

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

COMMENTS: We currently do not have sufficient information on the distribution and abundance of this species to assess its conservation status.