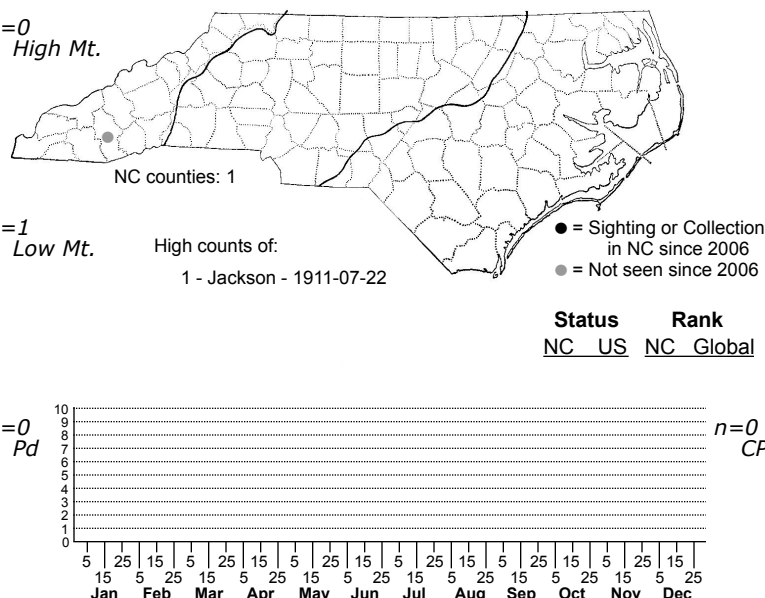
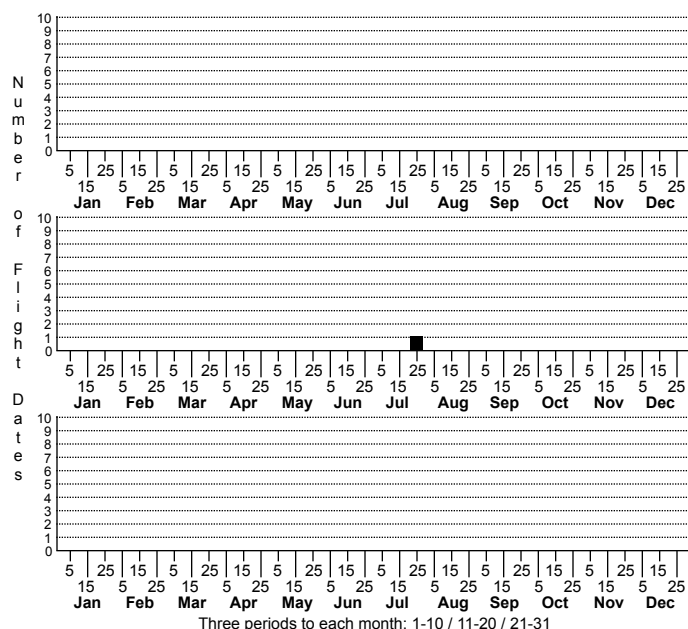


Bucculatrix eupatoriella None



FAMILY: Bucculatricidae SUBFAMILY: [Bucculatrigenae] TRIBE: [Bucculatrigeni]

TAXONOMIC_COMMENTS: *Bucculatrix* is a large genus of small leaf-mining moths, with around 300 species worldwide. A total of 103 Nearctic species have been described, and many others will likely be described in the future. Braun (1963) covered 99 species in her monograph, and four additional Nearctic species have been described since then.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1963, p. 94)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1963)

ID COMMENTS: This is a minute brown and silver moth with a reddish brown tuft on its head. The following description is based on that of Braun (1963). The face is yellow and the tuft light reddish brown. The eye-cap is small and yellowish, and the antennal stalk brown and indistinctly annulated. The ground color of the forewing and the thorax is uniform brown to bright ochre-brown, with markings that are brilliant silvery. Two oblique, silver streaks extend from the costa to the middle of the wing. The first begins along the costa at about one-third the wing length, and the second at about two-thirds. The ground between the two is shaded with dark brown. On the dorsal margin, and slightly anterior to the first costal streak, there is a short, curved silvery streak that is followed by a large patch of dark brown raised scales. Opposite the second costal streak, there is a pair of short, nearly confluent silvery dorsal streaks. The first is margined anteriorly, and the second posteriorly, with black-tipped scales. A faint creamy white spot is present along the costa and in the cilia near the apex. Near the apex, there is a silvery white spot that is followed by a black line that extends along the termen to the anal angle. This is sometimes broken or incomplete and only represented as a dash behind the white spot. A second dark line is present near the middle of the cilia that extends from the apex to the dorsal edge. The legs are gray-brown, with the base and apical fourth of the posterior tibia and spurs blackish, the mid-portion and hairs whitish, and the tarsal segments dark-tipped. The abdomen is fuscous above.

DISTRIBUTION: *Bucculatrix eupatoriella* is a seemingly rare species with only a few scattered records from Ontario, Quebec, Vermont, Ohio, and North Carolina. As of 2021, we have only a single historical record from the southern half of the Blue Ridge Mountains in North Carolina.

FLIGHT COMMENT: The adults are active from July through September. Our one record comes from 22 July. Braun (1963) states that there may be as many as three generations per year.

HABITAT: The larvae feed on *Eupatorium perfoliatum* (Braun, 1963). This species is associated with wet habitats, including marshes, swamps, bogs, and wet pastures (Weakley, 2015). It is found widely throughout the state.

FOOD: Eiseman (2022) lists Common Boneset (*Eupatorium perfoliatum*) and Spotted Joe-pye-weed (*Eutrochium maculatum*) as hosts. We do not have any feeding records in North Carolina.

OBSERVATION_METHODS: The adults appear to rarely visit lights. We recommend searching Common Boneset for larvae during the summer months and rearing the adults.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [SH]

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

COMMENTS: This species is known in North Carolina only from a single, historic record. Its known host plant, however, is common and widespread in wetlands, and the same may eventually be found to be true for the moth as well. Currently, we have too little information to accurately assess its conservation status.