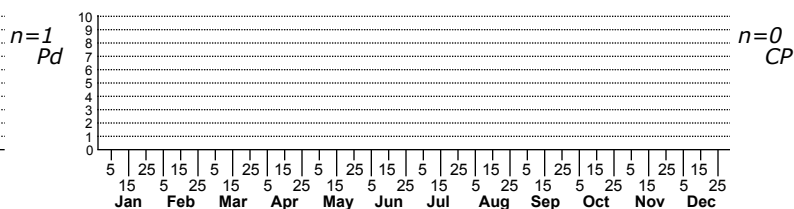
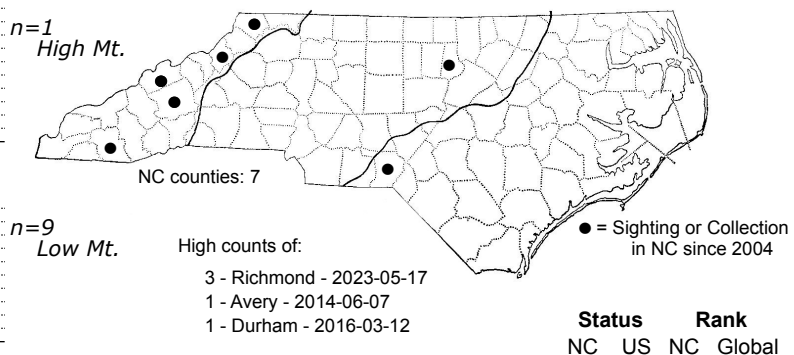
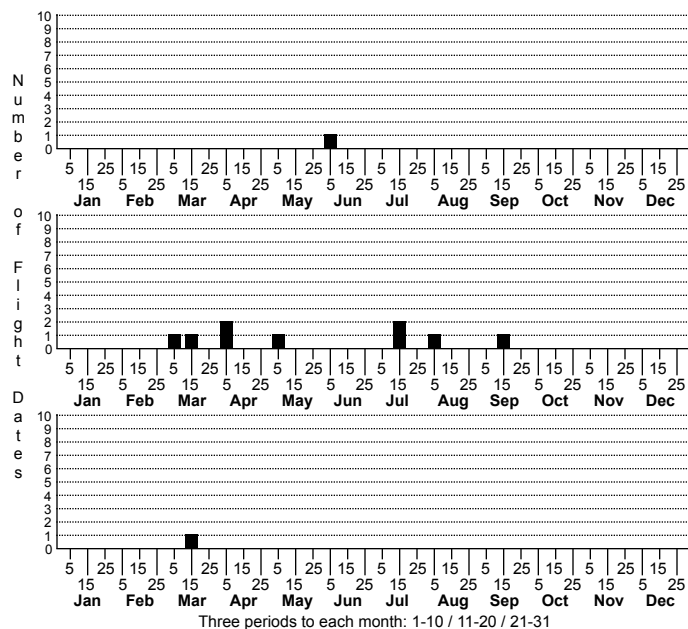


## *Bucculatrix angustata* Narrow Bucculatrix



FAMILY: Bucculatricidae SUBFAMILY: [Bucculatricinae] TRIBE: [Bucculatricini]

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: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1963, p. 89)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1963)

ID COMMENTS: This is a very small moth with a distinctive white patterning on a darker background. The following description is based on the description by Braun (1963). The face is white and the tuft whitish with a median brown line. The eye-cap is whitish, while the antennal stalk is pale brownish white with dark brown annulations toward the apex. The thorax is pale to dark brown, with the median area usually darker. The ground color of the forewing is dark brown (especially females) to whitish brown, and marked with non-silvery white streaks. A prominent longitudinal white streak runs from the base out to about three-fifths the length of the wing and is bordered with a zone of dark brown dusting on both sides. Two white, posteriorly oblique streaks extends from the costa towards the middle of the wing. The first begins at about one-half the wing length and curves towards the middle of the wing. The second is at about three-fourths, is slightly less oblique, and has a distinctive black spot or dash at its apex. Dark shading is often evident between the two streaks. Two similar, posteriorly oblique white streaks occur on the inner margin, one beginning at about one-half and the other at three-fourths. These often enclosed a dark crescent-shaped region between them. A dark spot located at the apex of the wing may also be partially or nearly completely encircled with an often triangular-shaped white mark. A line of dark-tipped scales curves around the apex through the pale cilia. The hindwing is narrowly lanceolate and is pale brownish gray. The legs are pale brownish gray, with the tarsal segments black-tipped. Braun (1963) noted that the black dot or short longitudinal line at the tip of the second costal streak is a good diagnostic character. It is especially noticeable in paler specimens, and is often discernible in much worn and nearly denuded specimens.

DISTRIBUTION: *Bucculatrix angustata* is a common and widespread species. Specimens have been found in southern Canada (Alberta; Manitoba; Ontario; Quebec; Nova Scotia), and throughout much of the eastern US. The range in the US extends from the New England states southward to southern Alabama and the Gulf States, and westward to Texas, Iowa, Wisconsin and Minnesota. Populations appear to be absent or rare in most of the non-mountainous regions of the Atlantic Seaboard from Maryland southward to Florida. As of 2024, our records come from both lower and higher elevations in the mountains, and at single sites in the eastern Piedmont and the Sandhills.

FLIGHT COMMENT: Local populations are multivoltine, with records extending from April through October in areas outside of North Carolina. As of 2021, our records extend from mid-March through early June.

HABITAT: The habitats that are preferred are poorly documented. Based on host plants, they probably include open woods and woodland edges, as well as more open, sunny sites such as old fields and roadways.

FOOD: The larvae use members of at least three genera of composites, including Asters (*Symphotrichum*), Goldenrods (*Solidago*), and Fleabanes (*Erigeron*). Asters appear to be the most important hosts (Eiseman, 2019). The known hosts include Heartleaf Aster (*Symphotrichum cordifolium*), Drummond's Aster (*S. drummondii*), Smooth Blue Aster (*S. laeve*), Calico Aster (*S. lateriflorum*), New England Aster (*S. novae-angliae*), New York Aster (*S. novi-belgii*) and Annual Fleabane (*E. annuus*). In North Carolina, mines have been found on *Symphotrichum*.

OBSERVATION\_METHODS: The adults come to blacklights but we do not have enough information to estimate how often. We recommend searching for leaf mines and rearing adults to better document host use and preferred habitats in North Carolina.

NATURAL HERITAGE PROGRAM RANKS: GNR [SU]

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

COMMENTS: This species may turn out to be widespread in the western half of the state, but we currently do not have enough information to estimate its conservation status.