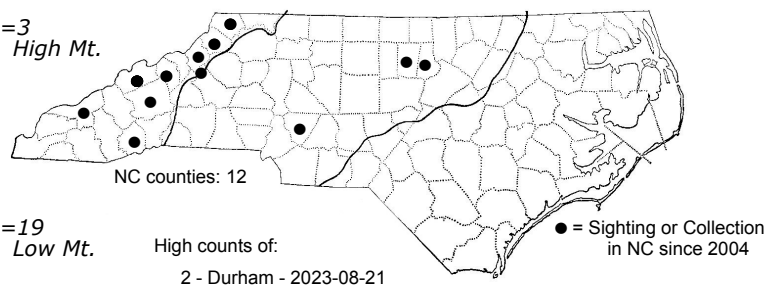
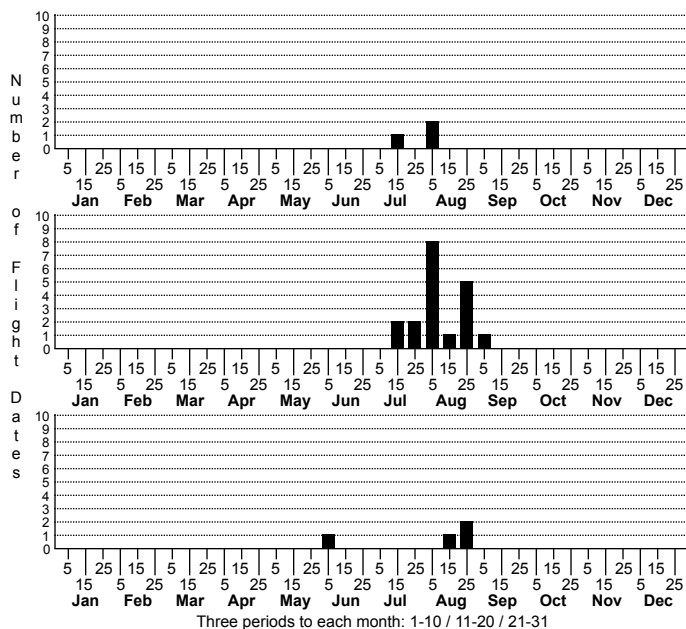


# *Epiblema carolinana* Gray-blotched Epiblema Moth



High counts of:  
 2 - Durham - 2023-08-21  
 2 - Watauga - 2024-07-14  
 1 - Yancey - 2018-08-05

Status	Rank
NC	US
NC	Global



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini  
 TAXONOMIC\_COMMENTS:

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Wright and Gilligan (2023)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Thompson and Guelph (1928)

ID COMMENTS: This species has complex patterning that includes mixtures of white, brown, gray and black. The palps, head, antennae and thorax are brown, with the latter having a tuft of reddish-brown scales. The forewing has a broad, dark brown basal patch that is speckled with white and black patches. The distal margin of the basal patch is scalloped and blackish, and contrast with the middle two-thirds of the wing that is white with overlaying diffuse patches of gray. The whitish middle portion of the wing is followed by a zone of predominantly brownish patches that are interspersed with irregular white streaks and gray striations, along with a prominent black spot in the pre-tornal area (Wright and Gilligan, 2023). The ocellus is white with transverse gray bars on the lateral margins. There is a black eyespot or elongated mark below the apical corner of the ocellus and from 1-4 black spots or dashes on the white central field. The costal strigulae are mostly gray on the basal two-thirds of the costa, but white on the apical third to the apex. There is a narrow reddish-brown band on the apical two-thirds of the termen and the fringe is gray.

DISTRIBUTION: *Epiblema carolinana* is found in eastern North America. The range extends from Maine and other New England states southward to northern Florida, and westward to western Tennessee, Missouri, Iowa, eastern Kansas and Minnesota. Populations are also known from adjoining areas of southern Canada from Manitoba eastward to New Brunswick and Nova Scotia. As of 2024, our records are all from the Blue Ridge and Piedmont.

FLIGHT COMMENT: The adults have been observed from May through September in different areas of the range, with a seasonal peak commonly in July and August. As of 2024, our records extend from early June through late August.

HABITAT: Populations are commonly found in mesic to bottomland settings, particularly where openings support the establishment of Cutleaf Coneflower and possibly other hosts.

FOOD: The larvae have been reported to feed on *Rudbeckia*, with Cutleaf Coneflower (*Rudbeckia laciniata*) appearing to be a widely used host (Heinrich, 1923; Thompson and Guelph, 1928; Putman, 1942; MacKay, 1959; Godfrey et al., 1987; Miller, 1987; Lam et al., 2011; Wright and Gilligan, 2023). Grayhead Coneflower (*Ratibida pinnata*) is also a documented host based on U.S. National Museum records (Wright and Gilligan, 2023).

OBSERVATION\_METHODS: The adults are attracted to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S3S4]

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

COMMENTS: This species can be locally common in areas that support Cutleaf Coneflower. More information is needed on host use in North Carolina.