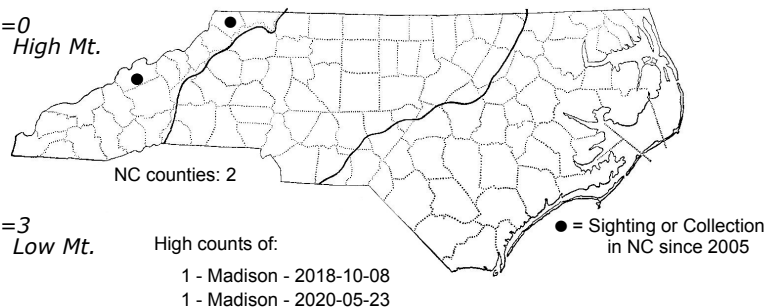
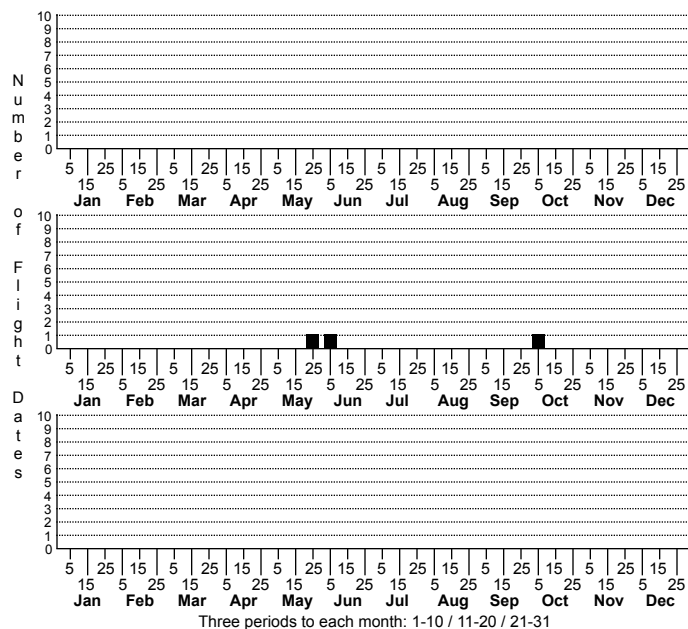


# *Neocaloreas leucobasis* None



Status	Rank
NC	US
NC	Global



FAMILY: Choreutidae SUBFAMILY: Choreutinae TRIBE:

TAXONOMIC\_COMMENTS: *Caloreas* is a genus of metalmark moths with eight species that were previously described from North America, as well as numerous described and undescribed forms in the Neotropics. Heppner (2022) recently published a revision that included the description of many new North American species with western affinities. He also split the traditional genus *Caloreas* into two genera (*Caloreas* sensu stricto and *Neocaloreas*). North American members of this complex now include 15 species of *Caloreas* and five species of *Neocaloreas*. Only three species are known from eastern North America, including two species of *Caloreas* in eastern Canada, and one species *Neocaloreas* that was previously known only from Northeast (New England and southeastern Canada) (see Map 2, p. 88).

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Fernald (1900); Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is mostly based on that of Fernald (1900) and Forbes (1923). The antenna is finely banded with black and white. The head, thorax, and basal third of the forewing is cream-colored to white and contrast sharply with the remainder of the wing, which is predominantly dark fuscous. The darker, apical two-thirds of the wing has complex patterning that includes a whitish central patch that extends from the costa to about the middle of the wing. The patch is surrounded by metallic silvery gray to bluish gray dusting that is weakly organized as bands. The subapical region has a narrow light reddish brown band and adjoins dark and light bands in the cilia. Blackish wormy streaks and blotches are present in the remainder of the wing. The legs are boldly marked with white and blackish banding. The hindwing is warm brown, and the upper side of the abdomen is brown with lighter scales at the end of each segment. The angle and quality of light can greatly modify the appearance of specimens, but the contrasting white and dark patterning is distinctive for this species. This species closely resembles other North American *Neocaloreas*, but is the only one that occurs in eastern North America.

DISTRIBUTION: *Neocaloreas leucobasis* is restricted to southeastern Canada (Ontario and Quebec) and the northeastern US. Populations have been found in Massachusetts, New Hampshire, and Vermont, and likely occur in nearby states (Heppner (2022)). Our two specimens from Madison County represent a major disjunct from northern populations in the eastern US. Given that this species has strong northern affinities, it is surprising to find them at lower elevation sites in the mountains.

FLIGHT COMMENT: Specimens have been observed from April through December in areas outside of North Carolina. Our two records are from October.

HABITAT: The host plants and habitats are poorly documented. As of 2022, we have two specimens from a lower-elevation site with a pasture that was next to an extensive stand of River Cane (*Arundinaria gigantea*).

FOOD: The only rearing record is from an evening-primrose (*Oenothera* sp.) as reported by Heppner (2022). He noted that there are several perching records for Pearly Everlasting (*Anaphalis margaritacea*), which suggest that it may be an important host. This northern species is not native to North Carolina but is occasionally grown as an ornamental. It is not present in the vicinity of our only known collection sites in Madison County, which suggests that other hosts are used in the state.

OBSERVATION\_METHODS: The adults appear to rarely visit lights.

NATURAL HERITAGE PROGRAM RANKS: GNR SNR [S1?]

STATE PROTECTION:

COMMENTS: This species appears to be disjunct and rare in North Carolina. We need additional information on its distribution and abundance before we can assess its conservation status.