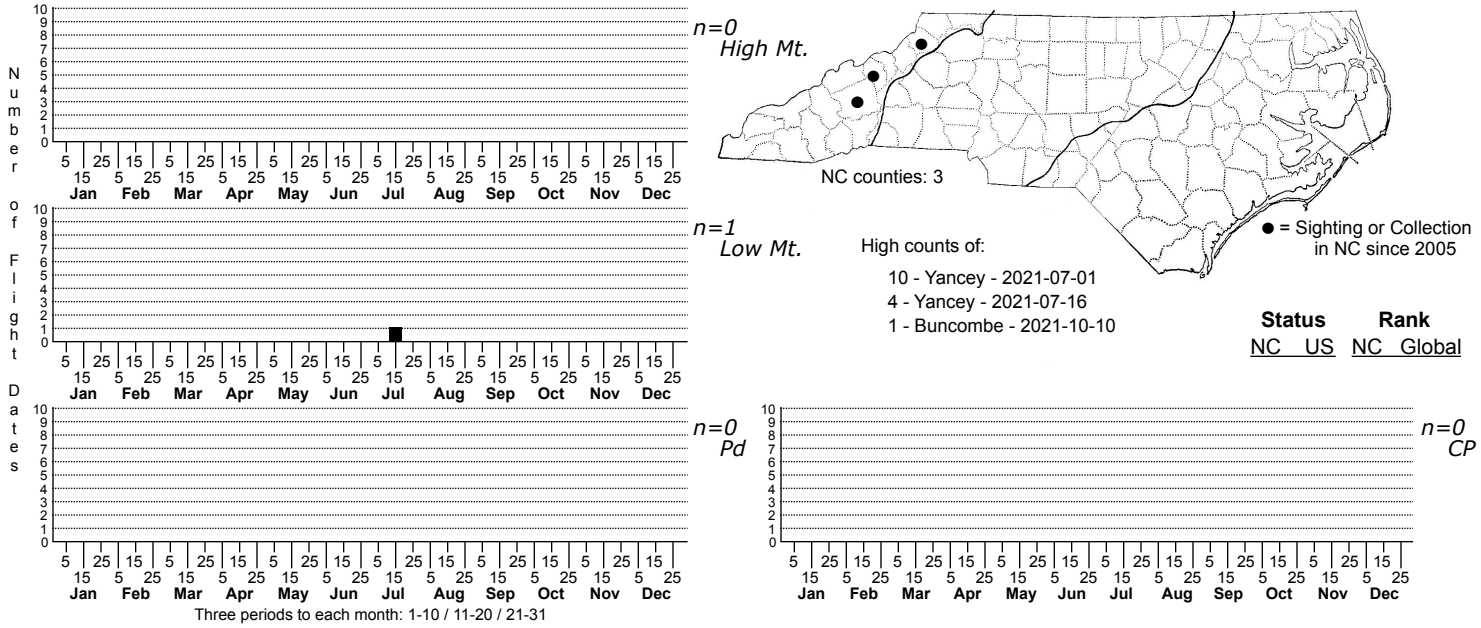
Cameraria lentella None



FAMILY: Gracillariidae SUBFAMILY: Lithocolletinae TRIBE:
TAXONOMIC_COMMENTS: Cameraria is a genus of leaf-mining micromoths. Many species are stenophagous and specialize on a small number of closely related host species. There are currently more than 50 described species in North America.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Braun (1908)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1908); Eiseman (2019)

ID COMMENTS: This is a somewhat distinctive Cameraria with two angulated white fasciae with dark posterior margins, a white subapical costal spot and opposing dorsal streak, and heavy black dusting in the apical region. The following detailed description is based in part on the description by Braun (1908). The antenna is grayish and broadly annulated with dark brown. The face and palps are whitish, but on some individuals may have a golden tinge. The head tuft is reddish saffron and mixed with whitish scales behind. The thorax and forewing are deep reddish saffron, and a narrow white line on each side of the thorax is continuous with an indistinct curved whitish basal streak at the inner angle. The basal streak is sometimes absent and replaced by the few black scales which form its external margin. An angulated white fascia is present at about the basal third and at the middle of the wing. Both are strongly margined with black scales on the posterior margin, and have a reduced series of black scales on the anterior margin near the costa. The first fascia on some specimens is broken into a matching costal and a dorsal streak that are not connected, but have continuous black dusting from the costa to the dorsal margin. A white costal spot or short oblique streak is present at the apical third that is margined with a few black scales. These are opposed by a long oblique dorsal white streak that is strongly margined behind with black scales. Rarely, the costal streak (if present) and dorsal streak may join or nearly join to form a third angulated fascia. In addition to the costal spot, a small patch of black scales is usually evident between the costal spot or streak and the second fascia, and a faint white spot may be evident near the apex. Overall, the apical region is densely dusted with black. The cilia vary from grayish ocherous to more gray toward the tornus, and have a dark brown line that runs through the middle. The hindwing is gray, and the cilia are gray with an ocherous tinge. The abdomen is dark gray above, pale reddish beneath, and has a reddish anal tuft. The hind tibia is reddish towards its apex, and the tarsi are white with black annulations.

DISTRIBUTION: Cameraria lentella occurs in eastern North America and is mostly restricted to southern Canada (Ontario; Quebec) and the northeastern US to as far south and west as Ohio, Illinois, New Jersey, and Washington, DC. Two populations were discovered in Yancey Co. and Buncombe Co. in 2021 that appear to be components of a southern disjunct group in the southern Appalachians. We still have much to learn about the distribution of this seemingly uncommon species in North Carolina.

FLIGHT COMMENT: The mines and adults have been found from April through October. As of 2022, we have mine records from early July and early October, which suggest two broods per year in North Carolina. A mine from October had larvae in overwintering niduses, and the adults emerged in March within four weeks after being removed from a refrigerator. This suggest that adults would likely first emerge in April or perhaps May in natural sites in the mountains.

HABITAT: Populations are generally associated with mesic hardwood forests. All of our records as of 2022 are from rich, mesic forests at mid-elevational sites in the mountains.

FOOD: This species uses members of the Betulaceae. American Hop-hornbeam (Ostrya virginiana) appears to be the primary host (Eiseman, 2022), but there is at least one record of the species using Sweet Birch (Betula lenta). The latter is questionable and may reflect a misidentified plant specimen. In North Carolina, we have rearing records from Hop-hornbeam.

OBSERVATION_METHODS: The adults appear to rarely visit lights and are best obtained by rearing them from the mines on Ostrya.

NATURAL HERITAGE PROGRAM RANKS: GNR S1S2

STATE PROTECTION:

COMMENTS: This species appears to be uncommon to rare in North Carolina, where there appears to be a southern disjunct population that is isolated from the main range farther north.