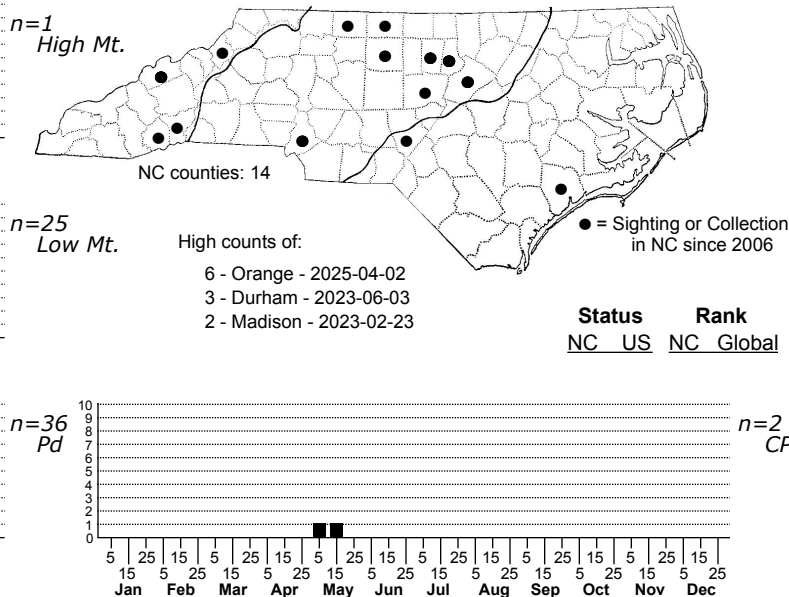
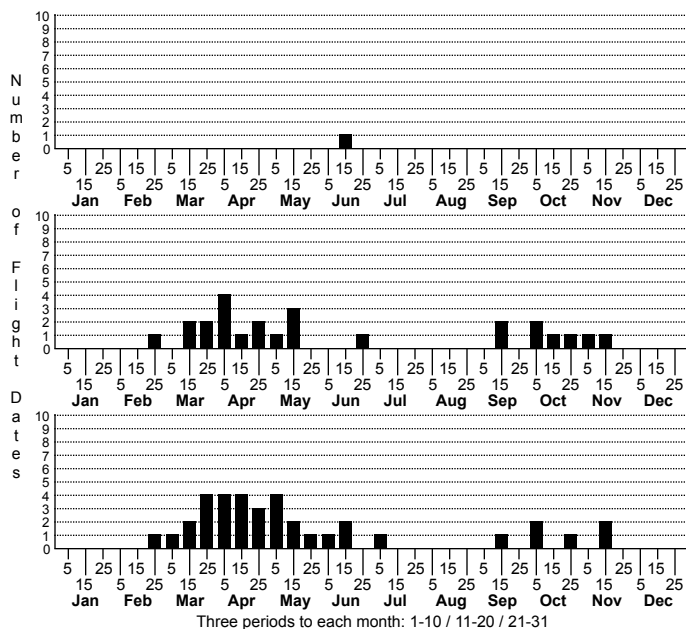


Elachista illectella None



FAMILY: Elachistidae SUBFAMILY: Elachistinae TRIBE: Elachistini

TAXONOMIC COMMENTS: *Elachista* is a large genus of small moths that occur worldwide. Around 135 Nearctic species are currently recognized. They specialize on monocots and most feed on either grasses (Poaceae) and sedges (Cyperaceae).

FIELD GUIDE DESCRIPTIONS: Covell (1984; as *Cosmiotes illectella*)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1948, p. 91, as *Cosmiotes illectella*)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1948)

ID COMMENTS: This is a minute fuscous to black-and-white moth, with the females darker and more boldly marked than the males. A narrow white band is located at the middle of the wing and a broken white band also occurs in the subterminal area (Braun, 1948). Both sexes have a whitish spot at the apex (rarely not present) that helps to distinguish them from similar species, and the males have long yellowish white hairs on the last abdominal segments. The following detailed description is based on Braun (1948). The adults are sexually dimorphic, with the females noticeably darker than the males. In both sexes, the head is fuscous and speckled with dark gray, while the face is sometimes paler and more or less silvery. The labial palps are fuscous, but paler and sometimes whitish above, with a black spot at the base of the third segment. The antenna is dark fuscous with narrow paler annulations. The forewing of the male is fuscous overall. The bases of the scales are grayish white and the tips darker, which creates an overall grainy appearance to the wing. Just before the middle there is a slightly oblique, irregular, narrow fascia that is sometimes much reduced and indicated only by a broken line. At two-thirds the wing length, there is a white costal and an opposite dorsal spot that are occasionally obsolete. A few black scales usually separate their apices. The cilia are fuscous and whitish around the apex, while the marginal scales projecting into them are conspicuously black-tipped.

The forewing of the female is darker than that of the male and more evenly dark brown or black. When irrorated, it tends to be paler before the fascia, especially in the late fall and early spring generations. The fascia is broad and silvery white, while the dorsal and costal spots are silvery white and never reduced in size. In general, the female has whiter and more boldly contrasting marks than the male. The cilia is fuscous, with white around the apex. The black-tipped marginal scales are white at the base around the apex, and form a more or less conspicuous white transverse mark in the cilia. The hindwing and cilia are fuscous and darker in the female. The legs are gray, and the hind tibia has a white band before the middle and at the apex. The abdomen is fuscous.

Elachista irrorata and *E. illectella* are easily confused. Both males and females of *E. irrorata* are distinctly black-and white and lack an apical white spot on the forewing. Female *E. illectella* closely resemble the males and females of *E. irrorata*, but can be distinguished by the whitish spot at the apex (absent in *E. irrorata*).

DISTRIBUTION: *Elachista illectella* is found in eastern North America, with at least one record from Alberta. The range in the East includes southern Canada (Ontario; Quebec; Newfoundland) and the New England states, to as far west as Illinois and Oklahoma, and as far south as Mississippi, Tennessee, and South Carolina. Populations appear to be absent from much of the southeastern Coastal Plain. As of 2020, our records are from the Piedmont, and both lower and higher elevations in the mountains.

FLIGHT COMMENT: Local populations appear to have two or more generations per year, with most adult records occurring from March through October in different areas of the range. As of 2020, our records extend from March through November, with most from March through June.

HABITAT: The adults can be found in a variety of habitats that range from fields, meadows, and roadsides to forested sites with woodland grasses.

FOOD: The larvae are polyphagous and feed on several genera of grasses (Braun, 1948). The known hosts include Kentucky Blue Grass (*Poa pratensis*) and other *Poa* species, Common Timothy (*Phleum pratense*), Sweet Vernal Grass (*Anthoxanthum odoratum*), and species of *Agrostis*, *Elymus*, *Festuca*, and *Bromus* (Eiseman, 2022). In North Carolina, mines have been recorded on Sweet Vernal Grass, Lesser Quaking Grass (*Briza minor*), Sweet Woodreed (*Cinna arundinacea*), Eastern Bottlebrush-grass (*Elymus hystrix*), Virginia Wild-rye (*Elymus virginicus*), Nodding Fescue (*Festuca subverticillata*), and Common Velvet Grass (*Holcus lanatus*).

OBSERVATION METHODS: The adults are attracted to lights and the leaf mines can be found by searching grass leaves throughout the year.

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: We currently do not have enough information on the distribution, host plants, or habitat associations of this species to draw any conclusions about its conservation status.