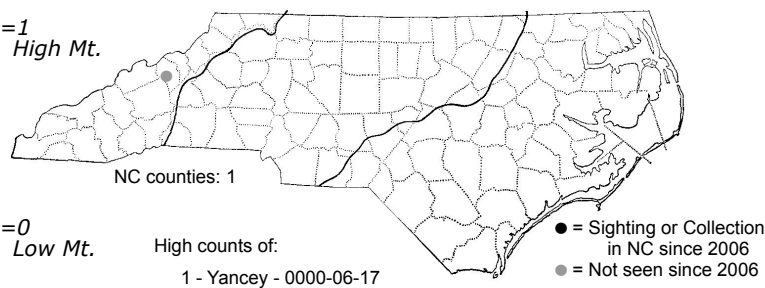
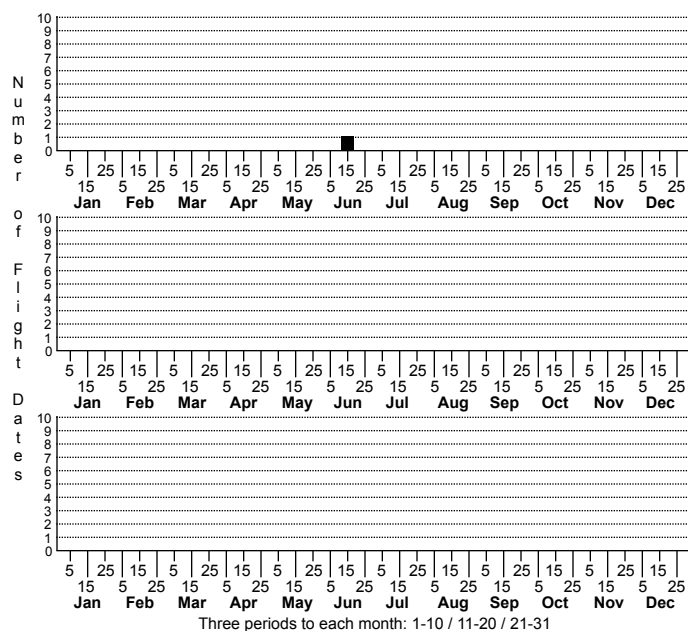


Elachista leucofrons None



Status Rank
NC US NC Global

FAMILY: Elachistidae SUBFAMILY: TRIBE:

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:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1948, p. 64)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Braun (1948)

ID COMMENTS: This is a minute black and white moth. The head is blackish with a contrasting white front. The forewings are dark brown or blackish, with a white basal patch, a white median band that completely crosses the wing, and two offset white triangular patches in the subterminal area (Braun, 1948). The adult of *E. albicapitella* is very similar to *E. leucofrons* but differs in having the head and the posterior dorsal tuft of the thorax white. Both structures are dark brown in *E. leucofrons* (sometimes intermixed with white scales, but never contrastingly pure white). Microleps.org has excellent images that show these characters. The wing pattern is also similar to that of *E. cucullata*, but the median band in that species does not reach all the way to the inner margin and the costal spot is anterior to the sub-tornal spot (reverse in *E. leucofrons*). For photographic records to be acceptable, both a frontal view and a good view of the dorsum of the thorax are required. The following detailed description is based on Braun (1948). The head is blackish and slightly speckled with lighter scales. A creamy white patch is present across the face and below the base of the antennae that sometimes covers the whole face below the antennae. The labial palp is black below and at the extreme apex, but white above, with the white completely encircling the base of the third segment and the tip of the second. The antenna is gray with pale annulations. In the female, these become white and more conspicuous towards the tip. The thorax is blackish, with the tip of the tegula white. The forewing is blackish with speckling that sometimes forms faint whitish lines. A narrow white fascia extends from the extreme base of the costa across the base to the dorsal margin. A second irregular white fascia is present just beyond one-third that is slightly oblique in its costal half and nearly perpendicular in its dorsal half. An erect narrow white spot is present just before the tornus, and a similar costal spot is present slightly posterior to the sub-tornal spot. The costal spot is sometimes nearly obsolete. The cilia is grayish black with a row of black-tipped scales at the base. The hindwing and cilia are dark blackish brown. The legs are blackish, except for the femora, and the tips of all segments and the basal half of the hind tibia are whitish. The abdomen blackish brown above and silvery beneath.

DISTRIBUTION: *Elachista leucofrons* is found in North America, with only a few scattered records from Michigan, Illinois, Ohio, and North Carolina. Braun (1948) also reported this species from Colorado and New Mexico, but they may be erroneous (Eiseman, 2019). We have only a single historic record for this species in North Carolina from the western mountains.

FLIGHT COMMENT: Populations appear to be single-brooded, with the adults emerging after the spring flush of growth.

HABITAT: The habitat where this species was recorded in North Carolina was not described. Based on its host plant preferences, Northern Hardwoods or some other type of moist forest seems likely. *Elymus* species are often found along river margins and bottomlands, and on moist slopes and roadbanks.

FOOD: The larvae are leaf miners on large woodland grasses in the genus *Elymus*, including Canada Wild-rye (*E. canadensis*), Virginia Wild-rye (*E. virginicus*), and Eastern Bottlebrush-grass (*E. hystrix*; Braun, 1948).

OBSERVATION_METHODS: Most records are from adults that were reared from leaf mines. We recommend searching for the leaf mines in late spring and rearing the adults.

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 have only one historic record for this species in North Carolina and are unable to assess its conservation status without more information on its distribution, host plants, and habitat associations.