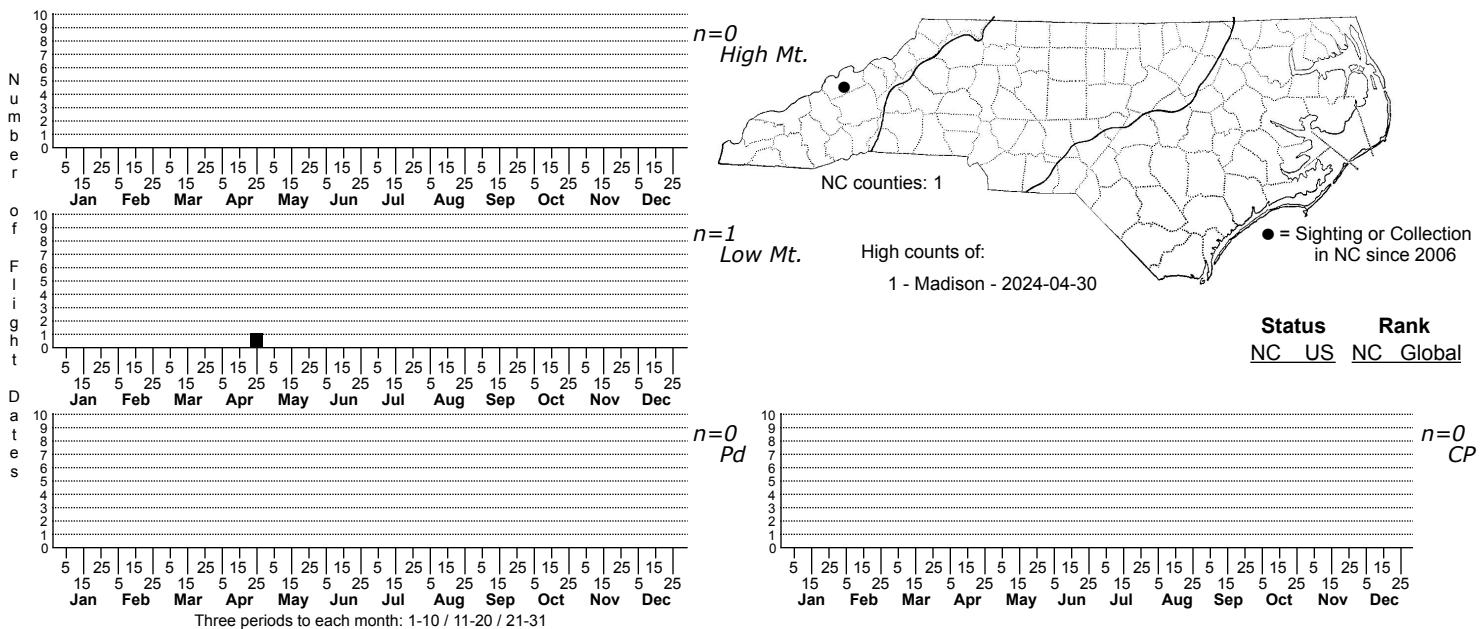


***Stigmella saginella* None**



FAMILY: Nepticulidae SUBFAMILY: TRIBE:

TAXONOMIC COMMENTS:

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Braun (1917), Newton and Wilkinson (1982)

TECHNICAL DESCRIPTION. IMMATURE STAGES: Eiseman (2022)

ID COMMENTS: <i>Stigmella saginella</i> is distinctive in being only one of two <i>Stigmella</i> in North America that have a light ground color that is dusted with fuscous scales (Braun, 1917; Newton and Wilkinson, 1982). The other species (<i>S. pallida</i>) is known from one site in Ohio and can be distinguished by its very light head tuft, compared with the dark head tuft of <i>S. saginella</i>. The following description is primarily based on that of Braun (1917). The face is pale buff, with the head and head tuft above dark brown. The collar and eye-caps are pale buff, while the thorax and forewing vary from being pale ocherous or pale buff to even whitish. Both are dusted with varying numbers of buff scales with fuscous tips that are often denser towards the outer half of the wing. The dark-tipped scales are either evenly distributed or collected into small spots, but never form a band. The cilia are pale ocherous and the hindwing pale gray. This species resembles <i>Zimmermannia obrutella</i>, but can be readily distinguished by the prominent collar between the head and thorax that consists of flattened scales (typical of all <i>Stigmella</i> species). The collars of <i>Zimmermannia</i> species are inconspicuous and consist of hair-like scales.

DISTRIBUTION: <u>Stigmella saginella</u> is found in eastern North America in association with hardwood forests. Specimens have been documented in southern Canada (Ontario; Quebec), and in the U.S. in Massachusetts, New York, Ohio, Illinois, Missouri, Pennsylvania, Kentucky, Virginia and Texas (Newton and Wilkinson, 1982; Eiseman, 2022; iNaturalist). This species was recently found in North Carolina at a lower-elevation site in the central Blue Ridge.

FLIGHT COMMENT: The flight season is poorly documented due to the scarcity of records, but local populations appear to be multivoltine, with the first flight occurring during the spring leaf-out. MPG has one record from March and several from July through September. Braun (1917) noted that occupied mines have been found from June through October. As of 2024, our only record is for an adult from late-April.

HABITAT: This species is generally associated with hardwood or mixed hardwood-pine forests where oaks are present.

FOOD: The larvae feed on members of the white oak group (Wilkinson and Scoble, 1979; Eiseman, 2022). The documented hosts include White Oak (*Quercus alba*), Swamp White Oak (*Q. bicolor*), Bur Oak (*Q. macrocarpa*), Chestnut Oak (*Q. montana*) and Post Oak (*Q. stellata*).

OBSERVATION_METHODS: The adults have rarely been found, but appear to be attracted to lights to some extent. Most records are based on reared adults from leaf mines.

NATURAL HERITAGE PROGRAM RANKS: GNR [S1S3]

STATE PROTECTION:

COMMENTS: This seemingly rare species was only recently found in North Carolina. More information is needed on its distribution, abundance and host use before we can accurately assess its conservation status within the state.