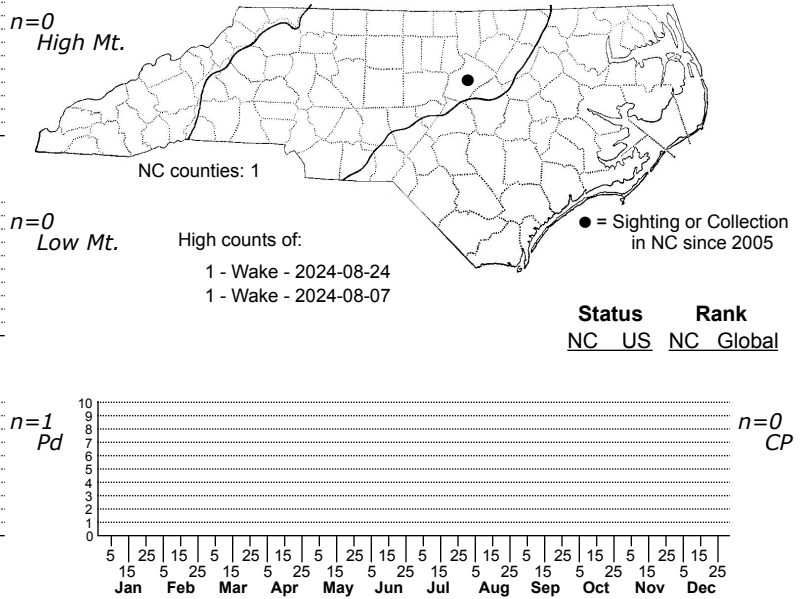
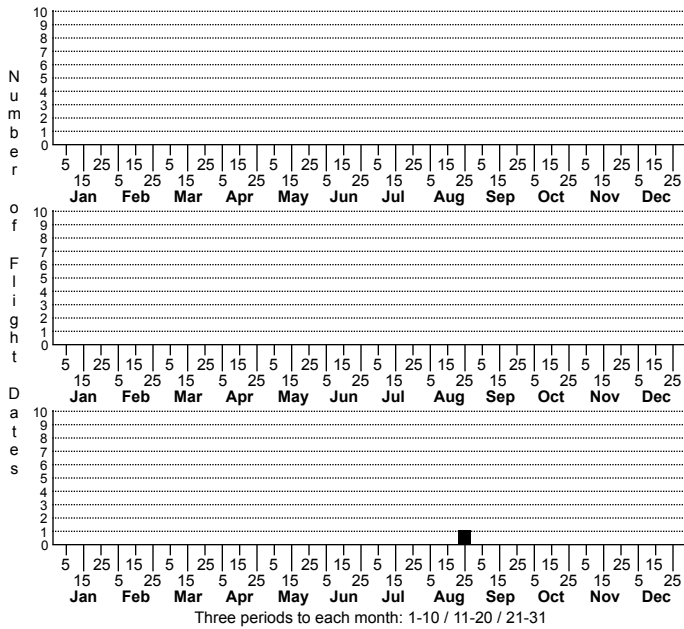


Marmara new species 27 - on Senna No common name



FAMILY: Gracillariidae SUBFAMILY: Gracillariinae TRIBE: [gracillariini]
TAXONOMIC_COMMENTS: The genus *Marmara* contains 19 described species from North America and numerous undescribed species. Most species are monophagous, and the mines have been found on over 80 North American plant genera that belong to 40 families (Eiseman et al., 2017). Given the small number of described species relative to the large number of hosts, there appear to be dozens of undescribed species in the US. Many of the species are difficult to rear and are only known from leaf or stem mines. North Carolina appears to have numerous undescribed species based on host preferences and mine characteristics, and Tracy Feldman has spearheaded efforts to document these within the state. We have included *Marmara* that we believe are probably undescribed species (ca. 30) and have listed these by their host plants. We encourage individuals to submit any leaf or stem mines that they find based on the plant hosts in order to better document the distribution and relative abundance of these forms in North Carolina.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS:
TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: This appears to be an undescribed species that specialized on species of *Senna*. Tracy Feldman has reared one adult, but it has yet to be described in detail.

DISTRIBUTION: The range is poorly documented. We have a single record from North Carolina as of 2024, and there is another from Oklahoma that appears to be this species (Eiseman, 2022).

FLIGHT COMMENT: Our one adult record as of 2024 is from August.

HABITAT: Local populations are associated with our native *Senna* species. These can be found in a variety of habitats where there are opening or edges that provide a moderate amount of sunlight. Examples include openings in bottomland forests, woodland borders and glades.

FOOD: This species appears to specialize on native species on *Senna*, including Maryland Senna (*S. marilandica*).

OBSERVATION_METHODS: We recommend searching for the stem mines on our native *Senna* species during the summer months. The adults should be reared, photographed and collected whenever possible.

NATURAL HERITAGE PROGRAM RANKS: GNR[SU]

STATE PROTECTION:

COMMENTS: