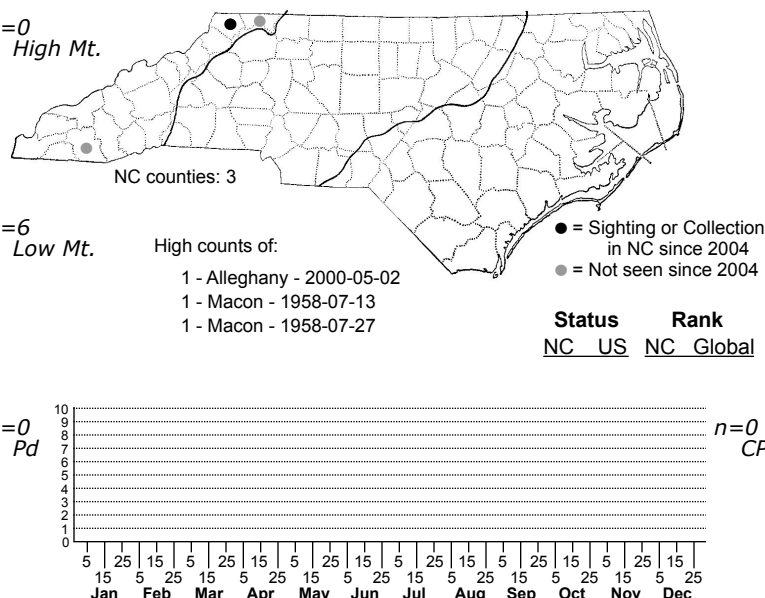
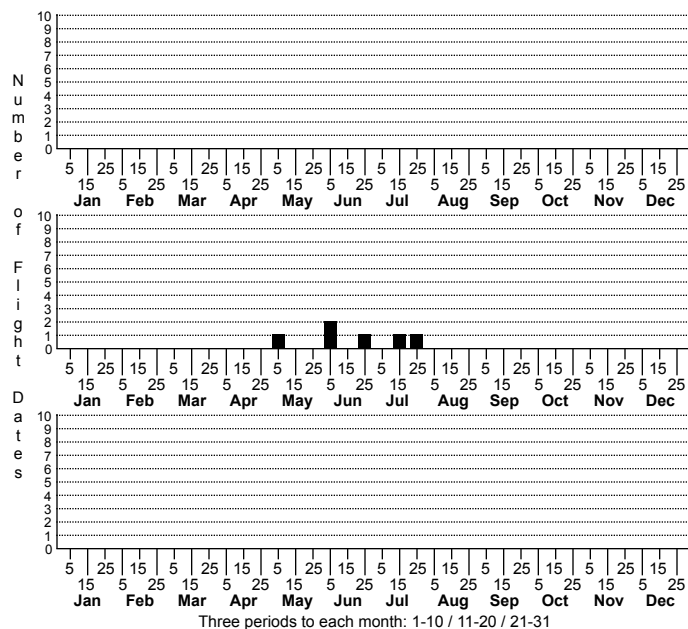


Nemoria tuscarora Tuscarora Emerald



FAMILY: Geometridae SUBFAMILY: Geometrinae TRIBE: Nemoriini

TAXONOMIC COMMENTS: One of 35 species in this genus that occur in North America (Ferguson, 1985), nine of which have been recorded in North Carolina. Ferguson (1969) included *tuscarora* within the *Extramaria* Species Group (Group IV), which in North Carolina also includes *elfa* and *outina*.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Ferguson (1969, 1985)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Gruber (2016)

ID COMMENTS: A medium-sized Emerald. Both pairs of wings are bright green with white antemedian and postmedian lines. Distinctive features include a lack of a terminal line and discal dots on the wings and white spots on the abdomen; the fringe is pure white and the front is faded rusty red (Ferguson, 1969, 1985). *Nemoria mimosaria* is similar in both size, color, and pattern but has a single white spot on the abdomen (genitalic features are also quite different; see below).

DISTRIBUTION: Appears to be restricted to the Mountains in North Carolina but has been found at lower elevations further to the north (Ferguson, 1969, 1985; Gruber, 2016)

FLIGHT COMMENT: Flies in both the spring and summer in North Carolina, but we do not have enough records to determine if there are two distinct flights

HABITAT: Records from North Carolina come from mesic, montane forests where bogs or other wetland habitats occur at least in the vicinity

FOOD: Larvae of this species have recently been observed on *Hypericum densiflorum* by Gruber (2016). In the mountains, this plant is usually associated with bogs and other wetlands; it also occurs in the Coastal Plain where the moth has not yet been observed.

OBSERVATION METHODS: The most recent records were obtained using blacklight traps, but we do not have enough data to determine how well it is attracted.

NATURAL HERITAGE PROGRAM RANKS: GU S1S3

STATE PROTECTION: Listed as Significantly Rare by the Natural Heritage Program. That designation, however, does not confer any legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: We still have very few records for this species, although more records are being made in states to the north. It may turn out to be a specialist on mountain wetland habitats but much still needs to be learned about the host plants and specific habitats used in North Carolina.