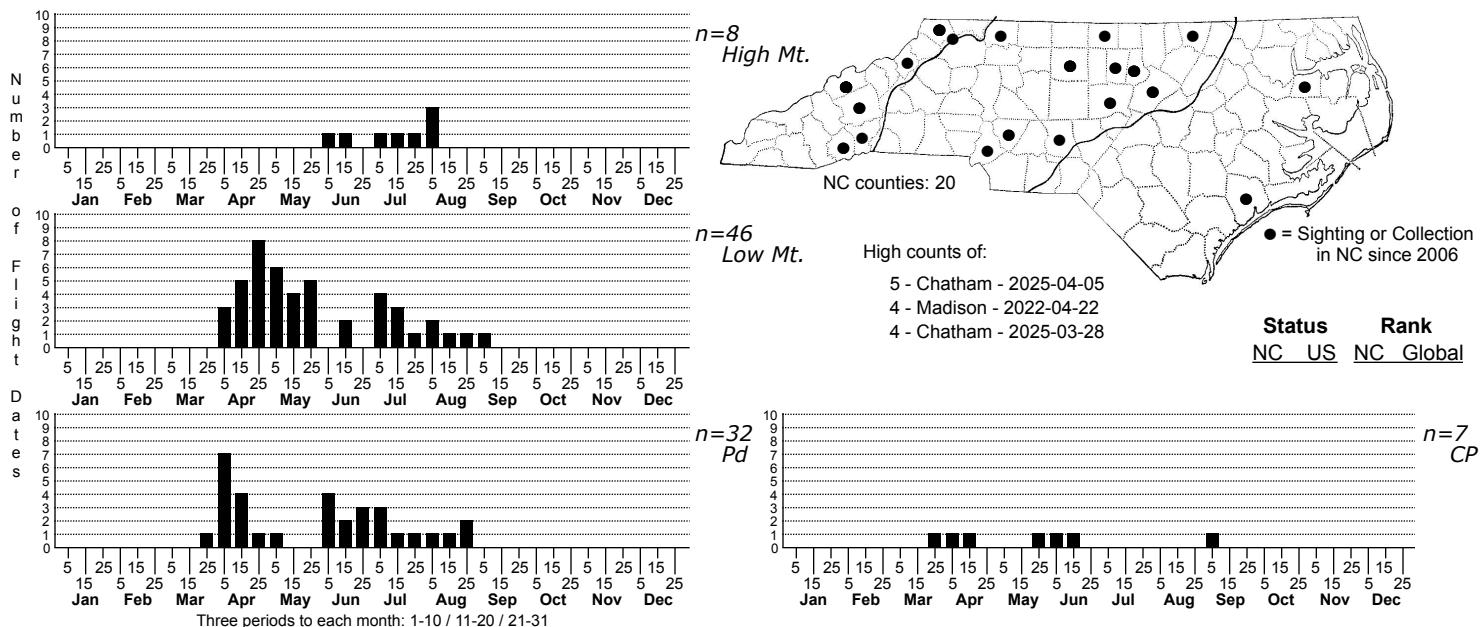


## *Caloptilia bimaculatella* Maple Caloptilia



FAMILY: Gracillariidae SUBFAMILY: Gracillariinae TRIBE: [Gracillariini]

TAXONOMIC COMMENTS: *Caloptilia* is a large genus with nearly 300 described species; 64 species have been described in North America north of Mexico. The larvae begin as leaf-mining sap-feeders, but the latter instars usually exit the mines and feed within a conical roll that begins at the leaf apex or at the tip of a leaf lobe.

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Beadle and Leckie (2012)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The forewing ground color, the top of the head, and the top of the thorax are purplish to brown. The forewing has two golden, rounded triangles (costal patches) that often touch or nearly touch, and the middle one is larger - reaching almost to the dorsal edge of the wing. The face is white and the labial palps are white with dark tips. The tibia and femur of the front and middle leg are dark brown to purplish brown, while the tarsi are white with dark spots near the tarsal joints (often faint). The rear legs is uniformly light tan to whitish. Mark Shields has collected specimens from Onslow County on the coast that have the apical triangle greatly reduced or missing, but otherwise conform to *C. bimaculatella*. We elected to assigned these to *C. bimaculatella*, although they may represent an undescribed species.

DISTRIBUTION: This species is broadly distributed in eastern North America, with populations ranging from southern Canada southward to Florida and westward to near the Mississippi River. In North Carolina, our records as of 2019 are entirely from the Blue Ridge and Piedmont, even though maples are common in the Coastal Plain.

FLIGHT COMMENT: *Caloptilia bimaculatella* appears to be multivoltine, with adults active from mid-April through September.

HABITAT: *Caloptilia bimaculatella* uses maples as host species and is primarily found in habitats with Red Maple (*Acer rubrum*), Sugar Maple (*A. saccharum*)x and Silver Maple (*Acer saccharinum*). This includes mixed pine-hardwood forests, deciduous forests, as well as urban landscapes.

FOOD: Conical leaf rolls with larvae have been found on several species of maples in the eastern US, including Red Maple (*Acer rubrum*), Sugar Maple (*A. saccharum*), and Silver Maple (*A. saccharinum*) (Eiseman, 2019). We do not have any feeding records in North Carolina.

OBSERVATION METHODS: The adults are attracted to UV lights. Searching for larvae in the rolled leaf tips of maples may prove to be a productive way to document local populations.

NATURAL HERITAGE PROGRAM RANKS: GNR S4S5

STATE PROTECTION: Has no legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: