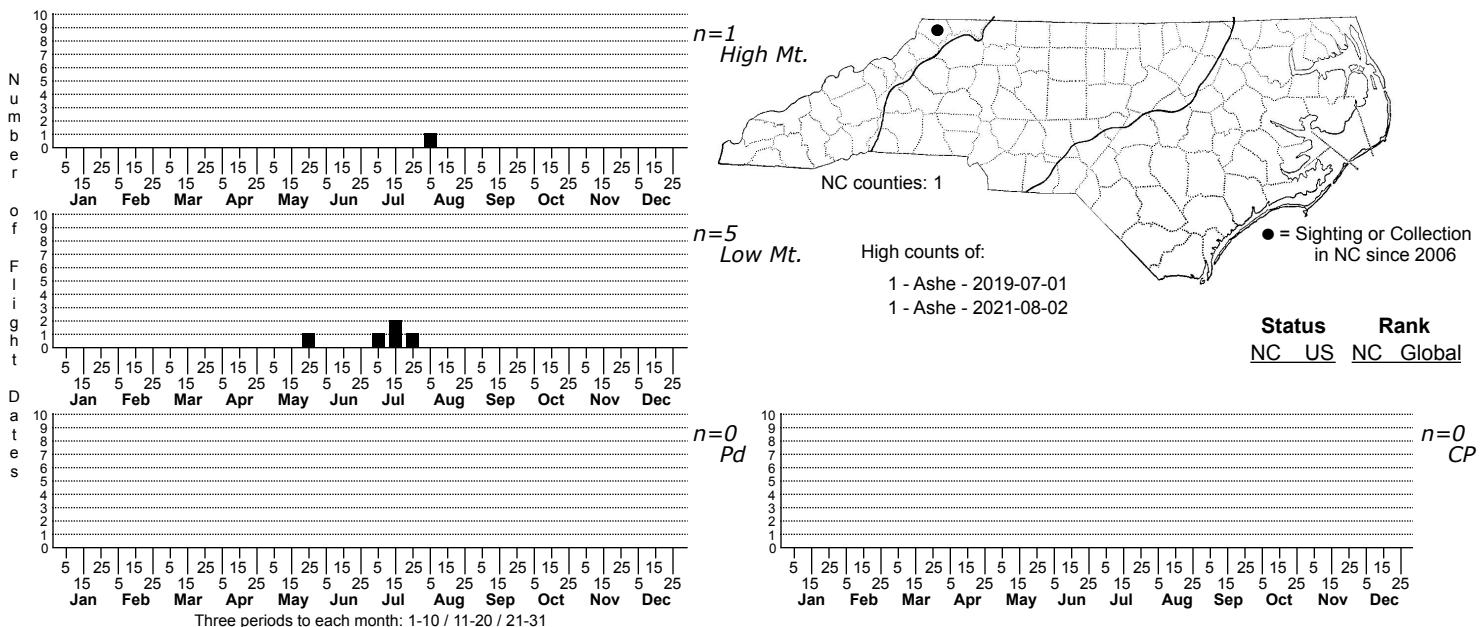


Caloptilia flavella None



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:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Ely, 1015.

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: As described by Ely (1915), the face and labial palps are pale yellowish, while the crown and thorax are straw colored with purplish iridescence. The antennae are yellowish gray and annulated with brown. The forewing has a yellowish tan ground color and is bordered on the costa with bright straw coloration. The costa usually has a series of fine dark dots along the margin, and the cilia on the apex are straw colored and intermixed with tan. The hindwing and cilia are yellow gray. The front and middle legs are dark brown except for the tarsi, which are white with dark brown dots at the joints. The femur of the rear leg is straw colored and shaded with brown near base, while the remainder of the leg is yellow gray.

DISTRIBUTION: Surprisingly few specimens of this species have been collected or observed since its original description in 1915, and most are from the northeastern US and adjoining areas of southern Canada. These include records from Ontario, Quebec, Nova Scotia, Maine, Vermont, Connecticut, Rhode Island, Pennsylvania and North Carolina (Eiseman, 2019). Tracy Feldman found leaf mines on *Morella cerifera* in Durham Co. that appear to be those of *C. flavella* (BugGuide).

FLIGHT COMMENT: Data on the flight season is very limited. Ely (1915) collected leaf mines in June and the adults emerged a few weeks later in July.

HABITAT: *Caloptilia flavella* is found in association with bayberries and wax-myrtles, which are the host plants. These generally grow in wet to moist coastal habitats such as pocosins, wet savannas, seepage bogs, and brackish marshes. They are sometimes planted as ornamentals as far west as the Piedmont (Weakley, 2015).

FOOD: This species is a specialist on species of *Morella*. The known hosts include Pocosin Bayberry (*M. caroliniensis*) and Common Wax-myrtle (*M. cerifera*). In North Carolina, mines have been recorded on Wax-myrtle.

OBSERVATION METHODS: Adults occasionally come to lights. Efforts need to be made in North Carolina to search the host plants during June for mines or leaf rolls and rear 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: