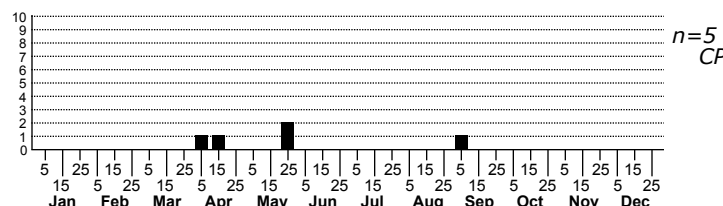
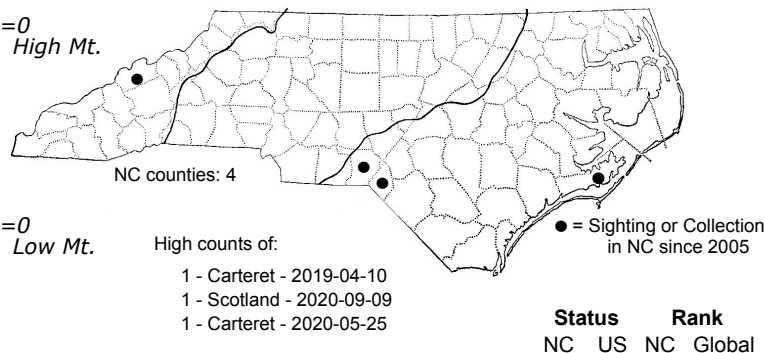


# *Caloptilia belfragella* Dogwood Caloptilia



FAMILY: Gracillariidae SUBFAMILY: Gracillariinae TRIBE:  
TAXONOMIC\_COMMENTS:

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Chambers (1875a)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Eiseman, 2019

ID COMMENTS: The following is based in part on the original description by Chambers (1875a). The head is purplish brown except for the white face. The labial palp is white, with a dark dot on the tip of the second segment. The third segment is often tipped with brown. The antenna, thorax and ground color of the forewing are all purplish brown. The costal 'triangle' is very pale lemon yellow and becomes truncate or rounded before terminating at the fold. The yellow mark extends posteriorly as a rather wide band along the costal margin to the cilia, and often has a series of small dark spots present along the costal edge. The fringe is light grayish brown to purplish brown with one or two darker lines usually evident along the outer half. The anterior and middle legs are purplish brown and the tarsi are white with little evidence of spotting on the tarsal joints. The hindleg is whitish, except for the purplish brown apical half of the femur.

DISTRIBUTION: *Caloptilia belfragella* is found in eastern North America, including southern Canada (Ontario; Quebec) and much of the eastern US. In the US, the range extends from Maine southward to northern Florida and westward to Texas, Oklahoma, Missouri, Illinois and Wisconsin. Populations are very spotty along much of the Atlantic Seaboard from New York to Florida. As of 2024, we have only a few records from the Coastal Plain, along with one from the Blue Ridge.

FLIGHT COMMENT: Adults have been found from March through September in areas outside on North Carolina. As of 2024, our records extend from early April to early September.

HABITAT: Both the hosts and habitats are poorly documented. The larvae depend on dogwoods (genus *Swida*; formerly *Cornus*), and our native species include ones that inhabit alluvial floodplains and wetland fringes to more mesic conditions. As of 2024, we also have records from coastal scrub and dune sites, an annually burned seepage area, and a high-elevation mesic site in the Blue Ridge.

FOOD: The only known host are Alternate-leaf Dogwood (*Swida alternifolia*), Silky Dogwood (*S. amomum*) and Rough-leaf dogwood (*S. drummondii*). Records of this species feeding on Sumac (*Rhus*) and a blueberry (*Vaccinium*) are thought to be erroneous (Eiseman, 2019; 2022). As of 2024, we have records for Alternate-leaf Dogwood and Silky Dogwood.

OBSERVATION\_METHODS: The adults occasionally visit lights, and the rolled leaves are easy to spot on native dogwoods.

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: