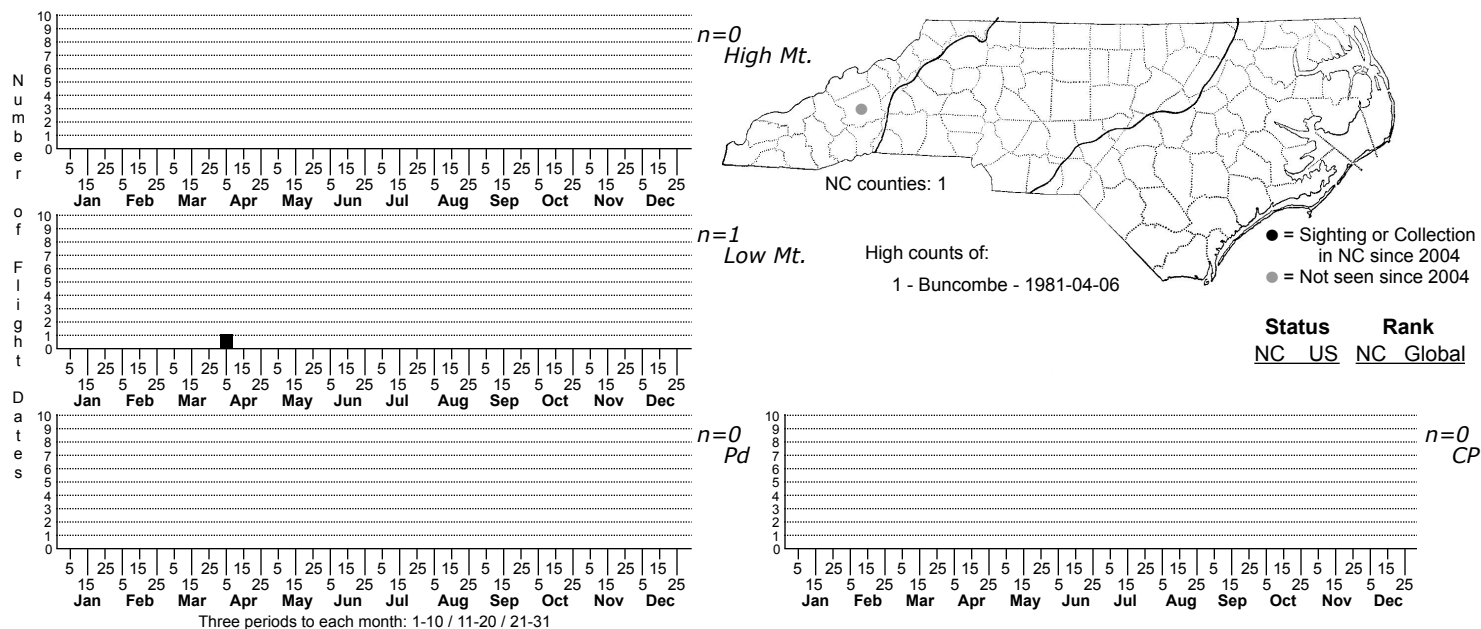


Chionodes cacula No common name



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE: Gelechiini

TAXONOMIC COMMENTS: The genus *Chionodes* is the most species rich genus of gelechiid moths in the Western Hemisphere, with 187 recognized species. Our knowledge of the diverse array of species in North America is largely due to the monumental work of Hodges (1999), who spend decades working on the group and described 115 new species (Powell and Opler, 2009). Many exhibit substantial variation within species and have drab coloration, typically with brown, dark gray, or blackish patterning on the forewings. These can only be confidently identified by examining secondary sexual characteristics and/or the genitalia of one or both sexes. Others are more boldly marked and can be identified by wing patterning. Many of our state records are based on Hodges (1999) database of over 19,000 specimens that he examined from major collections in the US. These include North Carolina specimens that he collected mostly from Highlands, and from a few other areas within the state.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Hodges (1999)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based on that of Hodges (1999). The frons is shiny yellowish white, and sometimes with shining gray-tipped scales mesially. The head and thorax are gray to yellowish gray, and the antenna is dark gray. The lateral surface of the labial palp is mottled dark gray, with pale yellowish gray to dull white on the second segment. The third segment is very dark gray with dull white scales at the base, middle, and apex. The forewing has a dark yellowish-gray to yellow-brown ground color, with small blotches of grayish-orange, yellowish-orange, or orangish-white. A small pale costal spot is usually present at four-fifths the wing length that sometimes is a component of a faint pale fascia that extends across the wing. The hindwing is light grayish brown, and the dorsal surface of the abdomen is mainly shining gray, with paler scales at the base and apex of the segments. The lower portions of the legs are blackish with pale to whitish annulations. This is a relatively small species that has a wing pattern that is similar to several other closely related forms. The forewing of *C. cacula* is tinged with shades of yellow or orange, which helps to separate it from certain forms that are grayish. These characters, along with genitalia characters, are needed for identification.

DISTRIBUTION: *Chionodes cacula* occurs from northern Delaware southward to Florida, and westward to eastern Texas, Oklahoma, Missouri, and Illinois. As of 2021, we have a single record from a lower elevation site in the mountains.

FLIGHT COMMENT: The adults are active from mid-February through mid-June in Florida, and from April through August elsewhere in the range. Our one record as of 2021 is from 6 April (Hodges, 1999).

HABITAT: The habitat requirements are unknown.

FOOD: The hosts are unknown.

OBSERVATION_METHODS: The adults come to lights.

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: We currently do not have sufficient information on the distribution and abundance of this species to assess its conservation status.