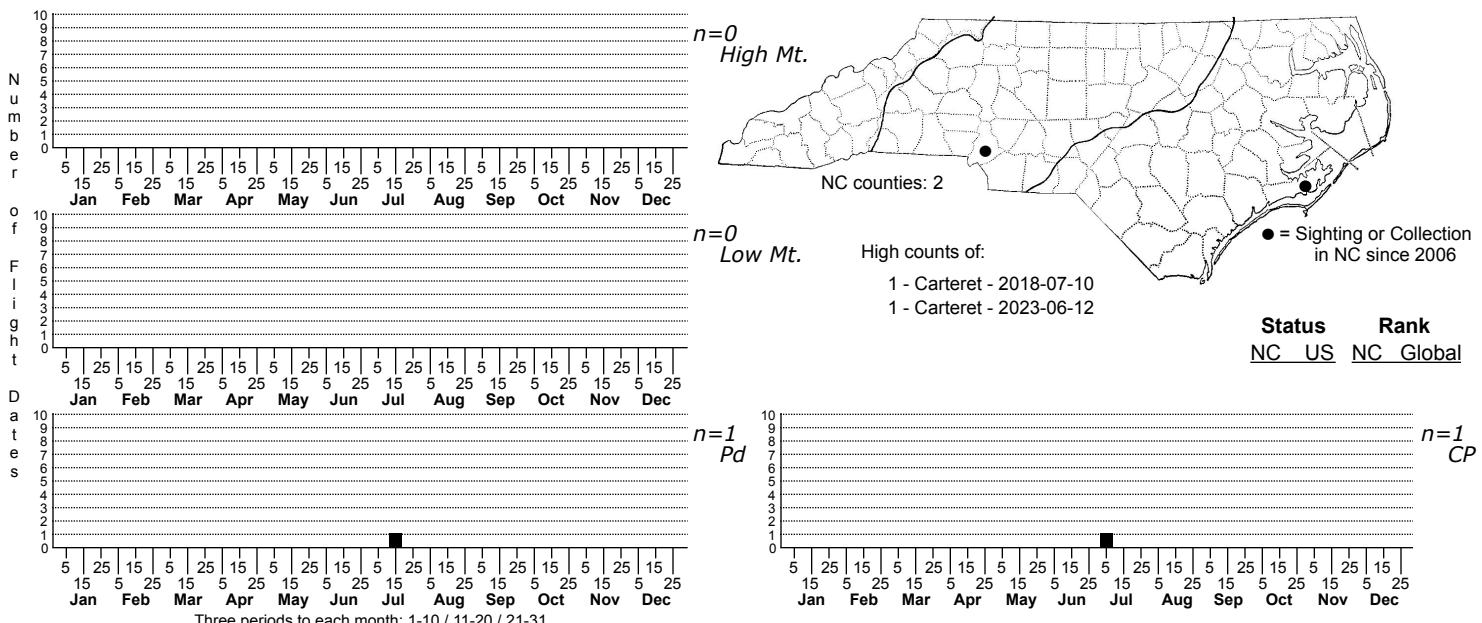


# Chionodes hibiscella None



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 spent 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: Busck (1903a); Hodges (1999)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Busck (1903a); Apple and Adamski (2005)

ID COMMENTS: The following description is based on those of Busck (1903a) and Hodges (1999). The face, head, and thorax are shining ocherous white and the shoulders purplish black. The antenna is dark brown and not annulated. The labial palp is dark brown on the first segment and the base of the second segment. The third segment has a dark-brown band at one-half the length and at the apex. The costal half of the forewing is dark brown to nearly black, while the dorsal half is light ocherous brown to whitish. The boundary between these two parts is poorly defined and somewhat variable. The dark costal half has lighter irregular patches, including a large, indistinct yellowish-brown patch at the middle of the costa, and a small and somewhat more distinct costal spot at about three-fourths. The lighter dorsal half has ill-defined darker shadings, and the veins are often somewhat darker which produces a striated effect. There is a small nearly black spot on the fold at the basal one-third, and a row of four black dots around the apical edge. The hindwing is light bluish fuscous with yellowish cilia, while the abdomen is yellow. The legs are dark purple, with yellowish white bars on the outside, and white annulations on the tarsi. The foreleg is dark brown, the midleg paler, and the hindleg palest. Hodges (1999) noted that *Chionodes hibiscella* is superficially similar to *C. ochreostrigella*, but usually can be distinguished by *C. ochreostrigella* having the head and thorax much darker, the third segment of the labial palp mainly dark brown, and with many dark-brown scales on the second segment of the labial palp.

DISTRIBUTION: *Chionodes hibiscella* is found in the eastern US. The range extends from extreme southern New York and vicinity southward along the Atlantic Seaboard to Florida, then westward to eastern Texas. Populations are mostly found in Coastal Plain habitats where the host plants occur locally. As of 2021, we have only two records, with one unusual record from the Piedmont.

FLIGHT COMMENT: Populations are bivoltine, with most adult records from areas outside of North Carolina occurring from April through August. Northern populations typically have seasonal peaks around June, and again in late July and August. Southern populations breed a month or two earlier. As of 2021, our two records are from mid-July.

HABITAT: This species specializes on members of the mallow family (Malvaceae). Swamp Rosemallow is one of the most common hosts and can be found in freshwater wetlands such as pond and lake margins, roadside ditches, and sunny to partially shaded areas in swamps and bottomlands. Seashore Mallow is another wetland host that is more commonly found in brackish waters.

FOOD: The known hosts are all members of the Malvaceae (Hodges, 1999; Robinson et al., 2010) and include Halberd-leaf Rosemallow (*Hibiscus laevis*), Swamp Rosemallow (*H. moscheutos*), Seashore Mallow (*Kosteletzkyia pentacarpos*), and Musk Mallow (*Abelmoschus moschatus*). The latter is an ornamental that has escaped in some areas of the Southeast. As of 2023, we have one larval record for Seashore Mallow.

OBSERVATION METHODS: The adults occasionally come to lights. Infected plants are easy to spot with rolled or drooping leaves and frass-filled seed capsules.

NATURAL HERITAGE PROGRAM RANKS: GNR SU

STATE PROTECTION:

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