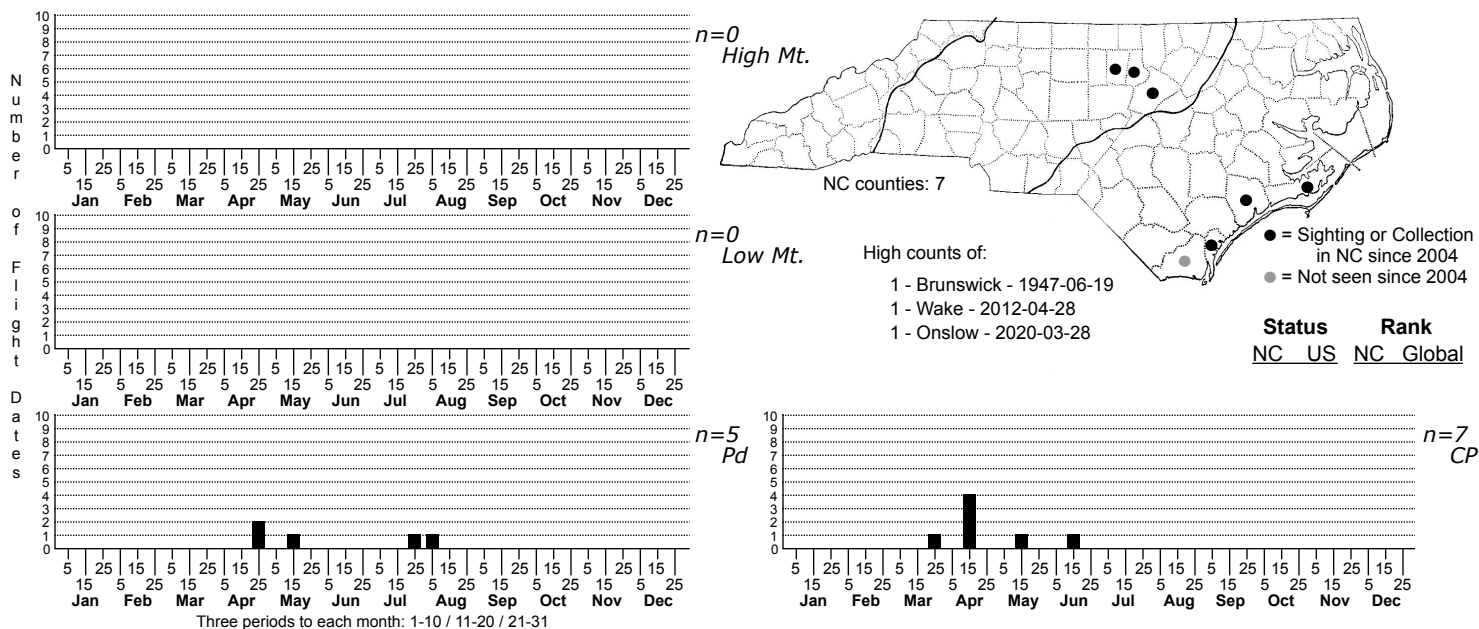


Chionodes rabula No common name



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: *Chionodes rabula* can be recognized by the combination of its small size, striped head and thorax, vaguely striated color pattern, and a faint, oblique gray fascia at one-half the wing length that is immediately preceded by a pale-yellow area. The following detailed description is based primarily on that of Hodges (1999). The face, head, and thorax vary from pale yellow to yellowish brown. The vertex has a median dark stripe that continues onto the thorax, which also has two less conspicuous lateral stripes. The antenna is about three-fourths the length of the forewing and has alternating pale yellowish and darker brown bands. The labial palp is recurved and reaches nearly to the thorax. The second segment is mottled with brown and pale yellow, while the middle and apex is mainly pale yellow. Brown-tipped scales are most concentrated near the base and at three-fourths the length. The third segment has a pale-yellow ground color, and a broad brown area at one-third and three-fourths the length. The ground color of the forewing is concolorous with that of the vertex and thorax, and varies from pale yellow to darker yellowish brown. The wing is vaguely striated, with the most prominent marks being two dark and nearly parallel longitudinal lines on the apical third near the middle. A series of one or more short, faint striations are often evident on either side of these. At one-half the wing length, there is faint, oblique grayish brown to brownish fascia. It begins on the costa at about one-fourth and slants posteriorly before curving rearward and terminating near the middle of the wing. The area immediately before the fascia is often slightly lighter colored than the surrounding ground. A blackish spot with a few lighter scales often adjoins the dark fascia near the middle of the wing, and a series of spots is usually present along the margin of the wing tip. The hindwing and cilia are grayish brown, and the legs have blackish and pale banding. The abdomen is mainly yellowish white or brown.

DISTRIBUTION: *Chionodes rabula* is found in eastern North America, and is most common in the southeastern Coastal Plain and lower Piedmont. The range extends from Rhode Island and vicinity southward to Florida, and westward along the Gulf Coast states to western Louisiana and eastern Texas. Isolates have been found in Ohio and Ontario. As of 2021, our records are all from the Coastal Plain and eastern Piedmont.

FLIGHT COMMENT: Adults have been recorded from February through November in areas outside of North Carolina, with most between April and August in areas north of Florida and the Gulf Coast. As of 2021, our records extend from late April through mid-June.

HABITAT: The preferred habitat is poorly documented. There is one record of this species being reared from Narrowleaf Cattail, which is associated with brackish or somewhat brackish waters in coastal regions. However, it is uncertain if *C. rabula* specializes on cattails, or has a broader diet.

FOOD: The only known host is a rearing records from Narrowleaf Cattail (*Typha angustifolia*) from eastern Maryland (Hodges, 1999).

OBSERVATION_METHODS: The adults occasionally come to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S5

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

COMMENTS: This species appears to be uncommon in North Carolina, but we need additional information on its distribution, abundance, and host use before we can assess its conservation status.