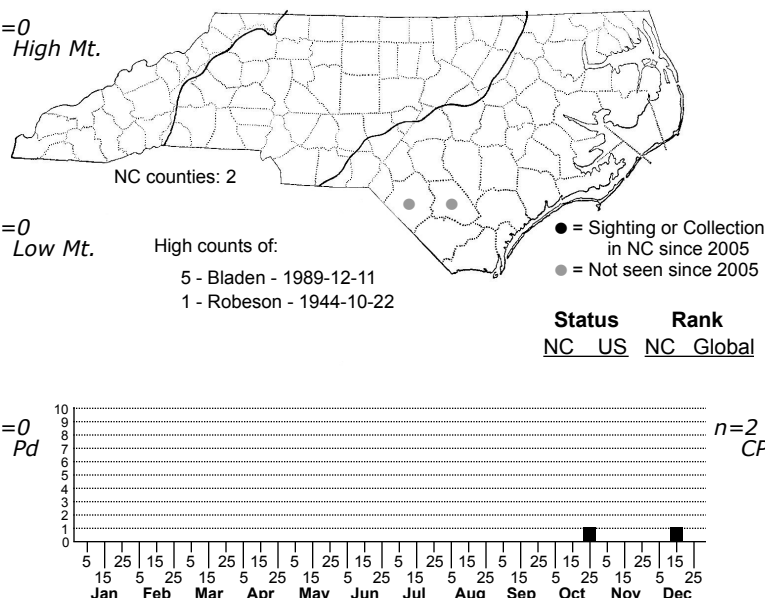


Chionodes rectifex None



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 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 mainly white with gray scales in front of the eye. The vertex and occiput are white to medium gray, with the scales often tipped with gray. The labial palp is dark brown on the outer surface of the first segment and the base of the second segment. The remainder of these segments is mainly white. The third segment is white at the base and middle, and dark brown to blackish elsewhere. The forewing is dark grayish-brown, and typically has three or four dark, longitudinal striations on the apical half. On some specimens, similar striations also occur on the basal half. The apical fifth is usually lighter than the remainder of the wing, and mottled with whitish and brown patterning -- particularly on the costal margin. The cilia are pale to off-white with scattered darker dusting. The hindwing is light grayish brown with slightly lighter cilia. The foreleg is mainly dark gray, and the middle and back legs are similar but paler. The abdomen is mottled dark gray, except for terga 1-3 which have finely striated, yellowish-gray scales. The dorsal surface of the hindwing of the male has very few sex scales. Hodges (1999) noted that specimens vary in the relative amounts of dark and pale scales on the head and labial palps. Some are nearly completely white, while others have many dark-brown scales. This species can be readily recognized in North Carolina by the streaked forewing, whitish head and thorax, and restricted range and habitat.

DISTRIBUTION: *Chionodes rectifex* has a relatively restricted range that extends from Robeson and Bladen Counties in North Carolina southward to Georgia and the Florida Panhandle.

FLIGHT COMMENT: This appears to be a late-breeder, with most records from late-October through mid-January. There is one record from May. Our records are from late-October and mid-December.

HABITAT: This species is found in areas with sandy soil. Hodges (1999) described the habitat as being longleaf pine and red oak scrub. As of 2021, our two records are from the Sandhills.

FOOD: The hosts are unknown.

OBSERVATION_METHODS: Adults have been collected at mercury vapor and black lights, and under leaf litter on sandy soils in longleaf pine and red oak scrub.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2S4]

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

COMMENTS: This species is uncommon throughout its rather limited range, and appears to be rare in North Carolina. However, additional information is needed on its hosts, distribution, and abundance before we can assess its conservation status.