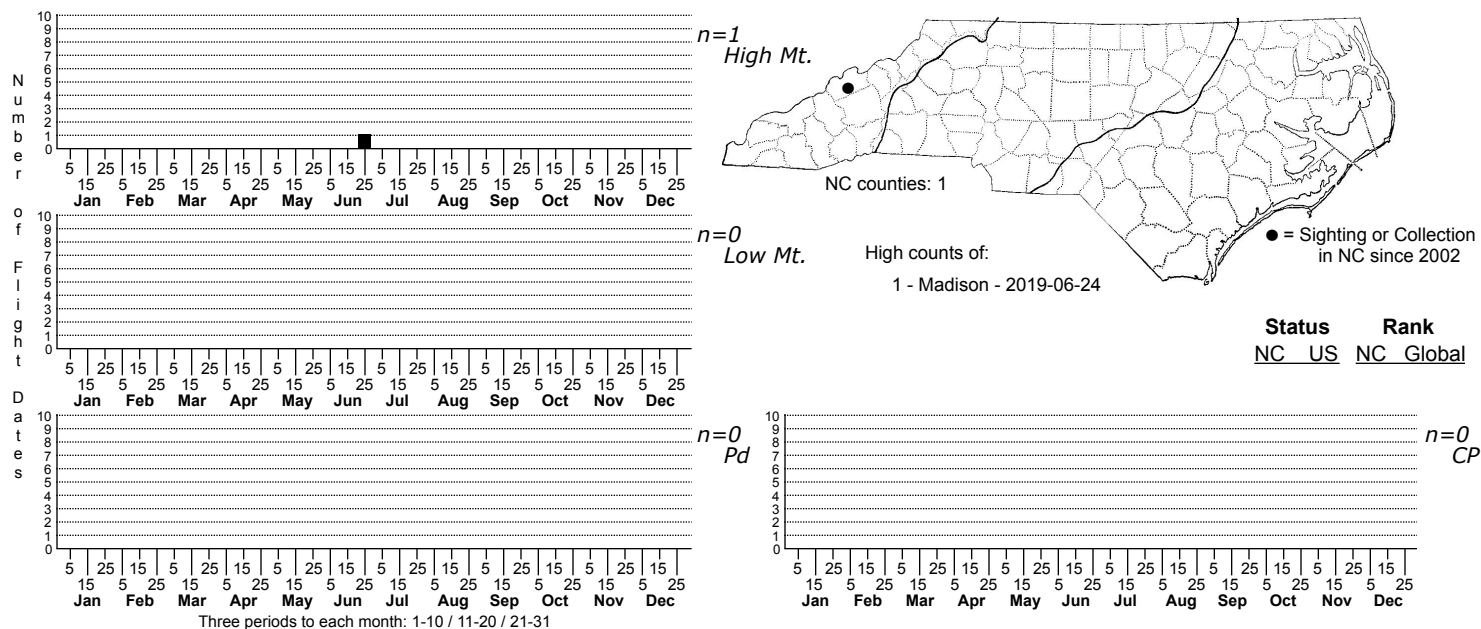


## *Chionodes continuella* Spring Oak Leafroller Moth



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: Hodges (1999)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following description is based on that of Hodges (1999). The head is cream-colored and the thorax somewhat darker. The second segment of the labial palp is mottled with cream and dark brown, while the third segment blackish-brown. The forewing typically has a dark ground color with three regions of white marks. The first is a posteriorly oblique, irregular band that extends from the costa at about one-fifth the wing length and terminates before reaching the inner margin. The second is a large, diffuse blotch at one-half the wing length that can cover much of the wing width. The third is a pair of costal and dorsal marks at four-fifths that rarely are connected to form a complete fascia. The three dark spots in the cell and on the fold that are present in several closely related forms are indistinct. Identification is best based on a combination of genitalia and wing markings.

DISTRIBUTION: *Chionodes continuella* is found in North America and is widespread across the continent at mostly northern latitudes. The range includes much of the southern half of Canada and the northern US southward to Colorado, Illinois and North Carolina. As of 2021, we have one record from a lower elevation site in the mountains.

FLIGHT COMMENT: The adults mostly fly from June through September.

HABITAT: The preferred habitats are poorly documented.

FOOD: Hodges (1999) reported that the larvae have been raised on lichens and spruce, but this needs to be verified given the large number of new taxa that have been recognized in Hodges' monograph.

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 need more information of the distribution and abundance of this species before we can assess its conservation