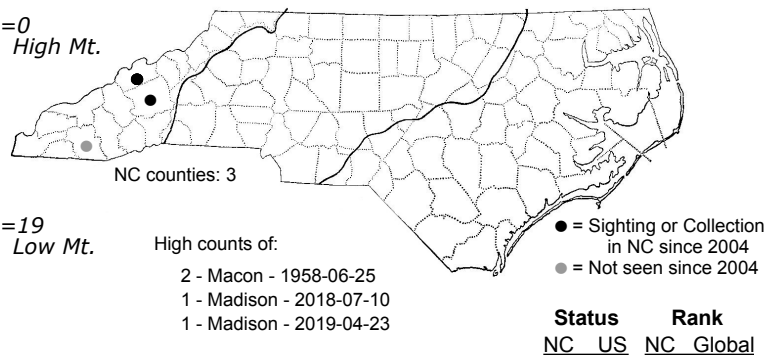
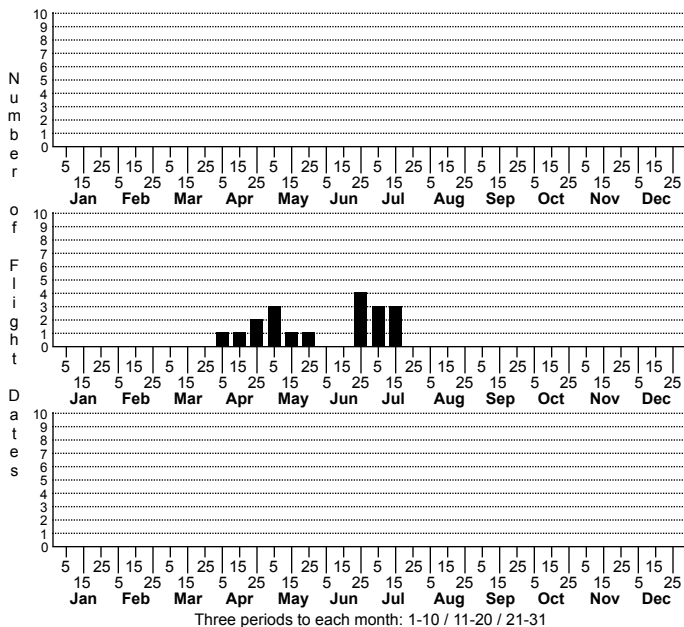


# *Chionodes fondella* No common name



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: This is a distinctively marked *Chionodes* that has intense black marks on the forewing, with the mark at the end of the cell extending a short distance basally as a broad line. The following detailed description is based on that of Hodges (1999). The vertex, thorax, and ground color of the forewing are pale yellowish white to ashy gray and overlain with dark gray to blackish dusting. The antenna is pale with darker annulations. The recurved labial palp is pale gray to off-white and extends nearly to the thorax. The second segment has concentrations of dark gray-brown tipped scales at the base and before the apex laterally. The third segment is mainly white, with many dark gray-brown tipped scales laterally. These are most noticeable at one-half the length and before the white apex. There are two conspicuous black marks. The first is a broad, oblique band that begins on the costa at about one-third the wing length and extends posteriorly nearly to the dorsal margin. The second is an irregularly shaped costal mark at about two-thirds. It has a broad line that extends forward and terminates before reaching the posterior margin of the first mark. The apical third of the wing is often heavily dusted with blackish scales, and in some individuals they are organized as a diffuse blotch. The hindwing and cilia are light grayish brown. The dorsal surface of the abdomen is mottled dark and medium gray, and the legs are dark grayish brown to blackish, with pale to off-white annulations. *Chionodes pseudofondella* is similar, but the second black mark does not have the broad line that extends forward, and a black spot is present between the two marks. In addition, the second segment of the labial palp is nearly white and lacks numerous dark-gray tipped scales

DISTRIBUTION: *Chionodes fondella* is broadly distributed across the eastern and central US and southern Canada. In Canada, the range extends from Alberta eastward to Nova Scotia. In the US, it extends from Montana southeastward to Colorado, Oklahoma, and Louisiana, and eastward across most of the eastern US, except for the southeastern Coastal Plain. As of 2021, all of our records are from lower elevation sites in the Blue Ridge Mountains.

FLIGHT COMMENT: Almost all records from areas outside of North Carolina are from April through July. As of 2021, we have records from early April through mid-July.

HABITAT: Our records are mostly from semi-wooded residential neighborhoods. The specific hosts are rather poorly documented, but the reported hosts are typically found in more open, sunny or partially sunny sites.

FOOD: Schaffner (1959) reported rearing *C. fondella* from the flowers of "everlasting" in New Hampshire, but the genus of the host was not reported (possibly *Antennaria*, *Anaphalis*, or *Pseudognaphalium*). Robinson et al. (2010) list Fragrant Rabbit-tobacco (*Pseudognaphalium obtusifolium*) and Hodges (1999) reported that a specimen was reared from *Monarda fistulosa* L. in southern Ontario.

OBSERVATION\_METHODS: The adults are attracted 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: As of 2021, we have only three site records for this species. Additional information is needed on its distribution and abundance before we can assess its conservation status.