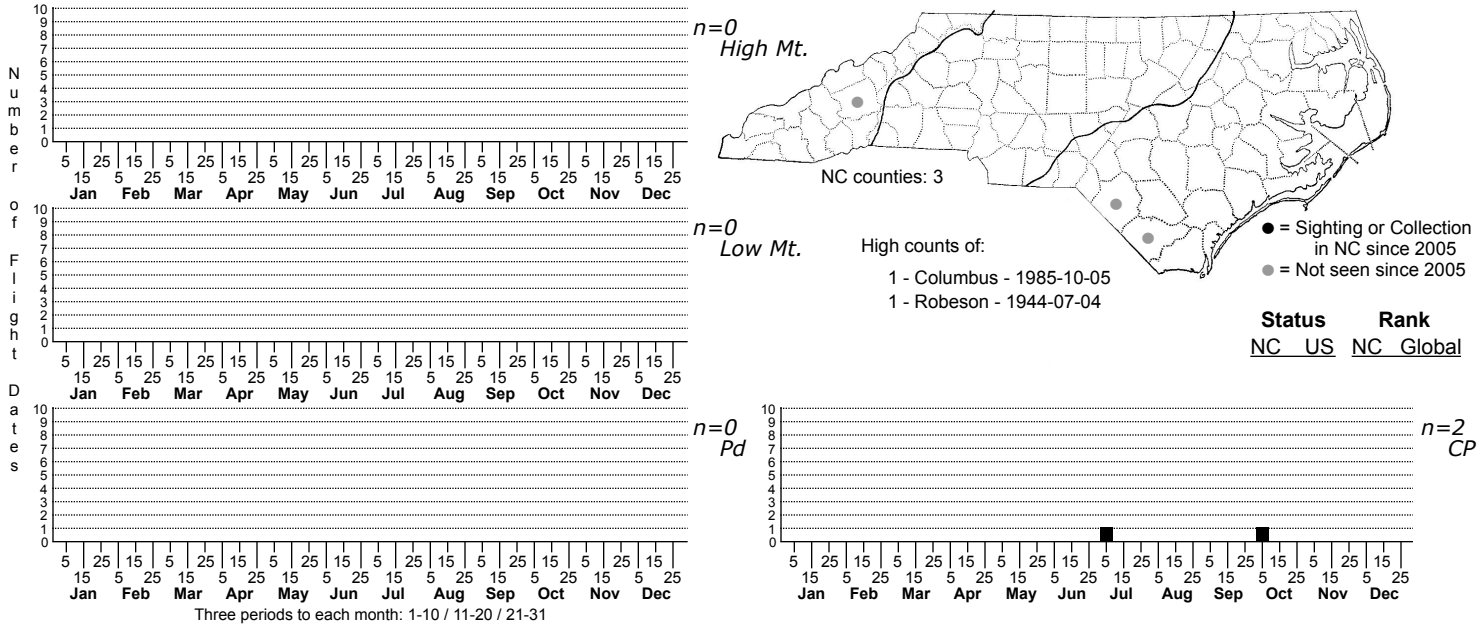
Chionodes imber None



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 is based on the description by Hodges (1999). The frons is shining yellowish gray, and the vertex and occiput shining gray. The antenna is dark brown to grayish brown with faint paler annulations. The labial palp is dark grayish brown on the lateral surface of the first segment and the base of the second segment. The remainder of the second segment is yellowish gray or pale yellowish white, and the outer surface has many dark-gray tipped scales. The third segment is mostly dark brown, with a white base and apex. The forewing has a slightly shining, warm brown to dark-gray ground color, with a single white costal spot at three-fourths the wing length. Rarely, individuals may have a matching dorsal spot. There is a dark spot at one-half the length of the cell, one at the end of the cell, and one at one-half the length of the fold. These dark spots may be preceded and followed by a few pale scales. The hindwing and cilia of both wings are light grayish brown to yellowish brown. The foreleg is mainly dark grayish brown, with the apex of the coxa, femur, tibia, and tarsomeres 1 and 2 off-white. The midleg and hindlegs are similar but generally paler. The dorsal surface of the abdomen is shining gray and slightly paler laterally. Hodges (1999) noted that C. lactans is similar, but has a pair of white spots at three-fourths the wing length that are sometimes fused to form a complete fascia. Positive identification is best achieved by using genitalic characters. Both of these species can be confused with the Aroga trialbamaculella complex, but lack a fringe of slender scales on the ventral surface of the fold of the forewing.

DISTRIBUTION: Chionodes imber is found in southern Canada (Manitoba; Ontario; Quebec) and throughout much of the US except for the West Coast states. The range extends from southern Quebec and Massachusetts westward to northern Idaho, and south to north-central Arizona, Texas, the Gulf Coast states, and south-central Florida (Hodges, 1999). As of 2021, we have records from the Coastal Plain and a high elevation site in the mountains.

FLIGHT COMMENT: Hodges (1999) reported records from late-March to mid-July, with the seasonal peak in mid-May through June. As of 2021, our two dated recorded are from July and October.

HABITAT: The hosts and habitat requirements are poorly documented. The few records that we have from North Carolina range from Coastal Plain sites such as Lake Waccamaw to a higher elevation site in the mountains.

FOOD: The hosts are unknown. Hodges (1999) reported that one larva was collected in a case on Sweet-fern (Comptonia peregrina), which is questionable given that members of this genus are not known to make cases.

OBSERVATION_METHODS: The larvae 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 currently do not have sufficient information on the abundance and distribution of this species within the state to assess its conservation status.