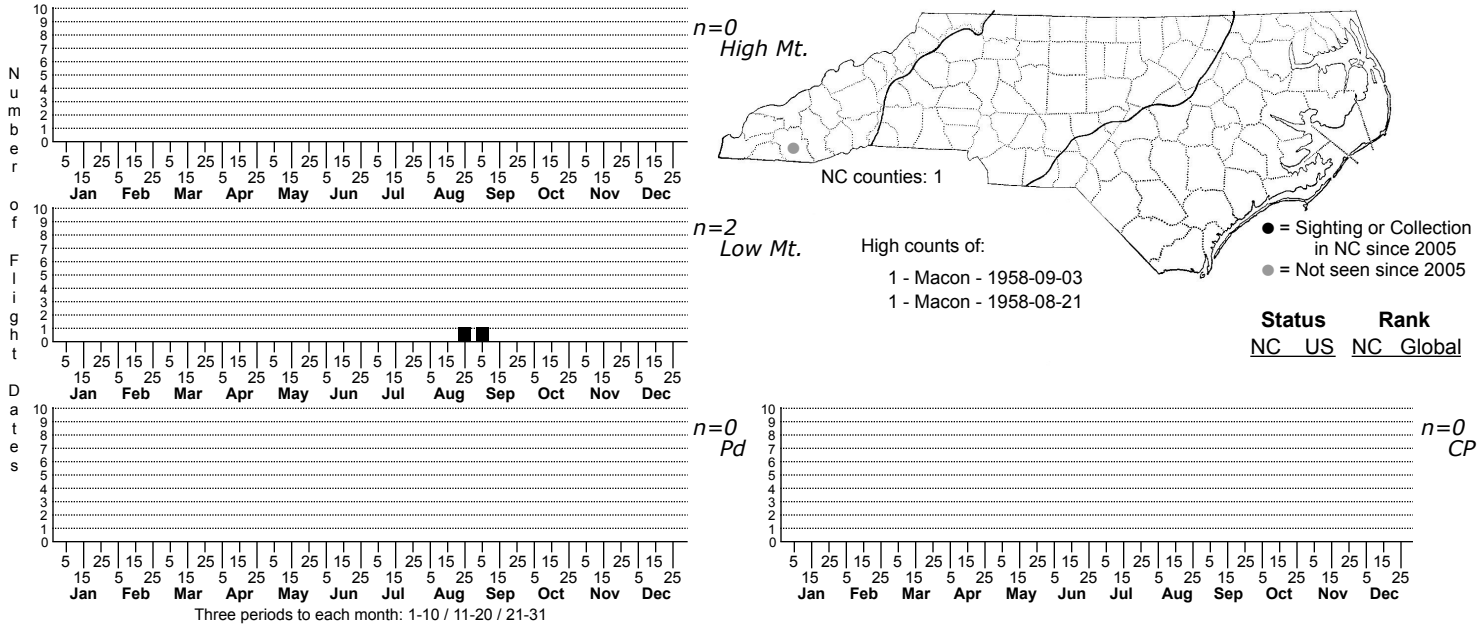
Chionodes tarmes None



Three periods to each month: 1-10 / 11-20 / 21-31

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 head, thorax, labial palp, antenna, and abdomen are all dark gray. The forewing is nearly uniformly very dark gray on the basal two-thirds to three-fourths of the wing length. On the most distinctly patterned specimens, four very dark-gray to black spots are evident. These include one on the fold at one half its length, one on the fold at two-thirds its length, one in the cell at two-thirds its length, and one at the end of the cell. The latter three spots are often preceded or followed by a few yellowish-white or off-white scales. A vague, transverse fascia at three-fourths the wing length is sometimes present, along with a small, white mark on the costa at the same position. Some or most of these marks may be missing on very dark individuals. The wing is much darker gray distally. Hodges (1999) noted that C. franclemonti and C. tarmes are extremely similar and are most easily separated by males of C. franclemonti lacking a scale pencil arising from the anal area of the hindwing. The males of C. tarmes have a scale pencil. The genitalia appear to be essentially identical. The dorsal surface of C. franclemonti may have some scales contrastingly tipped with dark gray or black, whereas the scales of C. tarmes gradually change shade and are not contrastingly dark. Habitat and location are helpful, since C. franclemonti occurs in coastal or sandy areas on the East Coast, while C. tarmes is found in non-sandy habitats away from coastal areas. In North Carolina, C. tarmes is only known from the mountains.

DISTRIBUTION: Chionodes tarmes in found in eastern North America and mostly at northern latitudes. The range extends from Maine westward through southern Quebec and Ontario to Michigan, and southward to central Illinois, Indiana, and New Jersey. We have one documented population in western North Carolina from Highlands that appears to be a southern disjunct of this otherwise northern form.

FLIGHT COMMENT: Hodges (1999) listed collection dates from 21 July to 3 September. As of 2021, our two records are from 21 August and 3 September.

HABITAT: The habitat is poorly documented.

FOOD: The hosts are undocumented. The larvae probably feed on members of the Cistaceae, as does a very closely related species, C. franclemonti.

OBSERVATION_METHODS: The adults come to lights.

NATURAL HERITAGE PROGRAM RANKS: GNR [S2S3]

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

COMMENTS: This species is seemingly rare in North Carolina, with a single known population that may be a southern isolate. More information is needed on host use, distribution, and abundance before we can assess its conservation status.