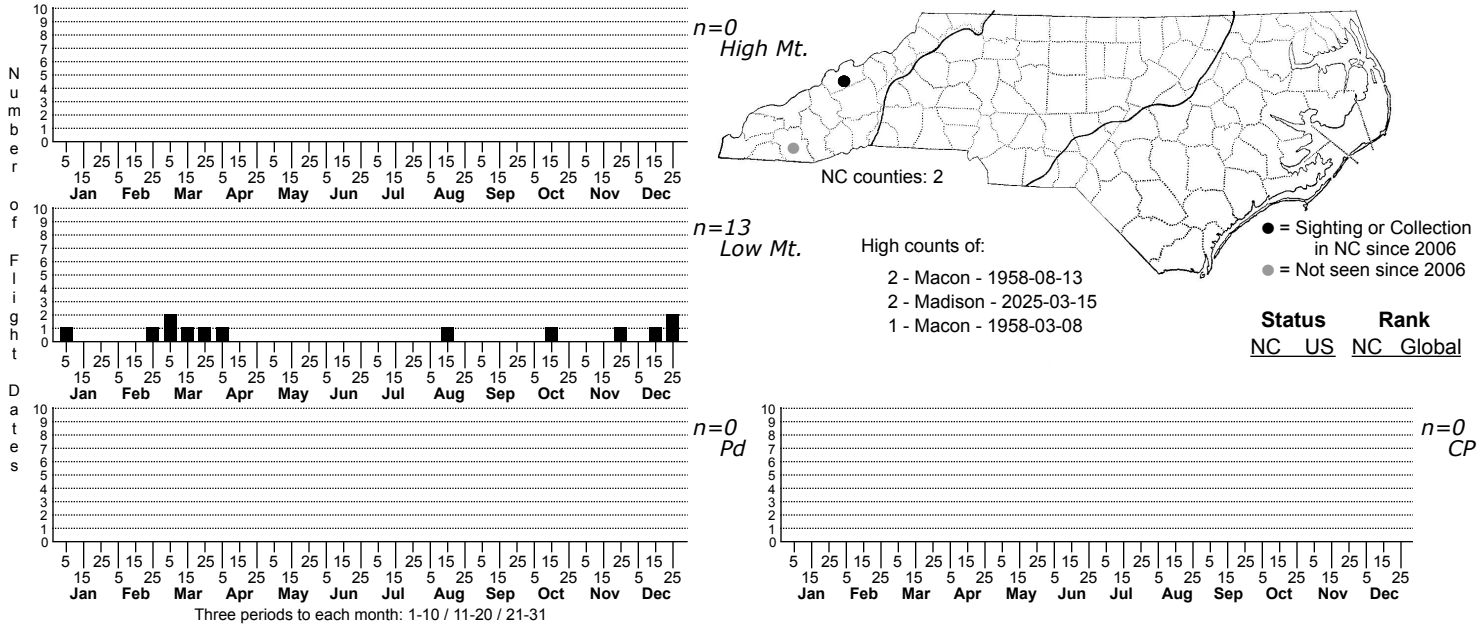
Chionodes baro None



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE:
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 in part on that of Hodges (1999). The head and thorax vary from orangish gray to dark gray, and the antenna is dark grayish brown. The lateral surface of the first segment of the labial palp is mainly off-white, while the second segment is mottled with very dark gray, off-white, orange gray, and grayish scales. The third segment is mainly very dark to grayish brown, with the base and apex white to yellowish white. The forewing is rather drab, with a light brown to orangish brown ground color that is overlain with darker spots or blotches. Specimens often have three small and equally-spaced blackish blotches along the costa at about one-third, one-half, and two-thirds the wing length, along with dark dusting on the apical fifth. A thin line of dark scales is often present at the wing base. Two or three black spots are often present below the inner margin at one-third to one-half the wing length that frequently have a few pale to whitish scales on their edges. A posteriorly oblique, irregular stria that is dark grayish brown to blackish is sometimes present that extends from the costa at about one-fourth the wing length. It ends before reaching the inner margin. The hindwing and fringe are light brown to grayish brown. The dorsal surface of the abdomen has the individual terga medium gray basally, and yellowish-white to off-white on the posterior margins. The lateral margins are uniformly shining yellowish white, and the scale tuft on tergum 8 of the male is yellowish gray. The foreleg is mottled dark grayish brown and yellowish white to off-white, with darker tarsi that have pale annulations. The other legs are similar, but paler. This species is one of several rather drab Chionodes species that are best identified by genitalia.

DISTRIBUTION: According to Hodges (1999). Chionodes baro occurs from Connecticut westward to Manitoba, and south to at least Oklahoma and North Carolina. As of 2025, our records are all from lower elevation sites in the Blue Ridge.

FLIGHT COMMENT: Hodges (1999) listed records from late March through late October. Fresh moths were present in July, and worn moths in October and again in March to early June, suggesting that the adults overwinter. As of 2025, we have several records from late-November through early April that are consistent with these being overwintering adults. Our one summer record is from mid-August.

HABITAT: The preferred habitat is poorly documented. Our records are from sites with hardwood forests, but the hosts are undocumented.

FOOD: The hosts are unknown.

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: We currently do not have sufficient information on the distribution, host use, and abundance of this species to assess its conservation status.