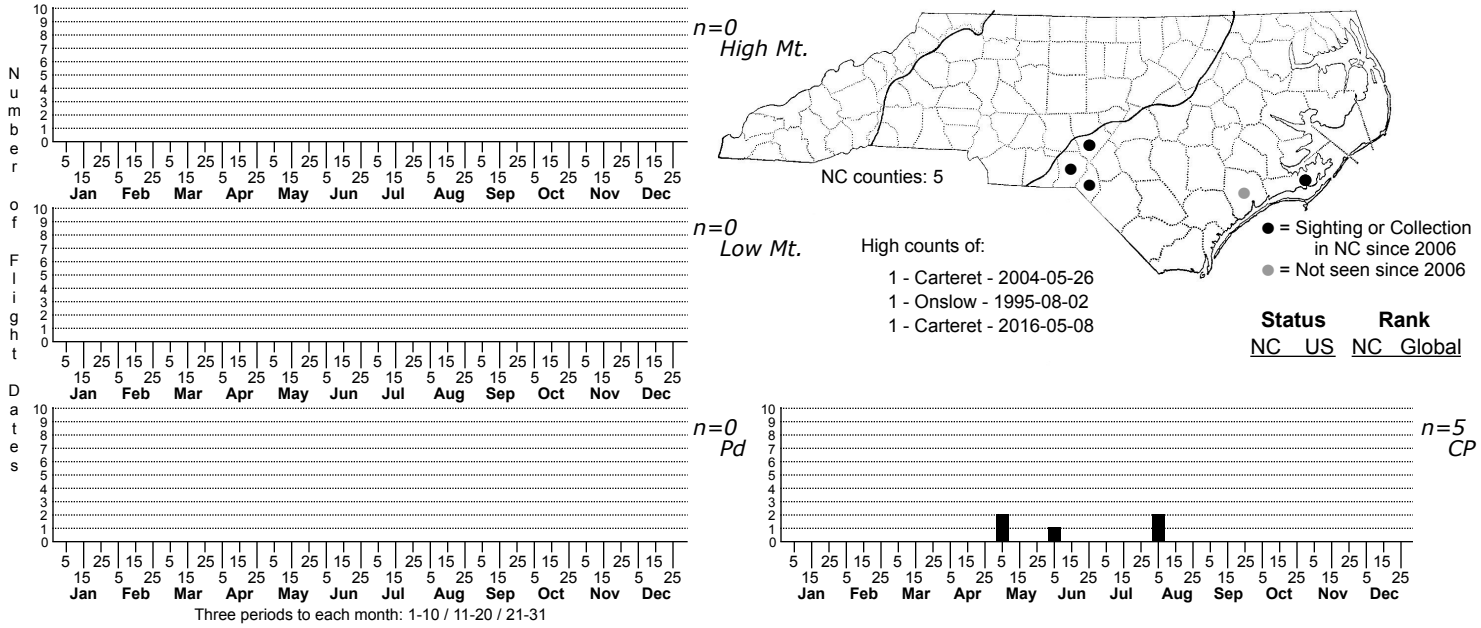
Hypomecis buchholzaria Buchholz's Hypomecis



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Boarmiini
TAXONOMIC_COMMENTS: One of five currently recognized species in this genus that occur in North America (Rindge, 1973; Blanchard and Knudson, 1984). Four have been recorded in North Carolina.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Forbes (1948); Rindge (1954); Schweitzer et al. (2011)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1948); Wagner et al. (2002); Schweitzer et al. (2011)

ID COMMENTS: A dark, brownish-black Hypomecis. Forbes (1948) and Rindge (1974) described buchholzaria as being darker than the other species in this genus; Rindge also noted that the lines and spots were less constrasting and more poorly developed in buchholzaria and the undersides of the wings particularly darker than the others. However, a very black form of the umbrosaria/ gnopharia complex is fairly common in the Sandhills and Coastal Plain that may, in fact, be even darker than is typical for buchholzaria. Forbes mentioned that buchholzaria has a violet tinge missing in the other species, but Rindge states that this tinge is present only in some individuals. The most reliable characters for separating buchholzaria are the structural features described below.

DISTRIBUTION: Appears to be limited to the southern half of the Coastal Plain, including the Fall-line Sandhills. In other states, it has apparently been recorded as far west as the foothills of the Appalachians (Wagner et al., 2002).

FLIGHT COMMENT: Not enough data exists from North Carolina to determine a pattern

HABITAT: Buchholz's Hypomecis appears to be strongly associated with dry-xeric oak barrens throughout its range, which is consistent with our findings in North Carolina: habitats in our state include both xeric sandridges in the Outer Coastal Plain and presumably similar dry oak forest in the Fall-line Sandhills.

FOOD: Larvae have been reared -- probably by Lemmer -- on Sweet-fern (Comptonia peregrina) (Forbes, 1948; Rindge, 1954). Wagner et al. (2002) also mention Sweet-gale (Myrica gale) and oak, and Schweitzer et al (2011) report that larvae will accept bayberry (Morella spp). While Sweet-fern occurs in the Fall-line Sandhills, it is not known to be present in the outer Coastal Plain of North Carolina. In that area, J.B. Sullivan has found a larva of H. buchholzaria on Turkey Oak (Quercus laevis), which was subsequently reared on that plant to adulthood.

OBSERVATION_METHODS: Appears to come to blacklights to some extent, but how reliably is not yet known (Schweitzer et al., 2011). Despite this species having been targeted in several moth surveys conducted in the Sandhills and Outer Coastal Plain, the only recent record we have for this species comes from a larva reared by J.B. Sullivan.

NATURAL HERITAGE PROGRAM RANKS: G3G4 S1S2

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

COMMENTS: We have very few recent records for this species despite the extensive surveys that have been conducted in apparently suitable habitats in North Carolina. As with several other species associated with dry-xeric oak habitats in the Coastal Plain -- including Acronicta albarufa, Heterocampa varia, and Catocala jair -- we are uncertain as to the causes of their apparent rarity.