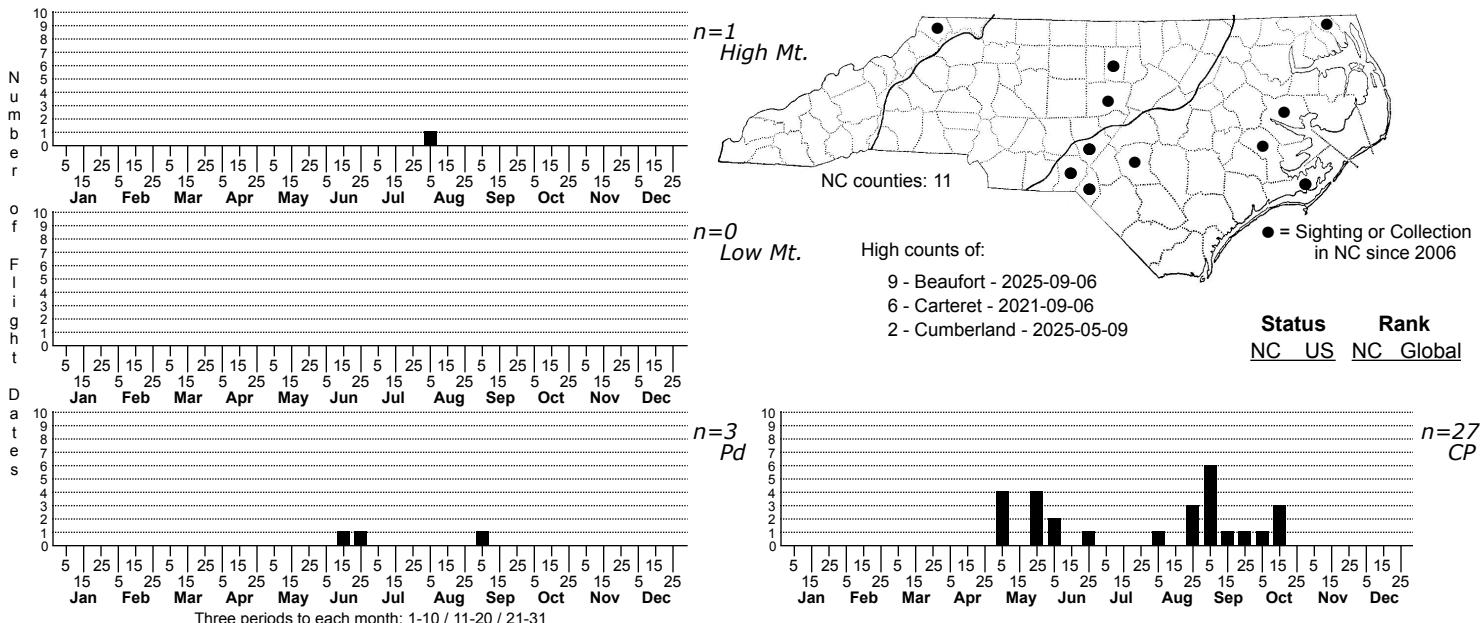


Pelochrista cataclystiana Solidago Pelochrista



FAMILY: Tortricidae SUBFAMILY: Olethreutinae TRIBE: Eucosmini

TAXONOMIC COMMENTS: *Pelochrista* is a large Holarctic genus of tortricids with around 75% of the 226 described species being native to North America (Wright and Gilligan, 2017). The highest species richness occurs in the western half of North America. The genus has a long and confusing taxonomic history, with many of the species formerly placed in the genus *Eucosma*. Gilligan et al. (2014) conducted a comprehensive phylogenetic analysis of *Pelochrista*, *Eucosma*, and related genera and redefined the genus *Eucosma* and *Pelochrista* based on differences in female genitalia. The great majority of *Pelochrista* species are known only from adults, which likely reflects the fact that the larvae of most species bore into stem bases and roots and are concealed from view. Members of the Asteraceae are the likely hosts for most species (Wright and Gilligan, 2017), but much work need to be done to identifying the hosts.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Wright and Gilligan (2017)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based on the description by Wright and Gilligan (2017). The head, palps, and thorax vary from yellowish gray to light brown or brownish yellow. The forewing is pale brownish yellow (sometimes with reddish-brown tints) and has weakly contrasting brown markings. An obscure, narrow median fascia is often present that extends from the middle of the costa to the inner margin and abuts the anterior edge of the ocellus. A thin, dark, longitudinal streak is often present that extends from the middle of the wing base to the middle of the wing. A series of thin longitudinal lines are present on the proximal two-thirds of the wing before the ocellus, and the costa has a series of prominent pale lines of the distal half that converge towards the ocellus. The ocellus is cream-colored with one or two black dots, and the termen has a narrow salt-and-pepper colored band that extends from the tornus to the apex. The hindwing is light grayish-brown with a concolorous fringe.

DISTRIBUTION: *Pelochrista cataclystiana* has a nearly transcontinental distribution. It occurs in Canada from British Columbia to Nova Scotia, and in the US from the Rocky Mountains and vicinity eastward to the Atlantic coast, and southward to Florida and the Gulf states. In North Carolina this species is relatively common in the Sandhills, and has been found at scattered localities elsewhere in the Coastal Plain, Piedmont, and Blue Ridge.

FLIGHT COMMENT: The adults have been found from April through October in different areas of the range, with a seasonal peak from June through August at most localities. As of 2022, our records extend from early May through mid-October. Seasonal activity in the Coastal Plain is bimodal, with adults active in May through early April, and again in August through October.

HABITAT: Local populations are commonly found in open habitats that support herbaceous composites. Many of our records are from Longleaf Pine communities or other habitats with well-developed herbaceous ground cover. Other sites include a coastal dune site and a mesic forest on Bluff Mountain in the Blue Ridge.

FOOD: Very little is known about the hosts. The only reported host is Grass-leaved Flat-top Goldenrod (*Euthamia graminifolia*) from Canada (Putnam, 1942). This species is restricted to the mountains in North Carolina, but a related species (*E. caroliniana*) is common in the Coastal Plain where most of our records come from and could be a potential host. Goldenrods (*Solidago* spp.) have been suspected to be hosts, but we are unaware of any documented use of goldenrods to date.

OBSERVATION METHODS: The adults are attracted to lights. We need more information on host use and the larval ecology for North Carolina populations.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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

COMMENTS: This species appears to be locally common in the Sandhills but uncommon elsewhere. We currently do not have sufficient information on its distribution and abundance to accurately assess its conservation status within the state.