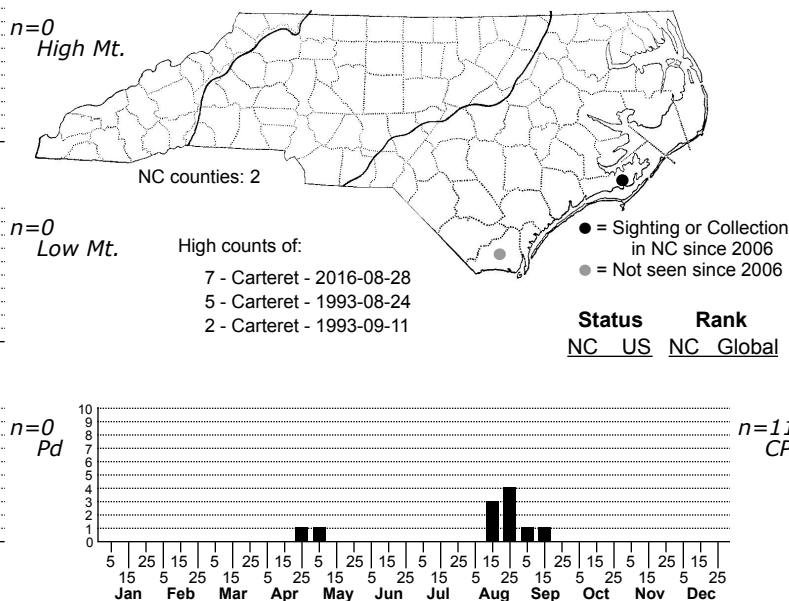


# *Pelochrista sullivanii* Sullivan's Pelochrista



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 (2015)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: The following is based on the original description by Wright (2015). The frons, vertex, and antenna are white, and the labial palp is white except for gray-brown marks on the lateral surface of the second segment and some gray-brown shading on the long scales that project from the ventral margin of the second segment. The dorsal surface of the thorax is whitish and suffused with gray brown. The foreleg and midleg have dark brown on the anterior surfaces and whitish on the posterior surfaces, while the hindleg is whitish. The tarsi have whitish annulations that are prominent on the foreleg and midleg, and obscure on the hindleg.

The forewing has a series of dark brown markings that are overlain on a whitish ground color that has fine, gray-brown transverse reticulations. The darker marks include a subbasal fascia at about one-fourth that is nearly complete but often interrupted, and a median fascia that is band-like and extends from the mid-costal region to the pre-tornal portion of the inner margin. The median fascia is often either interrupted or constricted at the distal end of the cell by whitish interfascial scaling. The third mark is a narrow postmedian band that is usually interrupted near the costa and bends around the anterior margin of the ocellus where it connects to a narrow band along the termen from M2 to the tornus. The ocellus has lustrous gray to beige bars on the proximal, distal, and posterior margins and a whitish central field that is crossed by two blackish dashes. The costal strigulae are sharply defined and extend from the subbasal fascia to the apex. The termen has a thin white line from M2 to the apex, and the fringe scales are dark gray with white apices, with the distal row somewhat lighter. The hindwing is uniformly gray brown.

Wright (2015) noted that *Pelochrista sullivanii* is similar to *P. matutina* in color and maculation, but differs from that taxon in size (mean forewing length = 5.9 vs. 7.7 mm) and genitalia. *Pelochrista sullivanii* also resembles *P. symbolaspis* and *P. lynxana* in size, male genitalia, and forewing maculation, but has white interfascial areas without the brown and dark brownish-gray suffusion, respectively, that occurs in the latter two species. *Pelochrista sullivanii* is currently known only from coastal savanna habitats in Mississippi and North Carolina, while *P. symbolaspis* is only known from west Texas, and *P. lynxana* from remnant prairie/cedar glade habitat in the eastern Midwest and northern Mississippi.

DISTRIBUTION: *Pelochrista sullivanii* is currently known only from two widely disjunct sites: coastal savanna habitats in North Carolina and similar habitats in southeastern Mississippi and adjoining areas near Mobile, Alabama. As of 2022, all of our records are from Carteret and Brunswick counties.

FLIGHT COMMENT: Local populations appear to have both a spring and late-summer brood. As of 2022, our records are from late-April through early-May and from mid-August to mid-September.

HABITAT: This species has been collected from coastal pine savannas, but very little is known about its specific habitat requirements or host species. In North Carolina, *P. sullivanii* is often seen at the interface of pine flatwoods and pocosins where the undergrowth is fairly low.

FOOD: The host plants are undocumented.

OBSERVATION\_METHODS: The adults are attracted to UV lights.

NATURAL HERITAGE PROGRAM RANKS: GNR S1

STATE PROTECTION:

COMMENTS: *Pelochrista sullivanii* appears to be rare throughout its range, with only four site records from North Carolina as of 2022.