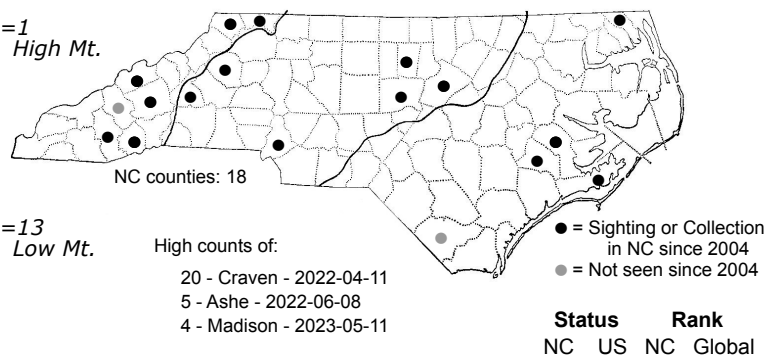
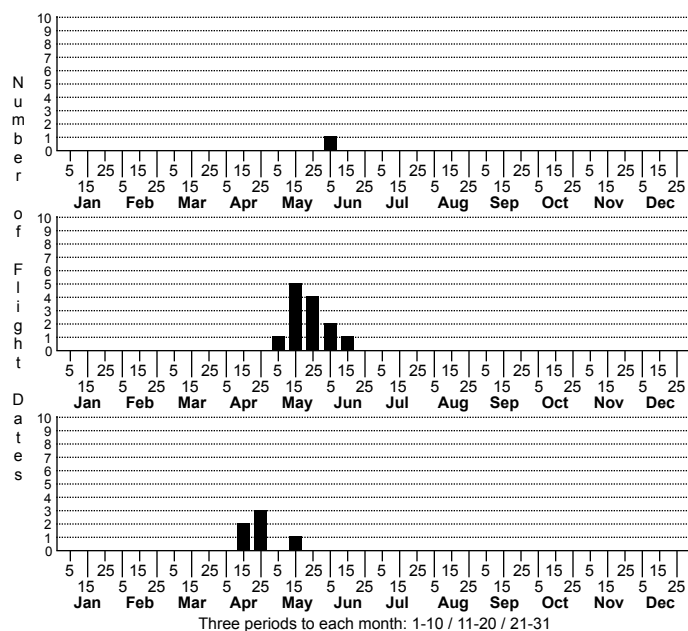


# *Adela caeruleella* Southern Longhorn Moth



FAMILY: Adelidae SUBFAMILY: Adelinae TRIBE: [Adelini]

TAXONOMIC COMMENTS: *Adela* is a small genus of moths, and most are noteworthy for having exceptionally long antennae. There are 11 described species in North America.

FIELD GUIDE DESCRIPTIONS: Leckie and Beadle, 2018.

ONLINE PHOTOS: MPG; BugGuide; BAMONA.

TECHNICAL DESCRIPTION, ADULTS: Powell (1969)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Powell (1969)

ID COMMENTS: *Adela caeruleella* is easy to recognize based on the very elongated antenna, and a mixture of purplish, bronzy or greenish-purple coloration on the thorax and forewing. The upper head is reddish tan, and three indistinct metallic reddish striae are usually evident on the apical third of the wing. The males have an extremely long antenna that is three times or more as long as the forewing and darker near the base. Females have a shorter antenna (about 1.5 times the length of the forewing), with a thick layer of purplish black scales on the basal half that contrasts with the lighter and thinner apical half.

DISTRIBUTION: *Adela caeruleella* is widespread in eastern North America from southern Quebec, Pennsylvania, and Ohio, south and southwestward to northern Florida, the Gulf Coast states, and central Texas. It is apparently absent from most of the Mississippi Valley and New England and vicinity. This species occurs statewide in North Carolina.

FLIGHT COMMENT: Local populations are univoltine. The adults are generally on the wing during the bloom of spring wildflowers, typically during March in Florida, and from April through June as one progresses further north. As of 2019, records for North Carolina are from mid-April in the Coastal Plain to June in the higher elevations of the Blue Ridge. A large mating aggregation was observed in Craven County on April 11, 2022 by J.B. Sullivan (see comments under Observation Methods).

HABITAT: The habitats are poorly documented and include both urban areas and relatively intact forested sites.

FOOD: The life history of the larval stages is unknown, as are the host plants. The adults have been found nectaring on a variety of vascular plants, including members of the Apiaceae, Asteraceae, and an assortment of other families. However, it is uncertain whether these are used as host plants for the larvae.

OBSERVATION METHODS: The adults are attracted to lights. They also visit flowers on warm spring days, and are commonly encountered resting on woodland vegetation. They sometimes aggregate on wildflowers, particularly members of the Apiaceae and Asteraceae, where it is not uncommon to find two or more adults on the same inflorescence.

The following observations of a mating aggregation were made by J.B. Sullivan on April 11, 2022:

"It was 11:45am along a trail and centered on a small American Holly shrub about 2-3' high. A female *Adela caeruleella* was perched on the end inch of a low Holly leaf about 8 inches above the ground. She remained motionless as 8-10 males flew all over the Holly with their antennae waving during flight. Occasionally they would light on her leaf but never appeared to approach her. They were in constant motion, rarely perching and if so rarely for long. I had no net so captured the female in a plastic vial. Once removed, males consistently lit briefly on her leaf as if they 'remembered' where she was. One male was also captured but they were in constant movement and trying to collect another individual seemed very unlikely. They continued to swarm the shrub after I left. The Holly may have been used only because it was in sunlight."

NATURAL HERITAGE PROGRAM RANKS: GNR [S4]

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 secure in North Carolina with scattered records across the state.