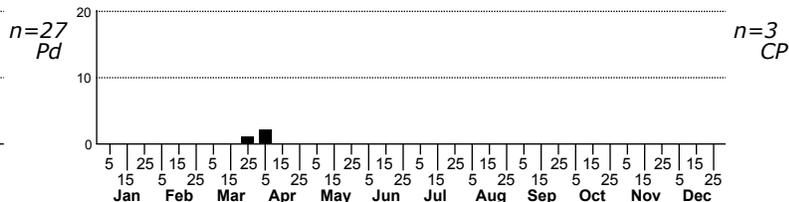
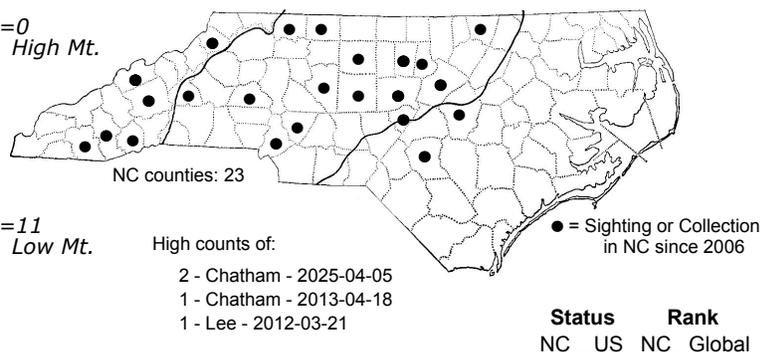
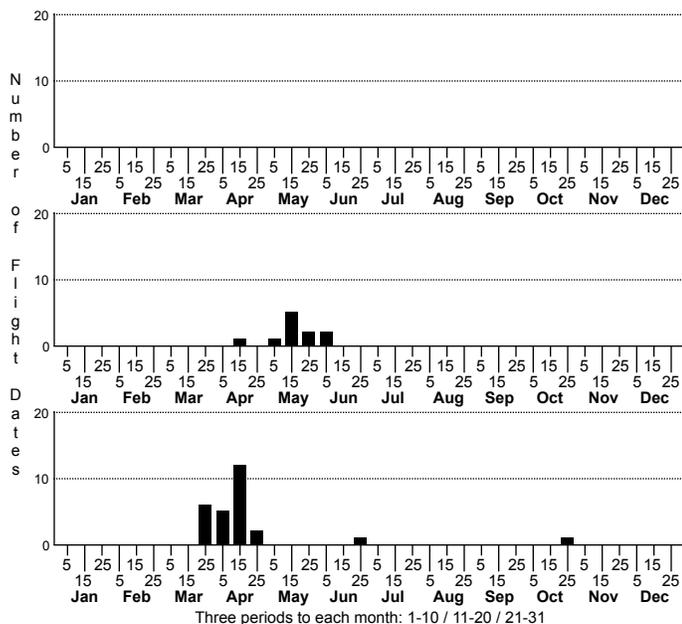


# *Prionoxystus macmurtrei* Little Carpenterworm Moth



FAMILY: Cossidae SUBFAMILY: Cossinae TRIBE: [Cossini]

TAXONOMIC\_COMMENTS: One of three members of the genus in North America, two of which are found in North Carolina. Very similar in appearance to members of the genus *Acosossus*, though no species in that genus occurs in the southeastern U.S. It is among the largest of the "micro-moths."

FIELD GUIDE DESCRIPTIONS: Covell (1984); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Packard (1890)

ID COMMENTS: This is a large, chunky moth that has a thick abdomen, broad thorax, and a disproportionally small head. The head and thoracic region are finely peppered with gray and white scales, and the pectinate antenna is blackish. The sexes are weakly dimorphic. The ground color of the forewing of the female varies from brownish to light smoky gray, and is marked by a series of black, irregular, transverse lines. The terminal fringe has an alternating series of black and white squarish marks. The hindwing is largely uniformly gray, and both wings have a translucent quality. The males are very similar, but have a more attenuated forewing, along with patterning that is fainter. The hindwing of the male also has a straighter outer margin, and may show a region of pale orange or yellow in the median area.

This species might be confused with *P. robiniae*, but the forewing of the latter has a reticulated pattern of black lines, and a large, angulated, median black blotch near the middle of the wing.

DISTRIBUTION: *Prionoxystus macmurtrei* is found in eastern North America, including much of the eastern US and adjoining portions of southern Ontario and Quebec. In the US, the range extends from Maine and other New England states southwestward through the Carolinas to central Alabama, and westward to central Texas, central Oklahoma, eastern Kansas, Missouri, eastern Iowa, Illinois and Wisconsin. Isolated records are also known from northern Florida and north-central Minnesota. As of 2025, almost all of our records are from the Piedmont and lower-elevations in the Blue Ridge, with only three records from the western Coastal Plain.

FLIGHT COMMENT: The adults have been observed from March through July in different areas of the range, with a seasonal peak in May. As of 2025, almost all of our records are from late-March to early-June, with adults in the Blue Ridge flying several weeks later than those in the Piedmont. The duration of the larval stage is undocumented for North Carolina.

HABITAT: Our records for natural sites are mostly from wet to mesic hardwood forests, but we also have numerous records from semi-wooded residential neighborhoods. This species is almost never found in xeric communities.

FOOD: The larvae bore into the wood of deciduous trees (Forbes, 1923; Craighead et al., 1950; Covell, 1984; Solomon, 1995; Heppner, 2007; Robinson et al., 2010). The reported hosts include maples (*Acer*), chestnuts (*Castanea*), ashes (*Fraxinus*), and oaks, including Northern Red Oak (*Quercus rubra*), which appears to be the primary host (Solomon, 1995).

OBSERVATION\_METHODS: Females are attracted to lights to some extent, but males far less so. Since the mouthparts of the adults are rudimentary, they do not feed, and consequently do not come to bait or visit flowers.

NATURAL HERITAGE PROGRAM RANKS: G4 [S3S4]

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

COMMENTS: The adults are only occasionally seen at lights and usually only a single individual is present on a given night. Populations are fairly widespread across the Piedmont and Blue Ridge, and the host trees are common and widespread.