

Cossula magnifica Pecan Carpenterworm Moth



FAMILY: Cossidae SUBFAMILY: Cossulinae TRIBE: [Cossulini] TAXONOMIC_COMMENTS: A resident of the southeastern U.S., this is the sole representative of the genus in North America.

FIELD GUIDE DESCRIPTIONS: Covell (1984) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Barnes and McDunnough (1911) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: Distinctive. The basal three-quarters of the forewing is powdery-gray (lightest subterminally) with fine black striations, heaviest at the base. The end of the forewing bears a creamy-brown elliptical disk, speckled, streaked, and edged in dark brown and black. The width of the forewings is almost uniform from base to outer margin, broadening only slightly at distal end. The raised, silver-gray thoracic scales encompass the base of the forewings imparting upon the moth something of a "cowled" appearance.

DISTRIBUTION: Most of our records come from the Coastal Plain and the adjoining eastern Piedmont; one historic record comes from the western Piedmont

FLIGHT COMMENT: Univoltine, adults fly from May to July

HABITAT: North Carolina records for this species come from a wide range of woody habitats, including maritime forest and scrub, xeric Carolina bay rims and sandhills, mesic hardwood slopes and ridges, reservoir shorelines, and wooded residential neighborhoods.

FOOD: Larvae are borers in oaks and hickories, including Live Oak ($\langle i \rangle$ Quercus virginiana $\langle i \rangle$) (Bailey, 1892). Pecan ($\langle i \rangle$ Carya illinoinensis $\langle i \rangle$) and American Persimmon ($\langle i \rangle$ Diospyros virginiana $\langle i \rangle$) have also been specifically as hosts used by this species (Covell, 1984), as have Southern Red Oak ($\langle i \rangle$ Q. falcata $\langle i \rangle$) and Cherrybark Oak ($\langle i \rangle$ Q. pagoda $\langle i \rangle$) (US Forest Service). In North Carolina, it has recently been reported from Common Hazel ($\langle i \rangle$ Corylus avellana $\langle i \rangle$) (M. Bertone, BugGuide, 2017), which is not native to our state.

OBSERVATION_METHODS: Attracted to lights but 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: G5 [S4]

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

COMMENTS: Uncommon to locally common in the Coastal Plain and Piedmont but apparently rare in or absent from the Mountains.