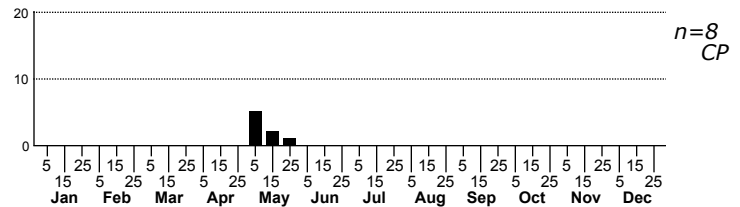
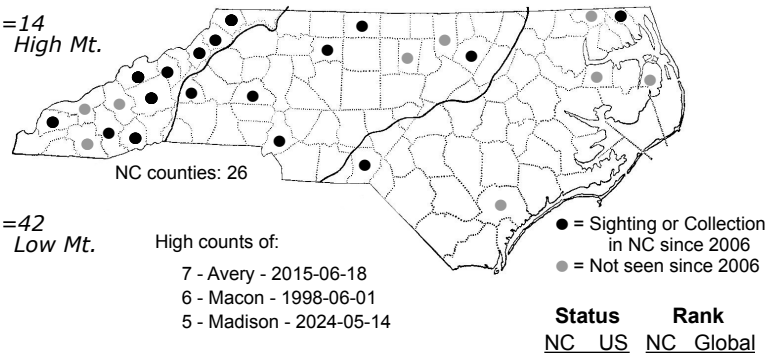
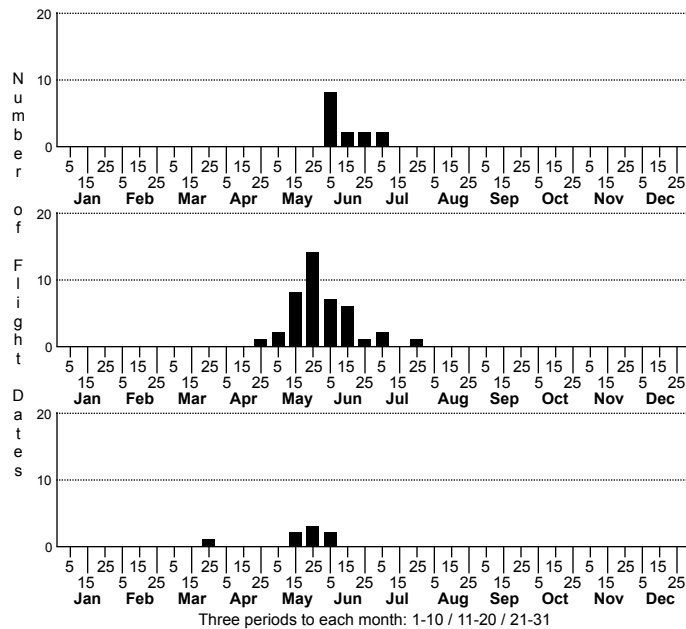


Packardia geminata Jeweled Tailed Slug Moth



FAMILY: Limacodidae SUBFAMILY: TRIBE:

TAXONOMIC_COMMENTS: This is one of four currently recognized members of the genus in North America, three of which occur in North Carolina. The fourth, *P. albicaudata*, may merely be a form of *P. geminata* (Wagner, 2005).

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

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Dyer (1898b); Wagner (2005)

ID COMMENTS: In this species the antennae are reddish-brown, while the head, palps, and thorax vary from dull white to reddish tan with varying levels of orangish-brown to brown dusting. A prominent scale tuft is present on the thorax. The ground color of the forewing ranges from off white to grayish to orange-brown and also has varying amounts of orangish-brown to brown dusting. The median and post-median areas are filled with a large V-shaped patch that is narrowest at the costa. The patch broadly widens from the costa and terminates in a region that extends from near the anal angle to just before the middle of the inner margin. The patch typically varies from light or dark brown and is edged by a brown median and postmedian line. In many specimens the region between the lines may be only partially filled with darker scales. The distal margin of the patch is marked near the anal angle with one to three oval or triangular white spots. The forewing pattern is reminiscent of that of *P. elegans*, but on that species the median and post-medial lines are white, and the spots at the anal angle are dark.

DISTRIBUTION: *Packardia geminata* is found in southern Canada from Ontario eastward to Nova Scotia, and in the US from Maine westward across the Great Lakes region to Minnesota. From there the range extends southward to Missouri, eastern Oklahoma, central Mississippi, central Alabama, northern Georgia, and western South Carolina. There is one isolated record from southern Louisiana. We have records from all three regions of the state, but most come from the Blue Ridge, with the rest of the state sparsely represented.

FLIGHT COMMENT: Local populations appear to produce a single brood each year throughout the range. Adults have been observed from February through September in different areas of the range, with the peak flight typically in May and June. As of 2023, our records extend from early May thorough late-July, with the exception of one early season record from late March. The seasonal peaks in North Carolina populations are in May and June.

HABITAT: Most of our records come from wet to mesic hardwood forests. These include peatlands, bottomland hardwoods, and pond and lake shorelines in the Coastal Plain, and cove forests and northern hardwood forests in the Blue Ridge.

FOOD: The larvae are polyphagous and feed on a variety of deciduous trees and shrubs, and possibly spruce (Dyers, 1898b; Covell, 1984; Murphy et al., 2010; Robinson et al., 2010; Marquis et al., 2019). The reported hosts including birches (*Betula*), hickories (*Carya*), dogwoods (*Cornus*), beeches (*Fagus*), wax-myrtles (*Morella*), gums (*Nyssa*), oaks (*Quercus*), spruces (*Picea*), cherries (*Prunus*), and viburnums (*Viburnum*). Specific host species that are used (iNaturalist; BugGuide; Murphy et al., 2010; Marquis et al., 2019) include Downy Serviceberry (*Amelanchier arborea*), American Hornbeam (*Carpinus caroliniana*), Coastal Sweet-pepperbush (*Clethra alnifolia*), American Beech (*F. grandifolia*), Black Gum (*Nyssa sylvatica*), Black Cherry (*P. serotina*), White Oak (*Q. alba*), Willow Oak (*Q. phellos*), Northern Red Oak (*Q. rubra*), and Black Oak (*Q. velutina*). Records for spruce (Covell 1984) are suspect and need confirmation given that the larvae typically feed on the undersides of broadleaf species.

OBSERVATION_METHODS: The adults are attracted to lights.

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: Although this species ranges across all three regions of the state, most records are from the Blue Ridge where collecting efforts have historically been concentrated.