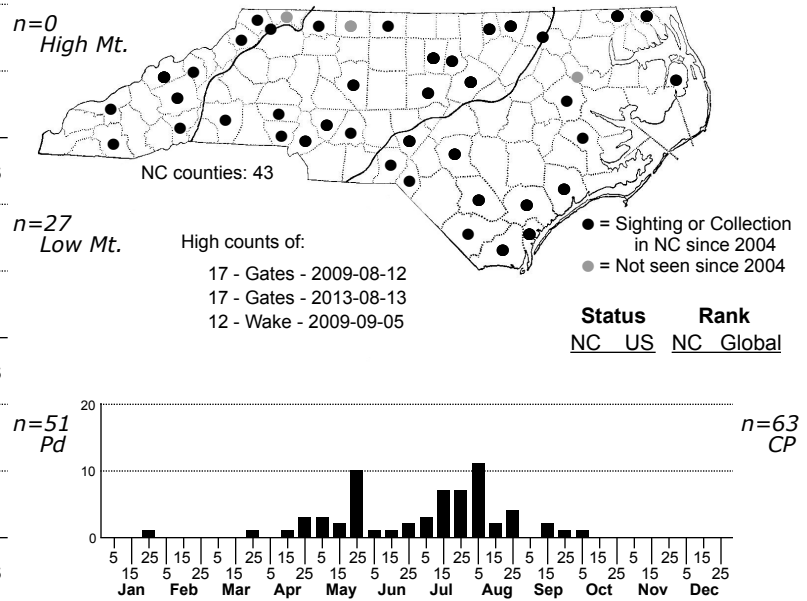
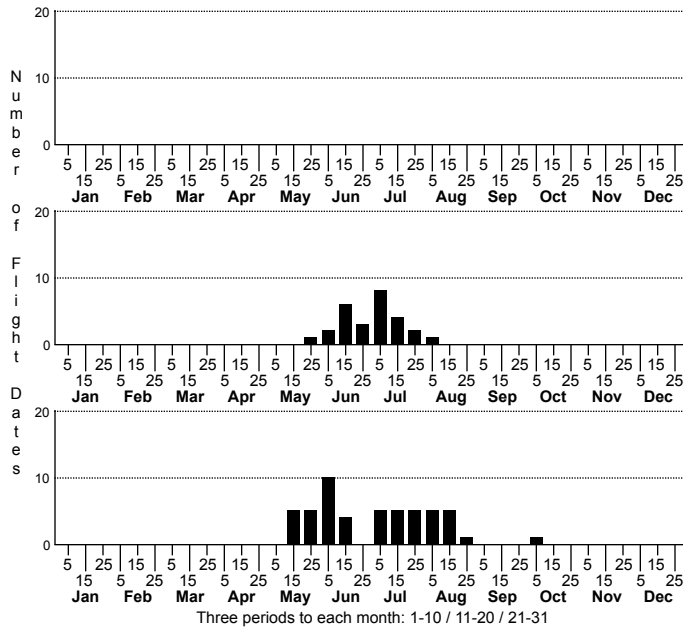


Anisota virginiensis Pink-striped Oakworm Moth



FAMILY: Saturniidae SUBFAMILY: Caratocaminae TRIBE:

TAXONOMIC COMMENTS: One of four species in this genus that occurs in North Carolina (3 others occur north of Mexico -- Tuskes et al. 1996). Ferguson (1971) described a southern subspecies, *pellucida*, based primarily on its more intense shade of red. Tuskes et al. (1996), however, considered the differences between the forms to be clinal. Apart from some possible and minor differences in the length of the spines in the larvae (Burke and Peigler, 2009), there does not seem to be any convincing reason to treat *pellucida* separately, particularly as a full species (as proposed by Riotte and Peigler, 1980; see also Burke and Peigler, 2009). We follow Tuskes et al. in this regard.

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

ONLINE PHOTOS: MPG, Bugguide, BAMONA

TECHNICAL DESCRIPTION, ADULTS: Forbes (1923), Ferguson (1971), Tuskes et al. (1996)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1923), Ferguson (1971), Covell (1984), Tuskes et al. (1996), Wagner (2005)

ID COMMENTS: Adult females are fairly easy to recognize, differing from those of *A. stigma* and *A. senatoria* in a number of respects: no dark speckling on the wings; more pinkish coloration, particularly in the marginal area beyond the postmedian line; and generally having longer, narrower forewings. Some individuals may be fairly translucent (form *virginiensis*) while others may be opaque (form *pellucida*). Tuskes et al. (1996) note the existence of intermediate forms, including specimens from Halifax County, NC (Ferguson, 1971, also shows an individual -- labeled subspecies *virginiensis* -- that looks intermediate between a more completely translucent individual labeled *virginiensis* and a more opaque specimen identified as *pellucida*; see Plate 5. 22-24). Males, like those of *A. senatoria* and *A. peigleri*, are believed to be bee mimics, possessing translucent forewings and flying only during the day (Tuskes et al., 1996). Males of *virginiensis* tend to have more transparent forewings than *senatoria* or *A. peigleri* and have more convex outer margins on both sets of wings (see illustrations in Covell, 1984).

DISTRIBUTION: Probably occurs statewide except for the High Mountains, where oaks are scarce

FLIGHT COMMENT: Probably has just one flight in the Mountains but appears to have two in the Coastal Plain

HABITAT: Habitats used in North Carolina appear to span the entire range of oak forests and woodlands, from Maritime Forests, to xeric Sandhills, to Coastal Plain and Piedmont Bottomland Hardwoods, to Montane Oak-Hickory Forests. Some of the records from lowland habitats, such as at Devil's Gut and Merchant's Millpond, however, may be due to the presence of sandridges, where the larvae may be feeding on upland oaks rather than floodplain species (Hall, pers. obs.; FLoyd Williams, pers. comm. to S. Hall). Direct observations of larvae present in floodplain habitats or feeding records on Laurel, Willow, or other bottomland oaks are needed to clarify their use of this type of habitat.

FOOD: Larvae are stenophagous on oaks. Ferguson (1971) mentions Northern Red Oak (*Quercus rubra*) for subspecies *virginiensis* and Blackjack Oak (*Q. marilandica*) -- figured in Abbot and Smith, 1797) for *pellucida*. Covell (1984) also adds Southern Red Oak (*Q. falcata*) and Water Oak (*Q. nigra*) for *pellucida*. According to Tuskes et al. (1996), many oaks are accepted in captivity. In North Carolina, we have records for larvae feeding on White Oak (*Q. alba*), Overcup Oak (*Q. lyrata*), Willow Oak (*Q. phellos*), and Northern Red Oak.

OBSERVATION_METHODS: Females come fairly well to blacklights and incandescent lights but since they do not feed, do not come to bait. Males are diurnal and do not show up at lights at night. Although believed to be bee mimics, they also do not feed and so are not found at flowers. Observations of males under natural conditions are very rare, but they can be obtained from captive-bred larvae or can be attracted to tethered or caged females. Larvae are gregarious but form smaller groups than in *senatoria* and *A. peigleri* (Tuskes et al., 1996).

NATURAL HERITAGE PROGRAM RANKS: G5 [S5]

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

COMMENTS: Populations are locally vulnerable to the effects of weather, outbreaks of disease, parasites, and predators, and to the effects of pesticides. However, given the commonness of their host plants, wide habitat range -- including suburban areas -- and statewide distribution, this species can easily recover from localized losses. In the Northeast, however, this species has declined drastically, and is now very local (Wagner, 2012). Declines may be possibly due to parasitism by a Tachinid fly, *Compsilura concinnata*, that was widely introduced in the Northeast to control Gypsy Moths and other pest Lepidoptera. This fly represents a serious and pervasive threat for many species of moths and is suspected to be responsible for the marked declines in several Saturniids. While such impacts have not yet been documented in North Carolina, *Compsilura* has spread as far south as Virginia (Kellogg et al., 2003) and will probably continue to expand its range southward. The situation in North Carolina needs to be monitored.