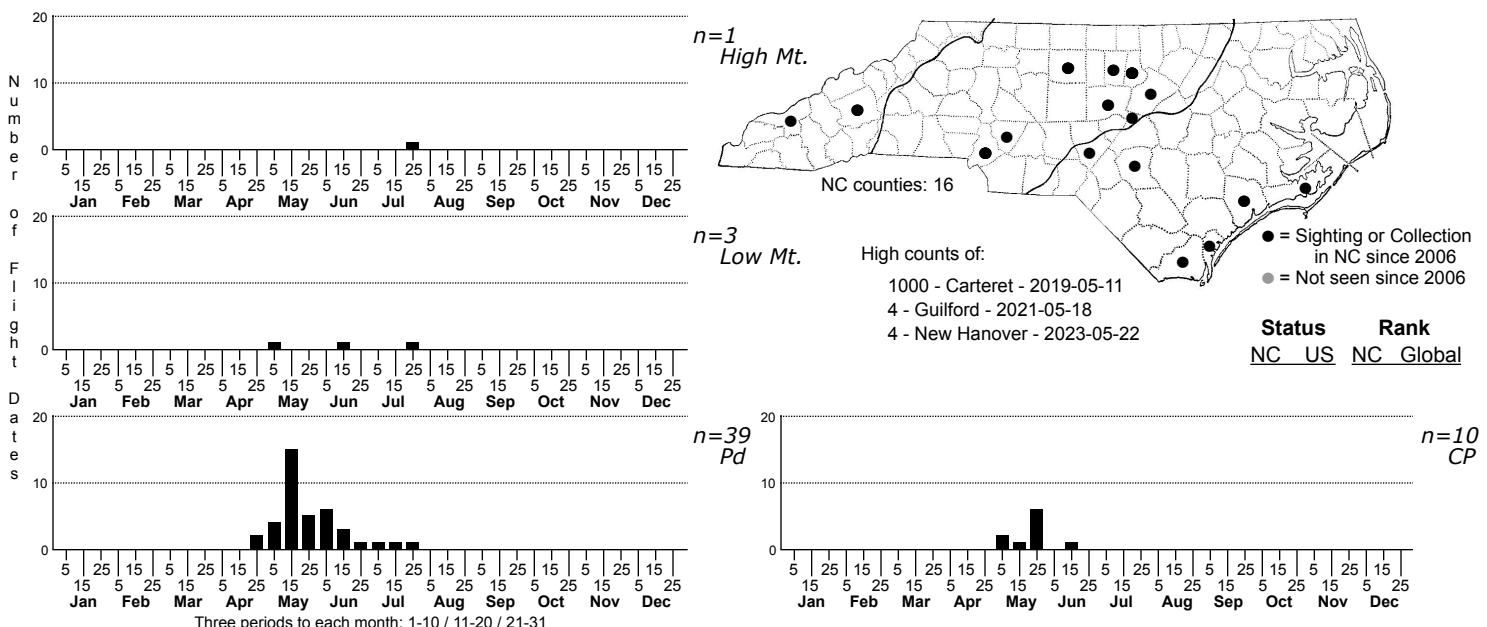


Pubitelphusa latifasciella White-banded Pubitelphusa



FAMILY: Gelechiidae SUBFAMILY: Gelechiinae TRIBE:
TAXONOMIC COMMENTS:

FIELD GUIDE DESCRIPTIONS: Beadle and Leckie (2012; as *Telphusa latifasciella*); Leckie and Beadle (2018)
ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Lee and Brown (2013)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Marquis et al. (2019)

ID COMMENTS: This species varies markedly in coloration and patterning, with two general color forms. The first and most striking has boldly marked black and white bands, while the other has heavy fuscous dusting and varying levels of light and darker banding that is subdued relative to the first form. Species with varying levels of intermediacy are occasionally seen. The following is based on the description by Forbes (1923) and the redescription by Lee and Brown (2013). The head is light gray or off-white and sprinkled with dark gray scales. The antenna is slightly more than half the length of the forewing, and is off-white with dark brown to blackish annulations. The labial palp is off-white with dark gray or blackish annulations. The second segment has three annuli: one at the base, one beyond the middle, and one before the apex. The third segment has one annulation near the base and a second beyond the middle. The thorax and tegula are dark gray and sparsely sprinkled with off-white scales, and there are tufts of raised scales on the lateral mesoscutum.

The forewing pattern varies markedly, but typically consists of a dark basal band that covers the basal one-fourth of the wing. This is followed by a broad and paler antemedial band. It is about as wide as the breadth of the wing, and is edged on both sides with two tufts of raised brown to black scales. This is followed by a darker, postmedial band of about the same width that is often weak or broken in the middle. This band has two raised scale tufts on the posterior margin. A whitish shade is present beyond it towards the costa. In the form with a contrasting white band, the basal and antemedian bands are black and the scale tufts are not readily evident. The lighter area that follows the postmedial band is sometimes organized into a narrow, whitish fascia that is jagged. The banded dusky forms are heavily dusted with light brown to fuscous coloration and the darker scale patches are prominent. Some of the dusky forms lack banding altogether, and are uniformly dark gray to fuscous, with conspicuous scale patches. The wing tip has a series of rather faint dark spots with lighter edging. The hindwing and the fringe varies from gray to yellowish brown. The unbanded forms superficially resemble *Pseudotelphusa quercinigracella*, but the latter has a well-developed, blackish antemedial fascia.

DISTRIBUTION: *Pubitelphusa latifasciella* is found in eastern North America from Vermont, New York, Ontario, and Quebec southward to Florida, and westward to central Texas, Oklahoma, Missouri, Wisconsin, and Minnesota. As of 2021, we have scattered records from throughout all three physiographic provinces, with most from the Piedmont.

FLIGHT COMMENT: Adult records extend from March through August in areas outside of North Carolina, with a seasonal peak in May through July. As of 2021, we have records from mid-May through late July.

HABITAT: Local populations depend on oaks, particularly species that are found in mesic to somewhat drier sites. These include semi-wooded residential neighborhoods, as well as oak-hickory forests, mixed pine-hardwood forests, and other forest communities with oaks.

FOOD: The larvae specialize on oaks and use a variety of species (Robinson et al., 2010; Marquis et al. 2019). The documented hosts include White Oak (*Quercus alba*), Scarlet Oak (*Q. coccinea*), Shingle Oak (*Q. imbricaria*), Post Oak (*Q. stellata*), Blackjack Oak (*Q. marilandica*), Chinquapin Oak (*Q. muehlenbergii*), Northern Red Oak (*Q. rubra*), and Black Oak (*Q. velutina*). Reports of this species feeding on *Vaccinium* are unsubstantiated and are probably incorrect.

OBSERVATION_METHODS: The adults are frequently collected at lights, and the larvae have been collected within leaf rolls and between the tied leaves of oaks.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S5

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

COMMENTS: As of 2021, we have scattered records from throughout the state. This species appears to be relatively secure based on its statewide distribution and use of oaks as hosts.