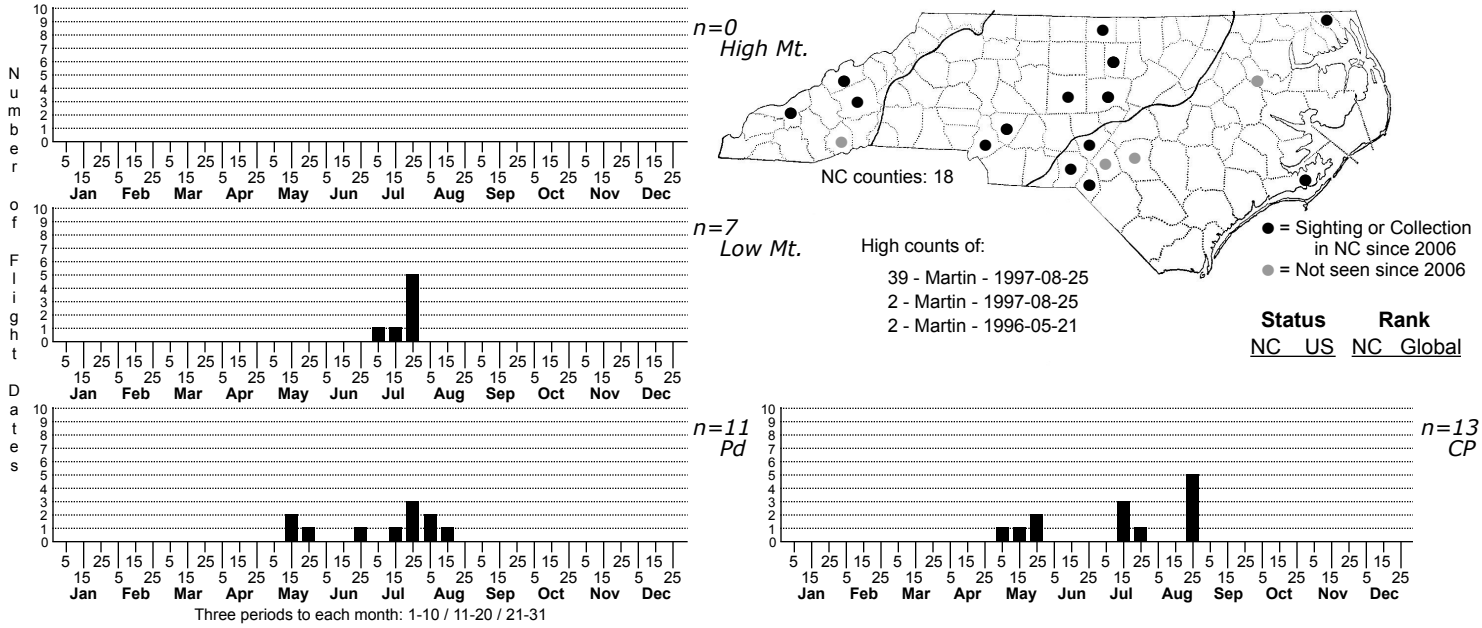
Heterogenea shurtleffi Red-eyed Button Slug Moth



FAMILY: Limacodidae SUBFAMILY: TRIBE:
TAXONOMIC_COMMENTS: Monogenic in N.A.

FIELD GUIDE DESCRIPTIONS:
ONLINE PHOTOS:
TECHNICAL DESCRIPTION, ADULTS: Forbes (1923)
TECHNICAL DESCRIPTION, IMMATURE STAGES: Dyar (1898a); Wagner (2005)

ID COMMENTS: Heterogenea shurtleffi is sexually dimorphic in both size and coloration. The forewing is cinnamon to brown in the larger females and darker chocolate brown in the males. The hindwing is also generally lighter brown in the females but blackish in the males. There are two narrow transverse bands on the forewing that are diffuse and dark brown. The inner band runs more-or-less obliquely across the wing from the inner margin to the costa near the middle of the wing. The outer band is much more strongly curved and runs from near the subtornal region of the inner margin roughly parallel to the termen before curving sharply towards the costa where is often joins the first band. A diffuse patch of similarly colored scales usually occupies the space between the two bands. In both sexes, there is usually a broad fringe on both wings, with a row of shorter, darker gray, but also somewhat elongated scales at the base of the fringe. These rows give the fringe a bicolored, or in some cases, tricolored appearance. Males are unlikely to be confused with other limacodids, and can be distinguished from similarly small and blackish species of Cryptothelia and Fulgoraecia exigua by their simple, rather than pectinate antennae. Females are similar in size, color, and pattern to Tortricidia flexuosa and Lithacodes fiskeanus, but have more rounded outer margins on the forewing, which are obliquely straight in the other species. Photographs showing the structural features described below should more reliably separate this species from the others.

DISTRIBUTION: Heterogenea shurtleffi is found in eastern North America where the main range extends from North Carolina southward to central Florida, and westward to central Texas and central Oklahoma. Scattered populations have also been reported for central Illinois, Maryland, New York, New Hampshire and Maine, as well as Ontario and Quebec, Canada. This species appears to occur statewide in North Carolina, with the exception of the higher elevations in the Blue Ridge.

FLIGHT COMMENT: The adults primarily fly from April through September in different areas of the range, with populations in Florida being active as early as February. As of 2023, our records are from early May through late August.

HABITAT: The largest sample of this species was recorded in the middle of a deeply flooded swamp forest, with no dry land around for hundreds of meters (the trap was located on the top of a beaver lodge). Many of the other sites where this species has been recorded in North Carolina are from riparian or wetland habitats. However, we also have records from mesic hardwood forests, dune habitats on a barrier island, and semi-wooded residential neighborhoods.

FOOD: The larvae are polyphagous and feed on deciduous hardwoods (Wagner, 2005; Heppner, 2007). The reported hosts include American Hornbeam (Carpinus caroliniana), chestnuts (Castanea), beeches (Fagus), oaks (Quercus), and presumably other woody plants. Based on the habitats where we have recorded this species in this state, American Hornbeam and bottomland or swamp oaks such as Overcup Oak (Q. lyrata) and Swamp Chestnut Oak (Q. michauxii) seem the most likely to be used. In North Carolina, we have a single feeding record from Northern Red Oak (Q. rubra).

OBSERVATION_METHODS: The adults are attracted to lights but do not feed and consequently do not visit flowers or come to bait.

NATURAL HERITAGE PROGRAM RANKS: GNR S3S4

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

COMMENTS: This species appears to be uncommon in North Carolina. More information is needed on its distribution, host plants and habitat preferences before its conservation status can be accurately assessed.