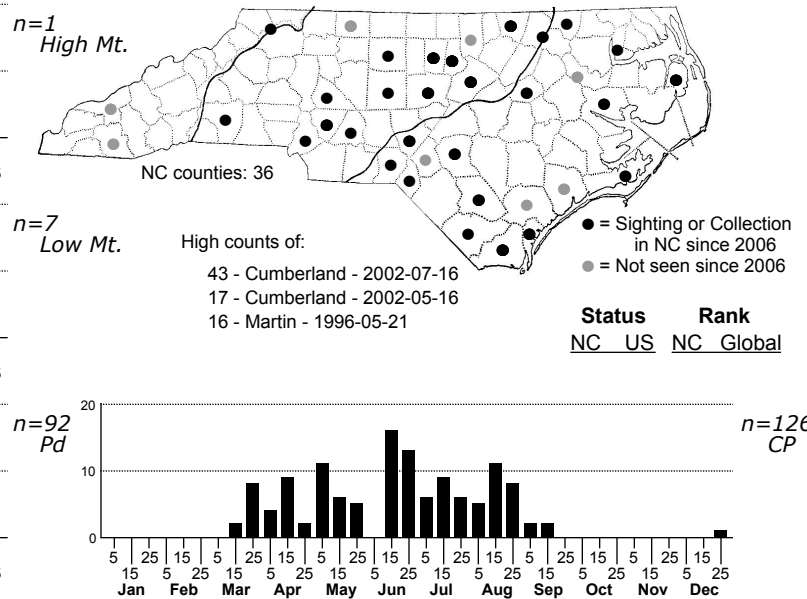
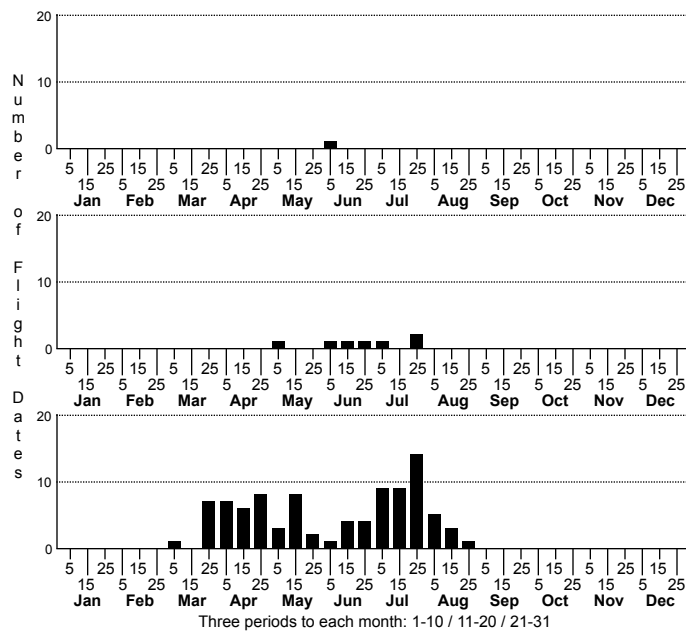


## *Zale obliqua* Oblique Zale



FAMILY: Erebidae SUBFAMILY: Erebinae TRIBE: Ophiuini

TAXONOMIC\_COMMENTS: One of 39 species in this genus that occur north of Mexico, 23 of which have been recorded in North Carolina. *Zale obliqua* and *squamularis* are closely related and apparently form a species complex with one or more undescribed species (Wagner et al., 2011)

FIELD GUIDE DESCRIPTIONS: Covell (1984)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: McDunnough (1943); Forbes (1954); Rings et al. (1992)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1954), Wagner et al. (2011)

ID COMMENTS: *Obliqua* is one of the easier species in this group to recognize: smoothly patterned pale brown and blue gray, with only a slight contrast between the antemedial and postmedial areas (before and after the medial line). The medial line forms a boundary between a lighter, more basal area and a darker, more distal area; this line is contiguous with the inner edge of the reniform in *obliqua* and *Z. squamularis* but crosses the wing before the reniform in the other pine-feeding species. *Obliqua* is larger than *squamularis* and differs by having a much less contrasting medial line (which is blackish in *squamularis*) and showing much less contrast between the pale antemedial area and the darker postmedial area.

DISTRIBUTION: Occurs over most of the state except the High Mountains

FLIGHT COMMENT: Appears to have just a single brood in the Mountains but may have a spring and summer brood in the Piedmont and Coastal Plain

HABITAT: The majority of our records come from the Coastal Plain, where it is associated with a range of wet-to-xeric forests: blackwater and brownwater floodplain forests, Non-riverine Swamp Forests, Coastal Fringe Evergreen Forests and Maritime Deciduous Forests, Wet Longleaf Pine Savannas and Flatwoods, and Pine-scrub oak Sandhills. In the Piedmont and Mountains, it has been recorded in both wet, riparian habitats and dry ridges.

FOOD: Larvae are stenophagous, apparently feeding on just a few species of pine. Wagner et al. (2011) state that Pitch Pine (*Pinus rigida*) is the primary host plant in the North. In North Carolina, however, Pitch Pine is restricted to the Mountains, where it may be used to some extent although there are also a number of other possibilities. Over most of its range in North Carolina, *Z. obliqua* probably uses Longleaf Pine (*P. palustris*) and Loblolly Pine (*P. taeda*), occurring at some sites where each of these two pines is the only one present. It may also feed on Pond Pine (*P. serotina*), a close relative of Pitch Pine, which often occurs in combination with the other two species. However, we only have a few records from peatland habitats, where Pond Pine is most abundant, and only from sites where Loblolly Pine is also present.

OBSERVATION\_METHODS: Comes well to both blacklights and bait.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S4S5]

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

COMMENTS: Although the distribution in the Piedmont needs to be better documented, *obliqua* occupies a wide range of habitats across most of the state and appears to be secure.