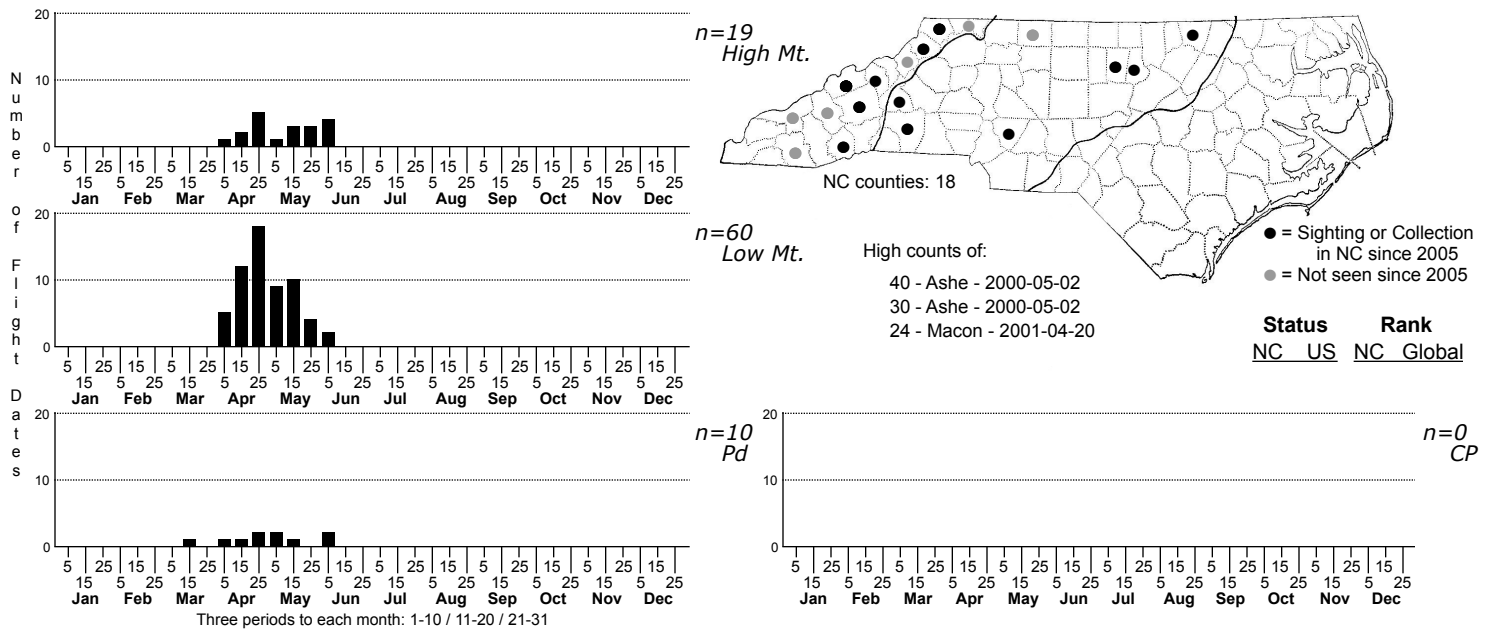


## *Zale unilineata* One-lined Zale



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

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

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1954)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1954); Wagner (2005); Wagner et al. (2011)

ID COMMENTS: A large, pale-to-warm brown Zale without strong contrasting zones across the wings, although the terminal area is usually grayer than the inner portions of the wing (Forbes, 1954). The basal, antemedian, and median lines are all diffuse but the combined postmedian and subterminal lines are the most conspicuous markings on the wings. The pale portion of this line is formed by the postmedian, with the outer portion often reddish. Zale declarans has a very similar pattern overall but possesses a predominately pale line on the hindwing rather than the contrastingly dark line present in unilineata; the outer margin is also more scalloped in unilineata. In North Carolina, these two species occupy widely separated ranges, with the Black Locust that unilineata feeds upon generally not present (if present at all) in the maritime forests and coastal fringe sandhills occupied by declarans.

DISTRIBUTION: Previously recorded only in the Mountains and Western Piedmont, where Black Locust is native, but now found to the eastern edge of the Piedmont

FLIGHT COMMENT: Appears to have a single flight in the spring

HABITAT: Our records come from mesic-to-dry sites in the Mountains, but it is not clear whether Black Locust is growing under completely natural conditions at all these sites or may have been planted. In the eastern Piedmont, it has been recorded in areas where Black Locust is mostly all planted or escaped.

FOOD: Larvae are monophagous, reported to feed only on Black Locust (*Robinia pseudoacacia*) (Forbes, 1954; Wagner, 2005; Wagner et al., 2011).

OBSERVATION\_METHODS: Appears to come quite well to blacklights with large numbers having been taken in single traps. Like other *Zale* species, it probably also comes well to bait.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S3S4]

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

COMMENTS: The natural habitats used by this species are unclear; Black Locust is often associated with rural lands in North Carolina and is now often planted well outside of their natural range within the state. With recent records from the eastern Piedmont, *Zale unilineata* may be expanding its range within the state.