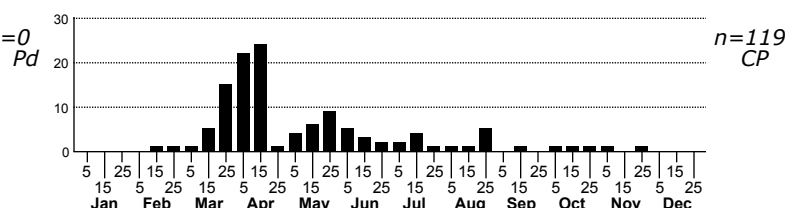
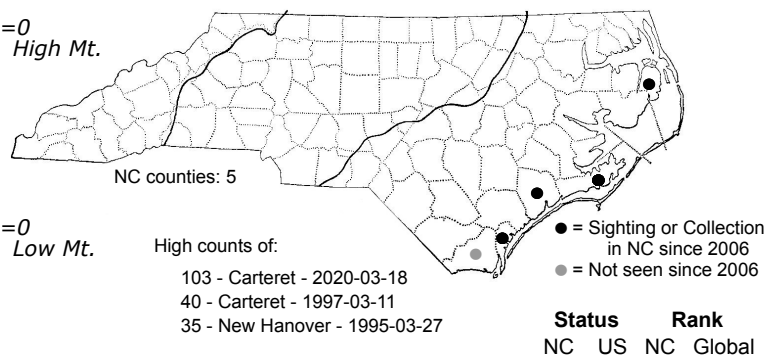
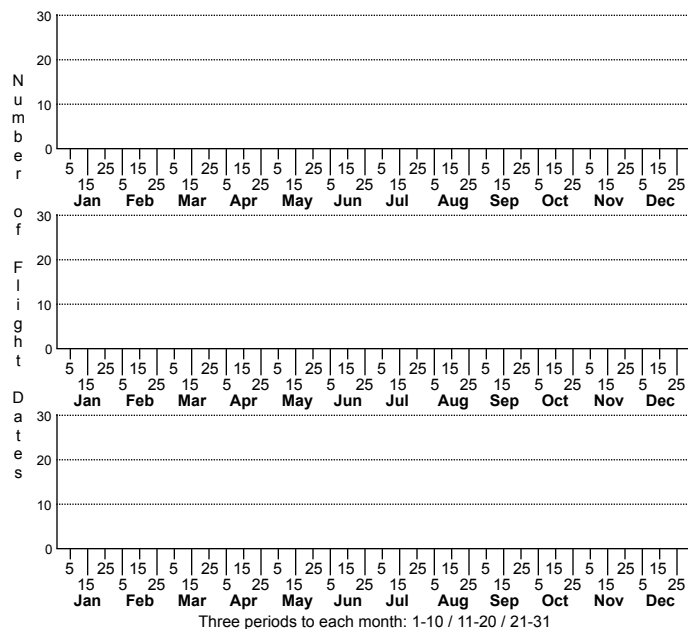


Zale declarans Dixie Zale



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:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Adults are illustrated in Kimball (1965) and Wagner et al. (2011) but neither give a detailed description of the adult characteristics

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

ID COMMENTS: A brown to umber Zale, either fairly uniformly colored across the wings or with a contrastingly grayish sub-terminal area. Somewhat similar to *Z. unilineata* in coloration and in possessing a narrow, contrastingly pale line formed by the postmedian and subterminal; differs from *unilineata* in possessing a predominately pale postmedian line on the hindwing rather than the contrastingly dark line present in *unilineata*. It also differs strongly in habitat, with the Black Locusts that *unilineata* feeds upon generally not present (if present at all) in the maritime forests and coastal fringe sandhills used by *declarans*.

DISTRIBUTION: Restricted to the outer coast, found mostly on barrier islands but also on the mainland at Carolina Beach State Park and at Camp Lejeune (both within just a couple of miles inland from the coast)

FLIGHT COMMENT: Adults are present during most of the growing season but appear to be most abundant in the spring (the same pattern was noted by Wagner et al., 2011).

HABITAT: Strongly associated with Maritime Evergreen Forest and Maritime Shrub communities but also occurs in Coastal Fringe Sandhills.

FOOD: Larvae feed on Live Oak (*Quercus virginiana*) and probably Sand Live Oak (*Q. geminata*), given the presence of *Z. declarans* in Coastal Fringe Sandhills habitats (where Live Oak is only occasional). In North Carolina, J.B. Sullivan reared larvae from Live Oak.

OBSERVATION_METHODS: Seems to come to blacklights more readily than other *Zale* species, with numbers collected in single light traps commonly exceeding 10 (maximum of 35); although we haven't collected it using bait, it is likely to be as strongly attracted as other species of *Zale*.

NATURAL HERITAGE PROGRAM RANKS: G5 S2S3

STATE PROTECTION: Tracked as Significantly Rare by the Natural Heritage Program; not given any legal protection, although permits are required to collect it on state parks and other public lands.

COMMENTS: As a strong habitat specialist restricted to just a narrow strip of the North Carolina coast, this species appears to be highly vulnerable to hurricanes as well as the effects of sea-level rise. Much of its habitat, moreover, has been lost due to coastal development, although it may be able to persist in areas where Live Oaks and coastal scrub communities have been integrated into the landscape surrounding houses and beach condos. Impacts from outdoor lighting are not known.