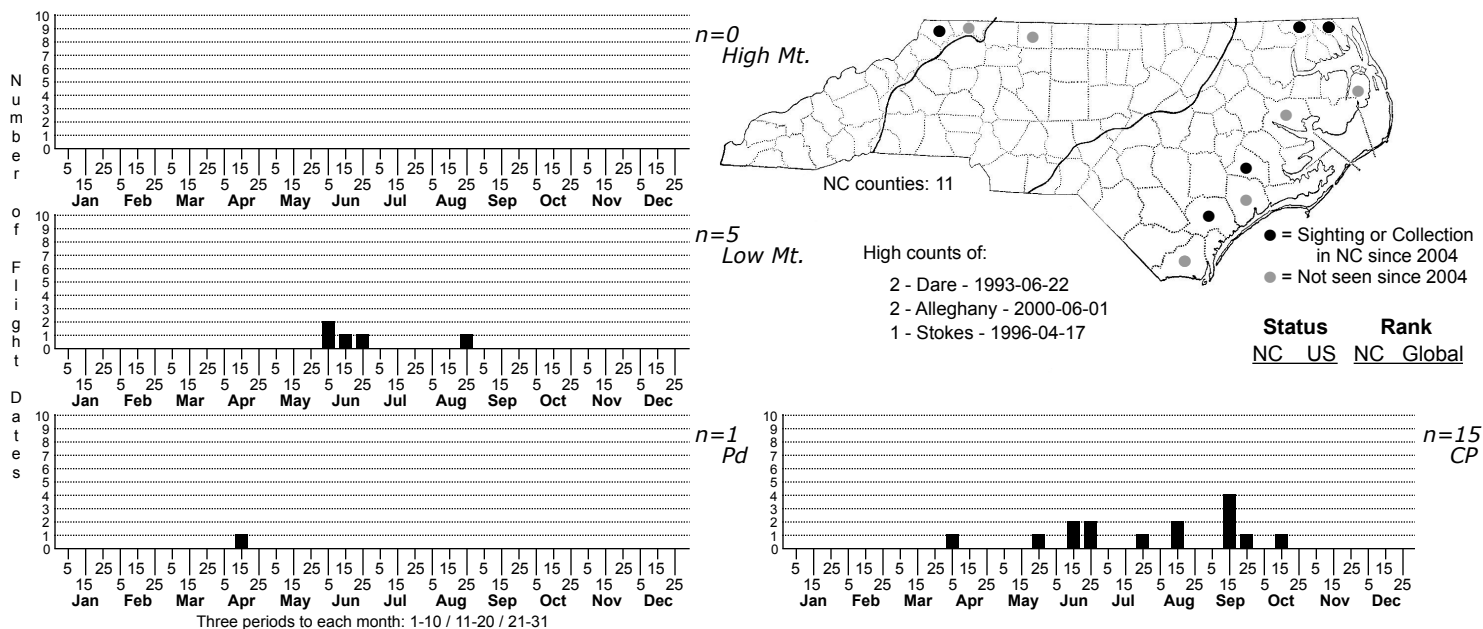


## *Scopula cacuminaria* Frosted Tan Wave Moth



FAMILY: Geometridae SUBFAMILY: Sterrhinae TRIBE: Scopulini

TAXONOMIC COMMENTS: One of 26 species in this genus that occur in North America north of Mexico (Pohl et al., 2016), seven of which have been recorded in North Carolina

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

ONLINE PHOTOS: MPG, BugGuide, BAMONA, BOLD

TECHNICAL DESCRIPTION, ADULTS: Covell (1970)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1948; not detailed)

ID COMMENTS: A medium-sized Wave, distinguished from other members of this genus by its pointed hindwings, cream ground color, and heavy brown spotting in the subterminal area (Covell, 1970). Discal dots on both sets of wings are dark brown and a series of dorsal dark spots runs from thorax down the abdomen. Both *cacuminaria* and *aemulata* have a postmedian consisting of a series of dots, but *aemulata* has a tan ground color and has rounded hindwings and lacks the spots in the subterminal area of the forewing. Some forms of *S. limboudata* have heavy shading or spots in the subterminal area and have somewhat angled hindwings, but they have a continuous postmedian line and the subterminal shading is usually diffuse. *Scopula purata* can have separate dark spots in the subterminal area but has a pure white ground color and has rounded hindwings.

DISTRIBUTION: Most of our records come from the Outer Coastal Plain, with one record from along the New River in the Low Mountains

FLIGHT COMMENT: We have too few records to detect a definite pattern in adult flights. Covell's (1970) data suggested that there were two distinct flights, one in late spring and another in late summer, but we have records from the fall as well.

HABITAT: All of our records come from wet habitats, particularly shorelines of ponds and rivers. Although several records come from estuarine areas, the habitats at these sites are mainly freshwater. A few come from small stream swamps but the majority are from more open shorelines, where either shoreline herbaceous vegetation or marsh plants could be the host plants for this species. We do not have any records, however, from beaver sedge meadows, which we have extensively surveyed in the Fall-line Sandhills and eastern Piedmont, nor do we have any records from the rich, open, herb-dominated seepage slopes, which have also been a target of our surveys.

FOOD: Forbes (1948) reared larvae on lettuce and cites Franclemont as saying they are general feeders. No observations from the wild are known, however, and the host plants still need to be confirmed; herbaceous species seem likely.

OBSERVATION\_METHODS: Appears to come fairly well to 15 watt blacklights; we have no records from bait.

NATURAL HERITAGE PROGRAM RANKS: G4 S2S3->[S3S4]

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

COMMENTS: Covell (1970) describes this species as local and rather scarce, which agrees with our findings. It is possibly a habitat specialist, but we need more information on its host plants to determine which habitats in particular it is associated with. More information is also needed on its distribution and abundance across the state before an accurate assessment can be made of its conservation needs.