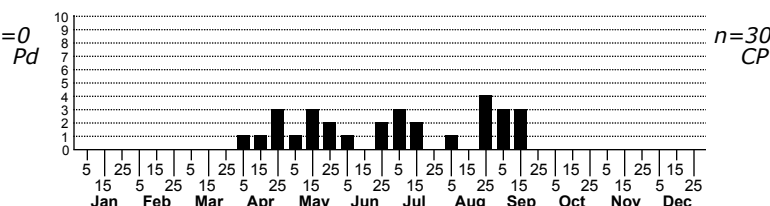
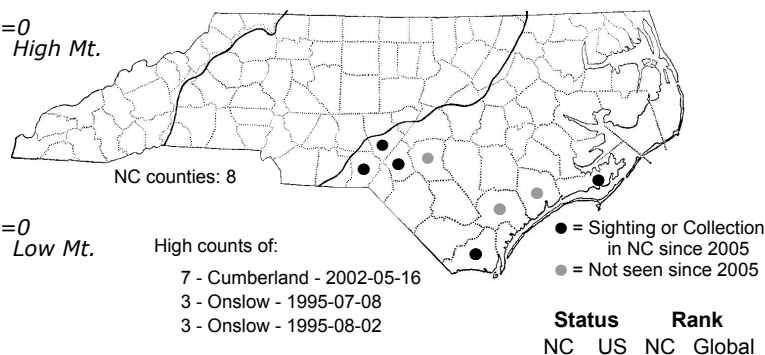


# *Scopula purata* Chalky Wave



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)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Covell (1970)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: A strikingly and distinctively patterned, medium-small Geometrid. The ground color is a shiny, pure white, covering the basal and medial areas of the forewing. The inter-antennal ridge is also pure white as is the thorax and the abdomen except for a dorsal row of dark spots. The antemedian is represented by a few black dots and the median line is absent. The postmedian, however, is blackish-brown and continuous over most of the wing, fading out towards the costa. Beyond the postmedian, the subterminal area is filled with the same blackish-brown shade, coalescing into a series of large spots, followed by a series of smaller dark spots running along the terminal line. The hindwing has a similar pattern. No other Geometrid in our area has a similar pattern.

DISTRIBUTION: All of our records come from the southern half of the Coastal Plain, including the Fall-line Sandhills and Outer Coastal Plain.

FLIGHT COMMENT: Flies fairly continuously from April to September, with suggestion of three different peaks.

HABITAT: All of our records come from open, wet or mesic, herb-rich habitats. These include wet savannas dominated by Longleaf Pines, Pond Pines, or Pond Cypresses. A number of our records also come from the edges of shallow ponds, including beaver ponds and borrow pits, but in all cases where they adjoin or are embedded within savanna or sandhill habitats.

FOOD: Larval hosts are apparently unknown, but most of our *Scopula* species feed on dicots (Robinson et al. 2010). Covell (1984) lists dandelion (*Taraxacum*), but this may be from ex ova rearing rather than a food plant used in the wild. Research is needed into the life history of this species and the host plants that are used in North Carolina.

OBSERVATION METHODS: Comes to blacklights and individuals can also be found resting on vegetation during the day.

NATURAL HERITAGE PROGRAM RANKS: G4 S2S3

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 strongly associated with wet, fire-maintained habitats. While it is fairly frequently observed in large tracts of such habitats -- including military bases, national forests, and state game lands in North Carolina -- it appears to be essentially absent outside these areas, especially where the natural fire regime has been significantly altered. While it appears to be secure within these large preserves, its status -- along with those of all species associated with fire-dependent habitats -- needs to be monitored, especially in areas where increased development threatens to curtail the use of prescribed burning to maintain natural habitats.