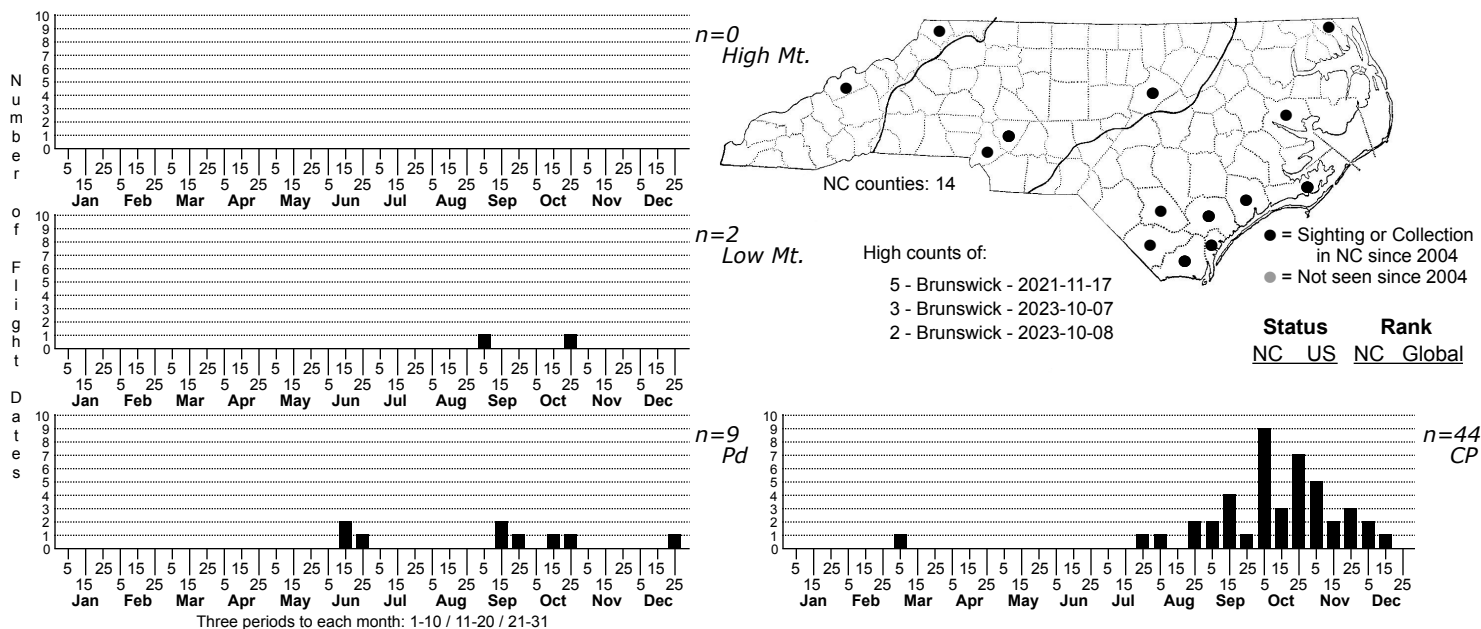


## *Samea castellalis* Stained-glass Moth



FAMILY: Crambidae SUBFAMILY: Pyraustinae TRIBE: Spilomelini

TAXONOMIC\_COMMENTS: Landry (2016) resurrected *Samea castellalis* that was previously synonymized with *S. ecclesialis*. According to Landry, *S. ecclesialis* is tropical and subtropical and does not occur north of Mexico. Specimens from North Carolina that we previously treated as *S. ecclesialis* have been reassigned to *S. castellalis*.

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Hayden (2014)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Hayden (2014)

ID COMMENTS: The following description is based in part on that of Hayden (2014). The ground color of the forewing varies from warm brown to reddish-brown and is overlain with an array of opaque light yellowish-brown and nearly translucent, whitish patches or windows. The patches are roughly arrayed in three bands, with the whitish patches either thinly margined basally and apically with black, or divided in half by a black line. The basal band has three or four very small whitish patches and two larger yellowish ones. The median band has a squarish white patch below the costa that is followed by another white patch and two yellow patches inwardly. The subterminal band consists of a cluster of small white and yellowish patches. The costa has four blackish spots in the subapical area, while the fringe is white with a row of diffuse dark brown spots at the base that are fused or nearly so near the middle of the termen. The hindwing has three large translucent areas on the basal half that are separated by dark brown lines, while the apical half of the wing has a warm brown to reddish-brown ground with a cluster of small, whitish patches. Females either closely resemble the males as described above, or can be melanic with the patches greatly reduced in size (Hayden, 2014).

This species is very similar to *S. multiplicalis*. It can be distinguished by the darkened area of the fringe midway along the margin (*S. multiplicalis* has a row of unfused, equally spaced spots along the termen), and by the pale and white spots in the forewing median area near the inner margin that are separated by a black line (see red arrows on the marked image above). In *Samea castellalis* the spots are of equal size, while in *S. multiplicalis*, the more basal spot is noticeably larger than the other.

DISTRIBUTION: *Samea castellalis* is primarily found in the southeastern U.S. from North Carolina westward to Oklahoma, and southward to southern Texas, the Gulf Coast states, and southern Florida. Scattered records occur farther north in Ontario, Massachusetts, Pennsylvania, Ohio, Virginia, and Missouri, Iowa, and Indiana. As of 2023, we have records from all three physiographic regions, with most from the southern Coastal Plain.

FLIGHT COMMENT: The adults are active year-round or nearly so in Florida, Alabama, and Texas, and mostly from May through November elsewhere. As of 2023, our records range from mid-June through late-December

HABITAT: This species is commonly found in open, xeric habitats in the Coastal Plain, and in residential neighborhoods in other areas of the state.

FOOD: Tropical Mexican-clover (*Richardia brasiliensis*) is the only known host (Hayden, 2014). Hayden (2014) noted that several records of this species feeding on aquatic plants were incorrect and turned out to be *Samea multiplicalis*.

OBSERVATION\_METHODS: The adults are attracted to lights and can be found nectaring on wildflowers at night (Atwater, 2013).

NATURAL HERITAGE PROGRAM RANKS: GNR [S3-S4]

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

COMMENTS: This species can be locally abundant in the Coastal Plain, but more information is needed on the host plants and preferred habitats before we can accurately assess its conservation status.