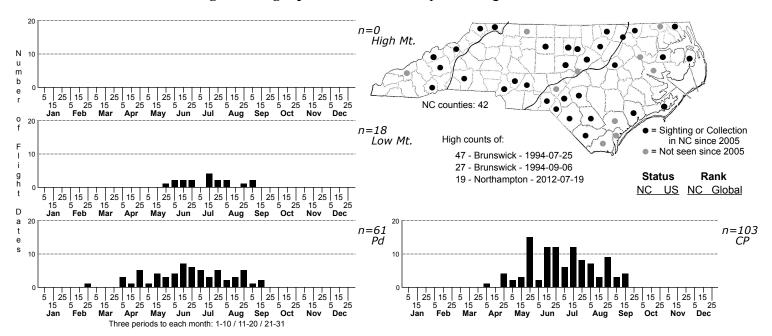
Digrammia gnophosaria Hollow-spotted Angle



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Macariini TAXONOMIC_COMMENTS: One of 49 species in this genus recorded in North America (Ferguson, 2008), six of which occur in North Carolina. Digrammia gnophosaria was placed in the primarily willow-feeding Rippertaria Species Group by Ferguson and is the sole member of that group in North Carolina.

FIELD GUIDE DESCRIPTIONS: Covell (1984; as Semiothisa gnophosaria); Beadle and Leckie (2012) ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1948); Ferguson (2008)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Wagner et al. (2001); Ferguson (2008)

ID COMMENTS: A medium-small, gray-brown Geometrid. The wings are fairly rounded with a typically uniform ground color, dusted with darker brown. The lines are usually fairly diffuse with the darkest markings at the costa; some specimens show more strongly darkened antemedian and postmedian bands (Ferguson, 2008). Unlike the lines of other members of this genus, the antemedian and median lines typically converge at the inner margin where they may be represented by darker spots or smudges; the hindwings also usually have darker smudges at the corresponding locations, as do the adjacent segments of the abdomen. The postmedian line is represented by a series of dark spots located on the veins, similar to D. ocellinata and ordinata. Also similar to ocellinata, the reniform is situated on the upper portion of the medial line and is represented by a dark ring with a paler center. This spot tends to be more conspicuous than it is in ocellinata (Ferguson, 2008).

DISTRIBUTION: Probably occurs statewide, with the possible exception of the high mountains.

FLIGHT COMMENT: Appears to be univoltine, with adults present from early spring to late summer

HABITAT: Our records come from a variety of habitats that possess shoreline thickets of willows. Lentic habitats range from beaver ponds, depression ponds, and borrow pits to large reservoir or lake shorelines. Lotic habitats include river, stream, and swamp edges as well as drainage ditches. We have few, if any, records from upland habitats located well away from shoreline willows.

FOOD: Larvae are stenophagous, feeding on willows (<i>Salix</i> spp.) (Wagner et al., 2001). In North Carolina, we have observed the species feeding on Black Willow (<i>S. nigra</i>).

OBSERVATION METHODS: Comes well to blacklights but we have no records from bait.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S4S5]

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

COMMENTS: Found across the state in a variety of wetlands, including disturbed sites such as borrow pits, reservoir shorelines, and drainage ditches. Associated with common, pioneering host plants. Apparently secure within the state.