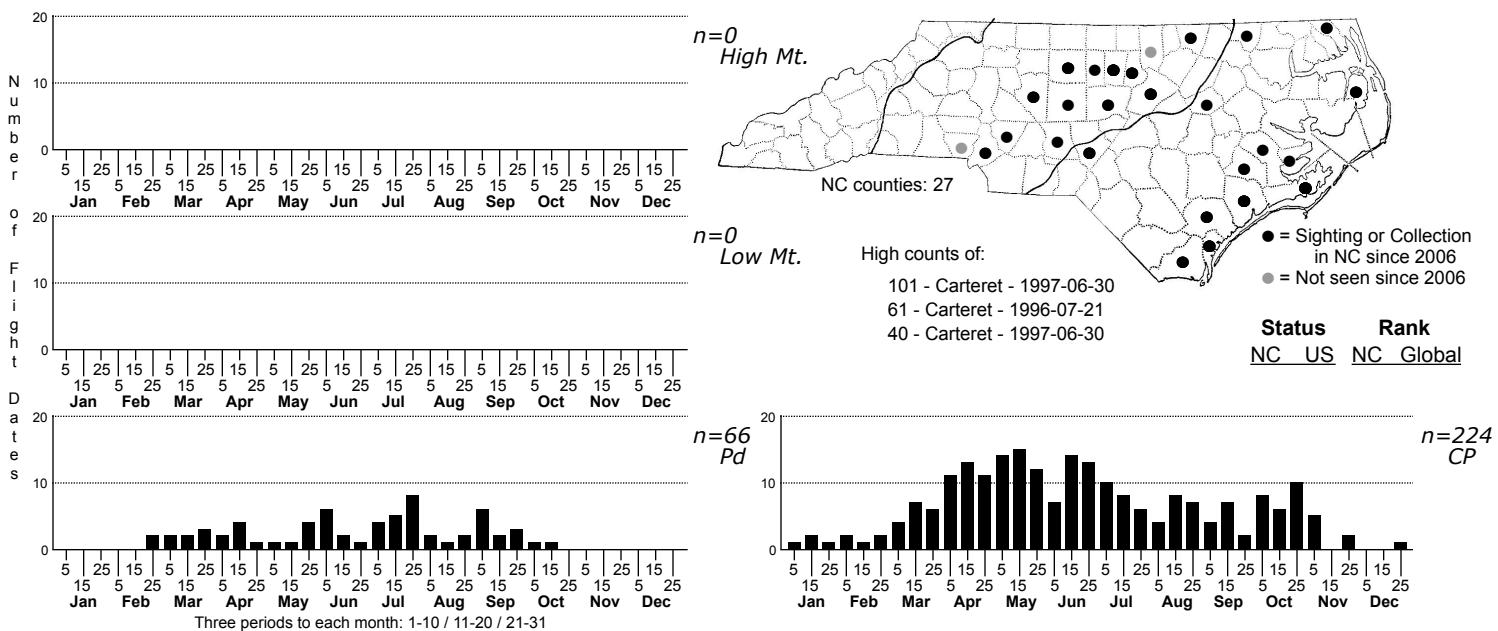


Diagrammia continuata Curve-lined Angle



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. *Diagrammia continuata* was placed in the cedar-feeding Continuata Species Group by Ferguson, of which only *continuata* occurs in the East.

FIELD GUIDE DESCRIPTIONS: Covell (1984; as *Semiothisa continuata*); 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-sized Geometrid with distinctive thick black antemedian and postmedian lines that strongly contrast with pale gray ground color. Some specimens of *D. gnophosaria* also have conspicuously dark lines but the ground color is usually brown rather than gray and they also possess an ocellate reniform along the median line, which is usually faint or missing in *continuata*.

DISTRIBUTION: Our records come entirely from the Piedmont and Coastal Plain, although Red Cedar -- the host plant for this species -- occurs in the Mountains as well.

FLIGHT COMMENT: Adults are present throughout the year in the Coastal Plain without any obvious peaks in activity. Records from the Piedmont appear to follow a similar pattern, but there are too few to be sure.

HABITAT: Occurs most abundantly on barrier islands in association with Southern Red Cedar. Records are sparser in the Piedmont, where it occurs in dry woodlands, glades, and forest edges in association with Eastern Red Cedar. Only a few records come from sites where Atlantic White Cedar is the only native cedar.

FOOD: Larvae are stenophagous, feeding on cedars (Wagner et al., 2001; Wagner, 2005; Ferguson, 2008). In North Carolina, most of our records come from sites with either Eastern Red Cedar (*<i>Juniperus virginiana var. virginiana</i>*) or Southern Red Cedar (*<i>J. f. var. salicicola</i>*); only a very few records come from areas where only Atlantic White Cedar (*<i>Chamaecyparis thyoides</i>*) occurs. Our only feeding record is from Eastern Red Cedar.

OBSERVATION METHODS: Comes well to blacklights but rarely to 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: Although fairly specialized in terms of host plants, this species occurs in several kinds of cedar-containing habitats, including disturbed areas. It does not appear to be of conservation concern in North Carolina.