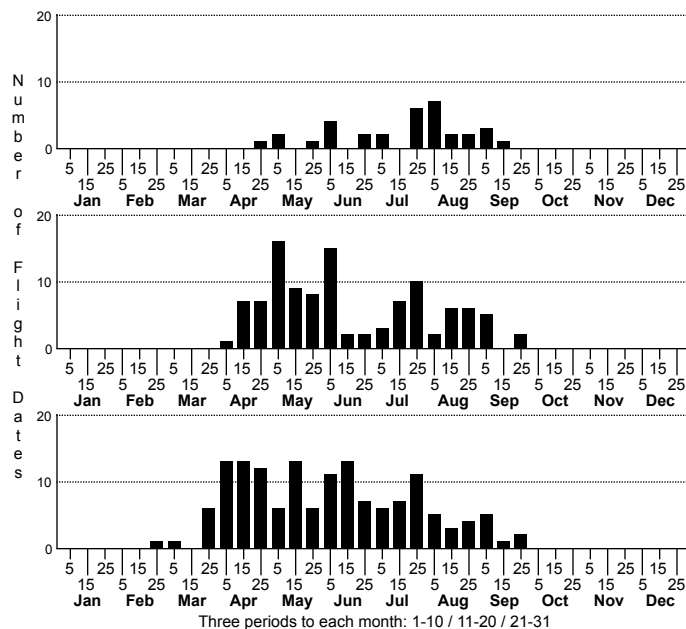


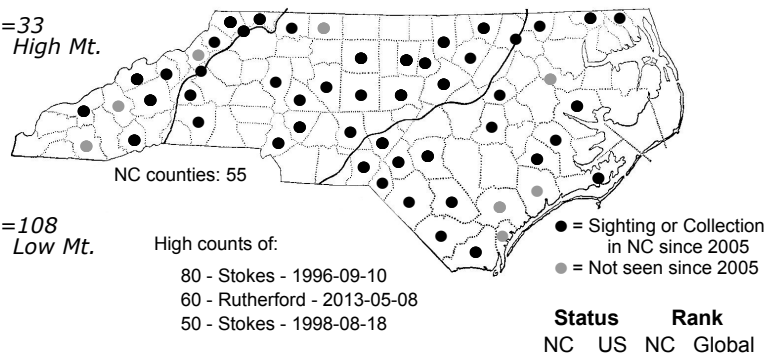
## *Besma quercivoraria* Oak Besma



*n*=33  
High Mt.

*n*=108  
Low Mt.

*n*=146  
Pd



*n*=126  
CP

FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Ourapterygini

TAXONOMIC\_COMMENTS: This genus currently contains 7 species named from Central and North America, and additional neotropical species await description. Two species occur in North Carolina.

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

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Forbes (1948)

TECHNICAL DESCRIPTION, IMMATURE STAGES: Forbes (1948)

ID COMMENTS: A medium-sized, variably orange-brown Geometrid. Sexes are dimorphic. Males are heavily shaded with brown, particularly beyond the postmedian, but often with a pale apical patch; the antemedian and postmedian both bend towards one another in the median area and are often joined by a bar. Females are generally much paler and lack the connecting bar between the lines; the lines are also more evenly curved and are often bordered with reddish-orange. Males are most likely confused with some species in *Euchlaena* but possess a more angled outer margin, giving the wing tip a squared-off appearance. Some particularly pale females are similar to those of *B. endropiaria*, but have more strongly angled outer margins on both wings and more falcate forewing apices.

DISTRIBUTION: Probably occurs statewide, except possibly the Barrier Islands.

FLIGHT COMMENT: At least three broods occur in the Coastal Plain and Piedmont.

HABITAT: The vast majority of our records come from wet-to-mesic stands of hardwood forests. In the Coastal Plain, these include bottomland and lakeshore stands, and dry-mesic stands that occur along seldom-burned bluffs. Conversely, records are absent from the Barrier Islands and rare in peatlands and Longleaf Pine habitats, particularly dry-to-xeric sandhills, although we have found larvae feeding on Bluejack Oak, which is associated with at least somewhat loamy sandhills. Records come from a wider range of upland hardwoods in the Piedmont, although again with most coming from bottomlands and mesic slopes. In the Mountains, records are plentiful from riparian forests, cove forests, northern hardwoods, but with again some coming from drier ridge-tops.

FOOD: Larvae reported from oaks, maples, and other hardwood trees as well as conifers. Wagner et al. (2001) specifically list maple (*Acer*), alder (*Alnus*), birch (*Betula*), beech (*Fagus*), oak (*Quercus*), willow (*Salix*), and elm (*Ulmus*). We have reared larvae found on Blue Jack Oak (*Quercus incana*) in Carteret and Craven Counties. Definitive non-oak records are needed.

OBSERVATION\_METHODS: Adults have been found at lights and may come to baits but no records known.

NATURAL HERITAGE PROGRAM RANKS: G5 SNR [S5]

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

COMMENTS: This species occurs over most of the state and is associated with a wide range of hardwood-dominated habitat types. Consequently, it appears to be quite secure in North Carolina.