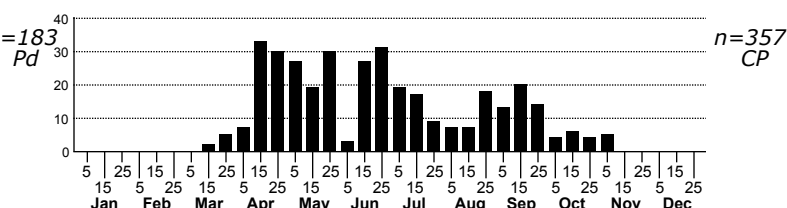
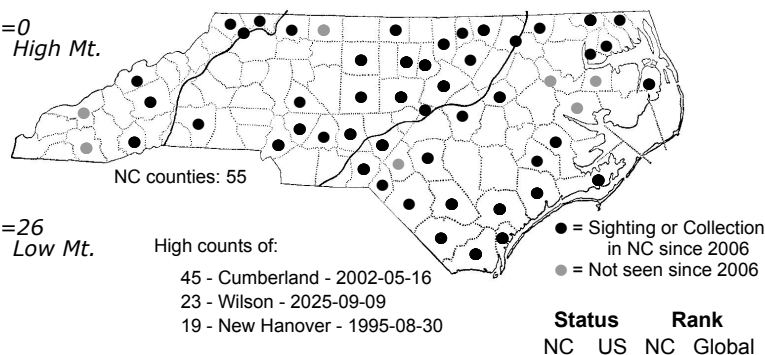
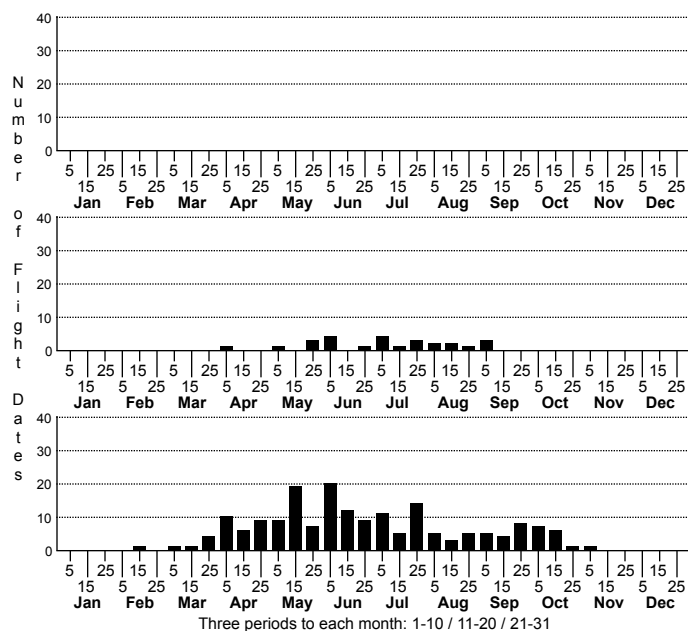


Macaria transitaria Blurry Chocolate Angle



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Macariini

TAXONOMIC COMMENTS: This is one of 73 species in this genus that occur in North America, with 17 species occurring in North Carolina. In the latest checklist of North American Lepidoptera (Pohl and Nanz, 2023), North American members of the genus *Speranza* and *Epelis* were treated as junior synonyms of *Macaria*.

FIELD GUIDE DESCRIPTIONS: Covell (1984; as *Semiothisa transitaria*); Beadle and Leckie (2012)

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Ferguson (2008)

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

ID COMMENTS: A dark grayish brown species with the angled hindwings and semi-falcate forewings typical of this genus. Smaller, darker, and less contrastingly marked than *distributaria* but otherwise similar in pattern. The lines are somewhat more diffuse than in *distributaria*, with the median usually the strongest. As in most of our *Macaria*, the lines are represented by dark spots where they intersect the costa, but the spot or blotch that is usually present on the subterminal line at the end of the cell is missing in *transitaria*; the subapical notch is also weakly developed in this species. The ground color is fairly evenly gray- or chocolate-brown over most of the wing, unlike *distributaria*, which has the basal and medial areas much paler. Like *distributaria*, however, *transitaria* has a prominent band of more reddish brown between the postmedian and subterminal lines. The terminal area is mottled pale and dark gray with the apex usually a fairly clear pale gray. As in other members of this species group, the head is yellow or ocher, contrasting with the grayish-brown thorax and abdomen.

DISTRIBUTION: Probably occurs statewide, with the possible exception of the High Mountains.

FLIGHT COMMENT: Has a long flight period, from early spring to late fall, possibly divided into three main flights.

HABITAT: Our records come from a wide variety of pine-containing habitats. In the Coastal Plain, these include Maritime and Coastal Fringe Evergreen Forests and river floodplains where Loblolly is the main species of pine; peatlands, where Pond Pine is the sole species of pine; and both wet/mesic and xeric Longleaf Pine communities where Longleaf is dominant. In the Piedmont, we have a number of records from mafic barrens as well as monadnocks where Shortleaf and Scrub Pine are common. Both of those species are also found on the dry ridges where *transitaria* has been recorded in the Mountains, but also joined by Pitch Pine and Table Mountain Pine, both of which occur only in that region of the state.

FOOD: Larvae are stenophagous, feeding solely on hard pines. Maier et al. (2011) specifically mention Jack Pine (*Pinus banksiana*), Red Pine (*P. resinosa*), and Pitch Pine (*P. rigida*), only the latter of which occurs in North Carolina and only in the mountains. Our records indicate that it probably feeds on a wide variety of hard pine species, including Loblolly Pine (*P. taeda*), Pond Pine (*P. serotina*), Longleaf Pine (*P. palustris*), Shortleaf Pine (*P. echinata*), and Virginia Pine (*P. virginiana*).

OBSERVATION_METHODS: Comes well to 15 watt blacklights but we do not have any records from either bait or flowers.

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: This species appears to be quite secure in the state, given its wide distribution, use of multiple host plants -- many of which are common or cultivated -- and a wide range of habitats.