Caripeta aretaria Southern Pine Looper Moth



FAMILY: Geometridae SUBFAMILY: Ennominae TRIBE: Ourapterygini TAXONOMIC_COMMENTS: A moderately sized New World genus with 15 species described from northern Mexico, Canada and the U.S. We have verified 3 species within the state; two more are reported from websites but we have not seen authenticated specimens.

FIELD GUIDE DESCRIPTIONS: Covell (1984) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Forbes (1948) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: A medium-sized Geometrid with strongly marked yellow-brown and white forewings. Similar in size and pattern to other members of this genus but the hindwings are fuscous, with a distinct postmedian line, rather than pale whitish and unmarked, as in the angustiorata, with which it shares a reddish tint on the forewings (Forbes, 1948).

DISTRIBUTION: Probably occurs over most of the Coastal Plain but is less common in the western part of the state.

FLIGHT COMMENT: Unlike our other species of Caripeta, this one certainly has two well-separated broods (spring and fall) in the Coastal Plain and likely throughout the state.

HABITAT: Most of our records come from wet-to-mesic habitats in the Coastal Plain, including Pond Pine Woodlands and other peatlands; wet pine savannas; and bottomland forests. Almost none, conversely, come from dry-to-xeric sandhills habitats. In the western Piedmont and Mountains, however, records come entirely from upland habitats, including several xeric ridges.

FOOD: Larvae probably feed on pines, but do not appear to have been documented in the wild. From the habitats used in the Coastal Plain, Pond Pine ($\langle i \rangle$ Pinus serotina $\langle /i \rangle$) appears to be the most likely host plant, and is the only species of pine occurring in some of the large expanses of peatlands where the moth has been recorded. Some use of Loblolly Pine ($\langle i \rangle$ P. taeda $\langle /i \rangle$) may also be made, since the moth has been recorded in bottomland stands where that species is the only pine present. In the Mountains and in the monadnocks found in Stokes County, Pitch Pine ($\langle i \rangle$ P. rigida $\langle /i \rangle$) may be used. Pitch Pine is closely related to Pond Pine but occupies much drier, ridgetop habitats in North Carolina. Other pines might also be used, but the general absence of records from the Piedmont suggests that Loblolly Pine, Shortleaf Pine ($\langle i \rangle$ P. echinata $\langle /i \rangle$), and Virginia Pine ($\langle i \rangle$ P. virginiana $\langle /i \rangle$) - the predominant species in that region - are not favored host plants.

OBSERVATION_METHODS: Adults are never common but seem to respond well to light trapping. Response to baits unknown but unlikely.

NATURAL HERITAGE PROGRAM RANKS: G4 S3S4

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

COMMENTS: The species appears to be fairly specialized in its habitats and host plants, occurring almost exclusively in natural pine-containing habitats rather than managed stands. Conversion of peatlands, wet savannas, and other natural pine habitats to silvicultural stands consequently probably constitutes a significant threat to this species in the Coastal Plain. While the xeric ridgetops it occupies in the western part of the state are less heavily exploited, the moth appears to be much less common in those areas. More needs to be learned about its specific host plants and habitat associations before an accurate assessment can be made of its conservation status.