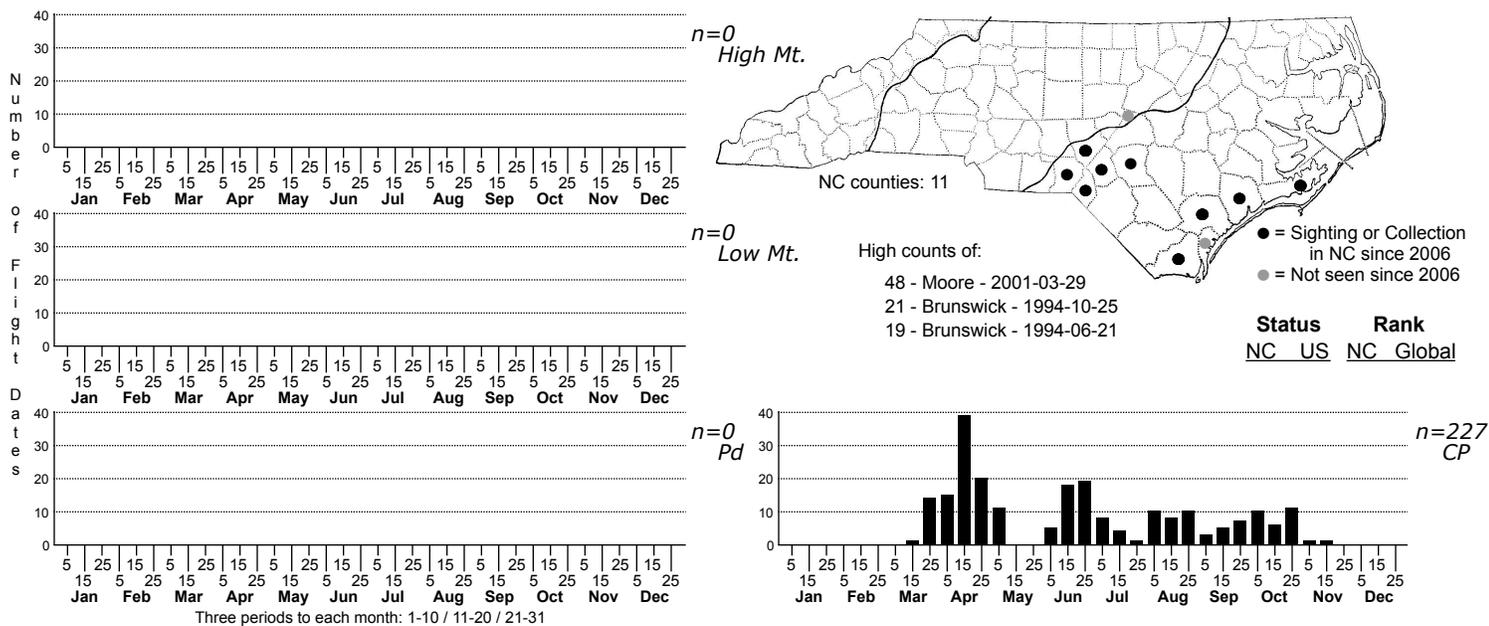


Doryodes bistrialis Double-lined Doryodes



FAMILY: Erebiidae SUBFAMILY: Erebinae TRIBE: Euclidiini

TAXONOMIC_COMMENTS: One of 10 species in this genus that occur in North America north of Mexico (Lafontaine and Sullivan, 2015), four of which have been recorded in North Carolina

FIELD GUIDE DESCRIPTIONS:

ONLINE PHOTOS:

TECHNICAL DESCRIPTION, ADULTS: Lafontaine and Sullivan (2015)

TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: A medium-small, pale tan, yellow, and brown Erebid with fairly narrow, pointed wings. The head, thorax, and ground color of the forewings is tan or grayish-brown, with the central portion of the forewing colored a brighter yellow-brown. The wing markings are typical of this genus: transverse lines are absent, but there is a dark brown longitudinal streak that runs from the base to near the apex; this streak is bordered dorsally by a narrow pale streak from the base to the postmedian area and by a similar but curving streak on the ventral side, from the cell to the terminal area; two dark spot are present in the orbicular and reniform areas. Other members of this genus are very similar, although in North Carolina, only *D. fusselli* is similar in size -- *spadaria* is significantly bigger. Individuals observed in Longleaf Pine habitats with wiregrass are highly likely to be this species, but in areas where Longleaf habitats and coastal marshes are located close to one another -- e.g., Carolina Beach State Park, the Military Ocean Terminal at Sunny Point, and portions of Camp Lejeune and the Croatan National Forest -- dissection or barcoding is necessary to identify the species.

DISTRIBUTION: Restricted to the southern half of the Coastal Plain in North Carolina, including the Fall-line Sandhills

FLIGHT COMMENT: Adults fly throughout the growing season, with a possibly separate flight in the spring but more continuously in the summer and fall, although with three peaks

HABITAT: All of our records come from Longleaf Pine habitats with extensive areas of Wiregrass, including both wet-to-mesic savannas and flatwoods and dry-to-xeric sandhills. It is scarce to absent, however, in stands of Longleaf Pine where prolonged fire suppression has led to the reduction or elimination of Wiregrass.

FOOD: In North Carolina, we have found larvae and a cocoon on Wiregrass and the strong association of this species with Wiregrass suggests that it is stenophagous on this genus (<i>Aristida stricta</i> and <i>A. beyrichiensis</i>). Older records for associations with <i>Spartina</i> probably represent other species of <i>Doryodes</i> that show a close association with tidal marshes rather than inland savannas and sand ridges.

OBSERVATION_METHODS: Comes well to lights and can be easily flushed during the day by walking through its habitat

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: This species is strongly specialized in both host plants and habitats. Although locally common in good quality habitats, it has been eliminated over large parts of its range due to loss of Longleaf Pine habitats generally or from reduction and loss specifically of its host plants due to the effects of fire-suppression. Like many other moth species associated with fire-maintained host plants, the moth is not adapted to survive a fire on site but instead must recolonize burned areas from unburned refugia. This metapopulation-dependent strategy makes this species highly vulnerable to the effects of habitat fragmentation. Although its populations have been undoubtedly reduced and the species remains vulnerable, it appears to have secure populations in several large tracts that are appropriately managed using prescribed burns. For that reason, we recommend keeping this species on the Watch List rather than listing it as Significantly Rare.