Euxoa violaris Violet Dart



FAMILY: Noctuidae SUBFAMILY: Noctuinae TRIBE: Noctuini TAXONOMIC_COMMENTS: One of 181 species that occur in North America north of Mexico (Lafontaine and Schmidt, 2010). Most are Western but 13 have been recorded in North Carolina. Belongs to the Violaris Species Group of Subgenus Euxoa (Lafontaine, 1987).

FIELD GUIDE DESCRIPTIONS: Covell (1984) ONLINE PHOTOS: TECHNICAL DESCRIPTION, ADULTS: Forbes (1954); Lafontaine (1987) TECHNICAL DESCRIPTION, IMMATURE STAGES:

ID COMMENTS: A medium-sized, violet gray and reddish brown Dart. The head, thorax, and the ground color of the forewings is pale gray with a somewhat violet sheen. The area between the reniform and postmedian is shaded with a darker red-brown; the antemedian and postmedian may also be largely dark reddish-brown but can also be a paler gray than the ground color, sometimes bordered by darker brown. The antemdian typically has an outward tooth or kink just above the inner margin and a similar sharp bend at the radius, with the segment in between running straight; the postmedian, in contrast, is smoothly curved. The orbicular is represented by a thin brown outline and is filled with the ground color; the reniform is usually filled with fuscous and embedded within the darker red brown shade. Hindwings are often pale at the base, shading to yellowish-brown towards the outside, with a darker discal bar usually present. This species is unlikely to confused with anything else, but Uloloche modesta is similar in size and general coloration but differs markedly in the course of its transverse lines.

DISTRIBUTION: Our sole records from the southern portion of the Outer Coastal Plain

FLIGHT COMMENT: Univoltine, with adults flying in October

HABITAT: Our records come from xeric sandhills located adjacent to the lower Cape Fear River. The vegetation is classified as Coastal Fringe Sandhills, which includes a mixture of maritime species and those associated with dry Longleaf Pine habitats. Records elsewhere also come from areas located near the coast but not necessarily beach dunes or other maritime habitats. Lafontaine (1987) states that it is associated with areas of loose sand.

FOOD: Host plants appear to be unknown. Like other species in this genus, <i>E. violaris</i> may be a general feeder on grasses and forbs, although its restricted range of habitats suggests that it could be more specialized.

OBSERVATION_METHODS: Comes at least somewhat to lights but to what extent has not been determined

NATURAL HERITAGE PROGRAM RANKS: G4 S1S2

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

COMMENTS: This species was considered rare by MacDunnough (1950) and is known from relatively few sites from coastal Massachusetts to the Panhandle of Florida (Lafontaine, 1987). Although apparently known from North Carolina since at least the 1950s, we only have records from only a single site, where it was collected during the Asian Gypsy Moth Nontarget Impact Survey (Hall et al., 1999). It has not been collected in sandhills habitats elsewhere despite fairly intensive surveys of their moth faunas. There is no indication as to why it is so scarce, but it does appear to have specialized habitat requirements. In North Carolina, its one known population is threatened by sea level rise; consequently, we consider it to be of significant conservation