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BRIEF NOTE

Second Ohio Record of Agraulis vanillae (Lepidoptera, Nymphalidae)¹

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ABSTRACT. In July 1990, an adult Agraulis vanillae was observed and a larva captured and reared, at The Edge of Appalachia Preserve in Adams County. The only previous sighting for A. vanillae in the state was in central Ohio in 1944.


INTRODUCTION

The range of Agraulis vanillae (Linnaeus), 1758, the Gulf Fritillary, extends from southern California, southern Texas, and southern Florida south through tropical America to Argentina (Scott 1986). It has been known, however, to emigrate sporadically as far north as Minnesota, Wisconsin, New York, and Pennsylvania (Opler and Krizek 1984). Temporary breeding populations have been recorded in Illinois, Missouri, and Virginia (Opler and Krizek 1984). In Ohio, according to David K. Parshall, past president of The Ohio Lepidopterists, the only previous sighting for A. vanillae was reported by Hazel Chase, who collected a specimen at Mt. Gilead, Morrow County in 1944 (Parshall pers. comm. 1990). This specimen, reported to be in the collection of the Cleveland Museum of Natural History, was photographed by Parshall, but could not be located by the curator. In Indiana only one sighting of A. vanillae exists. It was reported by W. S. Blatchley in Vanderburgh County in 1891 (Shull 1987). In Kentucky, Dr. Charles V. Covell, Jr., Department of Biology, University of Louisville, reported there have been thirty sightings of A. vanillae (Covell pers. comm.).

A. vanillae is easily recognized. Dorsally, the wings are reddish-orange with black markings along the veins. Ventrally, the fore wings are brown apically, changing to crimson basally; the hind wings are brown with several large silver spots.

MATERIALS AND METHODS

The Edge of Appalachia Preserve System is a group of 12 preserves that have been jointly owned and operated by the Cincinnati Museum of Natural History and The Nature Conservancy for the past thirty years in Adams County, OH, sighting, it would seem that the resident range of the butterfly is closely limited to the range of its host plants. Opler further stated that A. vanillae undertakes periodic emigrations, ranging farther north than any of its passion vine host plants (Opler and Krizek 1984). Such an overflight seems not to have occurred among the total, admittedly small sample of four records, in Ohio and Indiana. P. lutea has been recorded in 28 southern Ohio counties. Passiflora incarnata L. (passion-flower), the preferred host plant in the South, has been recorded from only four of the southernmost counties in the state (Cusick and Silberhorn 1977, Andreas 1989, Cusick pers. comm.). P. lutea has been recorded in 23 mostly southern counties in Indiana, and P. incarnata only in four of the southernmost counties of the state (Deam 1940). The Ohio and Indiana sightings of A. vanillae seem to be included in and to extend only slightly beyond the range of these two host plants (Fig. 1). Assuming the likelihood either of anthropogenic introduction or of wandering in the case of the Morrow County, OH, sighting, it would seem that the resident range of the butterfly is closely limited to the range of its host plants. Opler further stated that “A. vanillae is the hardiest of the heliconiines and sometimes surviving the winter as far north as Missouri and Illinois” (Opler 1984). However, in light of the severity of Ohio and Indiana winters, it is doubtful that colonization by this tropical species can be any more than a temporary occurrence (Shull 1987, Pyle 1981).

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LITERATURE CITED