Brief Note: Twenty-eight Species of Moths New to Ohio from Huffman Prairie, Greene County (Lepidoptera)

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Twenty-eight Species of Moths New to Ohio from Huffman Prairie, Greene County (Lepidoptera)

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ABSTRACT. Huffman Prairie, a 109 acre Ohio registered Natural Landmark, was inventoried for Lepidoptera under agreement with The Nature Conservancy and Wright-Patterson Air Force Base from June 1992 through July 1994. As a result of this inventory, Pseudopostega cretea (Meyrick) (Opostegidae), Tinea carnarietta Clemens (Tineidae), Agonopterix pteleae Barnes & Busck (Oecophoridae), Cosmopterix dapifera Hodges, Cosmopterix montisella Chambers (Cosmopterigidae), Calosima melanostriatella (Dietz) (Blastobasidaceae), Coleophora texanella Chambers (Coleophoridae), Isophrictis rudbeckietta Bottimer, Bryotropha branella (Busck), Gnorimoschema busckiella Kearfott, Scrobipalpula bensbawiella (Busck), Scrobipalpula atriplicella (F. v. Roslerstamm), Frumentia nudinella (Zeller), Syncopa palpilinaella (Chambers), Helcystogramma chambersella (Murtfeldt) (Gelechiidae), Acrolepiopsis leucoscia (Meyrick) (Acrolepiidae), Eucosma heathiana Kearfott, Epiblemma tandana (Kearfott), Dichrorampha sedatana (Busck), Aethes obliquana (Kearfott), Carolella sartana (Hiibner). Management plans which accommodate Lepidoptera receive support because lepidopterans, particularly butterflies, are popular with the general public, and lepidopterans can be dramatically affected by traditional prairie management techniques, such as fire (Dana 1986, Dana 1991, Panzer 1988, Van Amburg et al. 1981).

RESULTS

Twenty-eight species of moths were recorded in Ohio for the first time. The following data apply to all specimens: U.S.A., Ohio, Greene County, Bath Township, Huffman Prairie, N 39°48.4' x W 84°3.5'. The number of specimens collected on each date is noted in parentheses following the date. The distribution of each species, prior to its discovery in Ohio, is reported from specimen data in the U.S.
National Museum of Natural History (U.S.N.M.), Florida State Collection of Arthropods (F.S.C.A.), Museum of Comparative Zoology at Harvard University (M.C.Z.), from the literature as cited, or other observations as indicated.

Opostegidae

Pseudostega cretea (Meyrick), 8 July 1994 (1).

Distribution: Ontario, MI, NY, and CT, south to NC (U.S.N.M.).

Tineidae

Tinea carnariella Clemens, 8 July 1994 (1). Distribution: NJ and PA, south to FL, west to MT and OK (U.S.N.M.).

Oecophoridae


Blastobasidae

Calosima melanostriatella (Dietz), 10 June 1994 (1). Distribution: PA and CT (U.S.N.M.).

Coleophoridae

Coleophora texanella Chambers, 8 July 1994 (1). Distribution: NY to OR, south to AZ and southern CA (Hodges 1978).

Cosmopterigidae

Cosmopterix montisella Chambers, 10 June 1994 (1). Distribution: NY to OR, south to AZ and southern CA (Hodges 1978).


Gelechiidae


Scrobipalpa atricipellula (F.v. Rösslerstamm), 17 July 1993, 6 May 1994 (2). Distribution: Nova Scotia south to DC, west to Ontario, IL, CA, WA, and AK (U.S.N.M.).

Frumenta nudinella (Zeller), 17 July 1993 (1). Distribution: PA and VA, south to GA, west to IA and LA (reared "from Solanum carolinense") (U.S.N.M.).


Helcystogramma chambersella (Murtfeldt), 17 Sept. 1993 (1), 8 July 1994 (2). Distribution: PA south to FL, west to AZ and CA (Hodges 1986).

Acrolepiidae

Acrolepiopsis leucoscia (Meyrick), 6 May 1994 (1). Distribution: TX (U.S.N.M.) and Midland Co., MI (D. Profant Collection).

Tortricidae


Epiblemma tandana (Kearfott), 8 July 1994 (1). Distribution: NJ and PA (Heinrich 1923), MI and MN (Miller 1987), and KY (L. D. Gibson collection).

Dichrorampha sedatana (Busck), 13 May 1994 (2). Distribution: CO, CA, British Columbia, and AK (Heinrich 1926). MI, WI, and MN (Miller 1987).

Aethes obliquana (Kearfott), 8 Oct. 1993 (1). Distribution: Type locality: NC.

Carolella sartana (Hubner), 17 Sept. 1993 (1). Distribution: NC, south to FL, west to MS and TX (U.S.N.M.).


Crambidae

Hellula rogatalis (Hulst), 13 Aug. 1993 (2). Distribution: Nova Scotia to FL, KY, and AR, west to TX and southern CA (Munroe 1972).

Pyralidae


Poroia roseotinctella (Ragonot), 17 July 1993 (1). Distribution: KS, eastern TX to FL, and north to NJ (Shaffer 1968).

**DISCUSSION**

The occurrence, in Huffman Prairie, of some of the moth species, new to Ohio, may be a relict of the prairie's affinities with western U.S. prairie ecosystems. Eucosma heathiana, Isophrictis rudbeckiella, Agonopterix pteleae, Trachysmia cartwrightana, and Trachysmia villana are found in association with prairies, or they are distributed in states west of Ohio. Isophrictis rudbeckiella, Eucosma heathiana, and Trachysmia cartwrightana are known from no other location in Ohio, yet they are very common in Huffman Prairie.

Not all of the species reported as state records are prairie specialists. Several species, such as Cosmopterix montisella, Helcystogramma chambersella, and
Phycitodes albatella reliquella are widely distributed in the eastern U.S., but their small size (wing span less than 19 mm) may explain why they were not previously reported from Ohio. Ohio appears to be at the northern edge of the distribution for others, such as Cosmopterix daphifera, Carolella sartana, and Hellula rogatalis (cabbage webworm). Some groups of moths are poorly known, and proper identification is difficult. The Blastobasidae and Cochylini (Tortricidae) cannot be identified with certainty without comparing genitalia preparations to type specimens.

The inventory of Lepidoptera continues at Huffman Prairie with an emphasis on moths that fly during the daytime hours.

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LITERATURE CITED