Moth Surveys on the Avon Meadows Community Wetland, Pershore.

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Summary

The first moth report from Avon Meadows appeared in *Worcestershire Record*-No.31 (Stott 2011). At that time we were pleased to have recorded 140 species. Later, a report in Worcestershire Record-No. 47 (Stott 2019) formally recorded the first Worcestershire record for Dotted Fan-foot *Macrochilo cribrumalis*.

Moth recording sessions have taken place each summer since the initial 2011 survey, starting in earnest in 2014 when we received funding to purchase our own generator and Skinner moth traps. This article provides an overview of 70 trapping sessions between 2014 and 2022 which has increased the total moth species for Avon Meadows to 402.Among these is one Notable Conservation Priority C species, and a further 19 species of interest are noted.

Background

Avon Meadows Community Wetland is a 24 hectare site alongside the River Avon in Pershore (SO950460). It was the brainchild of Wychavon District Council and the Environment Agency and was created in 2007/8. Scrapes and reedbeds have been added since to a design prepared by the Worcestershire Wildlife Trust which cover approximately one third of the total site area. In environmental respects it is an unexceptional site, bounded by houses and gardens to the west and the River Avon to the east. The Management Plan for the Wetland is aimed at maintaining the historical land management pattern for the area, specifically low intensity grazing and annual hay mowing. Records are maintained for a wide variety of animals and plants (Friends of Avon Meadows website).

Method

Over the survey period a standardised method of trapping has evolved involving the deployment of two Skinner traps fitted with 125-watt mercury vapour lamps. In the majority of cases one trap is set at exactly the same location each time (SO 95095 46570) and the other put in a number of locations all within 100 metres of the first trap although in subtly differing habitat types.

Each session starts 30 minutes after sunset and runs for a period of three hours.

Results

Notable Records

The status below refers to the status in the West Midlands as stated in Simpson *et al* 2020.

Conservation Priority A: None. Conservation Priority B: None. Conservation Priority C: 74.011 Cream-bordered Green Pea *Earias clorana* Status: Uncommon resident. 12 records between

2015 and 2021. Early date: 31 May 2019. Late date: 7 August 2015.

Other Species of Interest

38.024 *Elachista poae* First recorded in 2015 (identified by A Simpson). Second record was a leaf mine found in 2016 in Reed Sweet-grass *Glyceria maxima*.

62.077 Endotricha flammealis

First recorded in 2021. A recent arrival in the West Midlands. A single record from July 2022.

63.118 Beautiful China-mark *Nymphula nitidulata* (01). Status: Uncommon resident. Four records from 2017 and 2018.



01. Beautiful China-mark *Nymphula nitidulata*. 25th August 2015. Richard Stott

69.006 Privet Hawk-moth *Sphinx ligustri* Status: Uncommon resident in the south. Two records in 2021 and 2022.

70.006 Dwarf Cream Wave *Idaea fuscovenosa* Status: Uncommon resident. One record in 2021.

70.055 Large Twin-spot Carpet *Xanthorhoe quadrifasciata* Status: Uncommon resident. Single records in 2014 and 2018.

70.159 Cypress Pug *Eupithecia phoeniceata* Status: Uncommon resident. Single record in 2021.

72.009 White Satin Moth *Leucoma salicis* Status: Uncommon resident. Irregular on Avon Meadows, Four records between 2015 and 2021.

72.026 Garden Tiger *Arctia caja* NEAR THREATENED. Status: Uncommon declining resident. Six records between 2011 and 2019.

72.037 Round-winged Muslin *Thumatha senex* Status: Uncommon resident. Fairly common on Avon Meadows with a high count of 71 in July 2015.

73.100 Silky Wainscot *Chilodes maritima* Status: Local uncommon resident. Fairly common on Avon Meadows, recorded in most years from 2015 to 2022.

73.119 The Crescent *Helotropha leucostigma* Status: Uncommon resident. Regularly recorded in Avon Meadows between 2011 and 2021.

73.134 Large Wainscot *Rhizedra lutosa* Status: Status: Uncommon resident and migrant. Recorded regularly on Avon Meadows between 2014 and 2021.

73.159 Small Clouded Brindle *Apamea unanimis* Status: Uncommon resident. Four records between 2014 and 2018.

73.266 Dog's Tooth *Lacanobia suasa* Status: Uncommon resident. A single record from 2015.

73.279 Broad-barred White *Hecatera bicolorata* NEAR THREATENED. Status: Uncommon resident. Two records from 2015 and 2019. 73.294 Southern Wainscot *Mythimna straminea* Status: Local uncommon resident. Regular in small numbers between 2011 and 2018.

73.302 Obscure Wainscot *Mythimna obsoleta* Status: Uncommon resident. Recorded regularly between 2011 and 2022 with a high count of 22.

72.052 Dotted Fan-foot *Macrochilo cribrumalis* Only recorded in 2019 - identified by S. Whitehouse. (Stott 2019).

Discussion

It should be noted that the number of survey nights were reduced over 2020/2021 due to COVID precautions.

It is notable that since 2016 that on average nine new species have been recorded each year and this rate is only falling slowly. Although a number of uncommon species are listed in this report, there are a large number of quite common species that are yet to be recorded. Over the last nine years an average of 153 species was recorded each year in total, of these, 55% were recorded only once during the year. References

Asher, N. 2022. Common Micro-moths of Berkshire. 2nd Edition. Berkshire Moth Group Publishing. Stott, R. 2011. First Moth Survey on the Avon Meadows Community Wetland, Pershore, June 2011. Worcestershire Record 31:28-30. Stott, R. 2019. Dotted Fan-foot Macrochilo cribrumalis (Erebidae) - new to VC37 Worcestershire. Worcestershire Record 47:32. Friends of Avon Meadows website. Available at: http://www.avonmeadows.org.uk/RecentSightings.html [Accessed 26.11.22]. Simpson, A., Duncan, I. & Williams, M. 2020. Moths of the West Midlands. Pisces Publications. Sterling, P. & Parsons, M. 2012. Field Guide to the Micro-moths of Great Britain and Ireland. British Wildlife Publishing. Waring, P. & Townsend, M. 2017. Field Guide to the Moths of Great Britain and Ireland. 3rd Edition. Bloomsbury Natural History.

Image

01. Beautiful China-mark Nymphula nitidulata. 25th August 2015. Richard Stott