MOTH TRAPPING AT THE BUNGALOW

2024



1. Introduction

This is the third sequential year that moth recording by light trap has been carried out at The Bungalow. The prolonged heavy rains in the early part of the year played havoc with the lives of all insects, particularly our butterflies. Our moths though appear to have weathered the storm and put on a good show with over 200 species in our Shamley Green Garden.

2. Method

On suitable evenings starting January 2024, the trap was set overnight amongst the fruit bushes at the bottom of the garden and inspected in situ next morning. The procedure was similar to that of previous years, with the trap contents counted, photographed and, hopefully, identified before being released into the shrubbery safe from inquisitive birds, particularly the local Robin.

The trap and light source were changed from last year as described below.

Available time and the long periods of rain meant the number of trapping events were down on previous years.

After each session the trap was dried, cleaned and stored under cover until the next session. Species and totals for each session were then added to a spreadsheet for the year.

3. The Trap



In late 2023, a Skinner-type moth trap was constructed from plywood for use in 2024 and fitted with 2x10w LED blacklight strip lamps with a UV output of 365nm. It was subsequently enhanced in March 2024 with a 6W strip of LEDs with a UV output of 395nm. It was hoped that the LEDs would be more effective in attracting moths than the discharge lamps and the Skinner type trap would be more effective in retaining them.

4. Recording

At the end of the year, the results were submitted to the County Moth Recorders (CMRs) for inclusion in the national database. Also included were previous years' data to assist in the construction of a Surrey County Historic Moth Database.

Photographs of each species were taken with gender and colour/pattern variations where appropriate. In some cases, other shots such as ventral views were taken to aid species verification. These are included in the list of photographs accompanying this Report. Where it is not possible to differentiate between species within a group or genus without dissection the specimen is listed as an aggregate (agg.). The number of photographs taken/recorded may be reduced to new species and variations subject to discussion at the end of 2024.

Due to the long periods of wet weather and other commitments, the number of trapping sessions was down to 29 from 30 in 2022 and 48 in 2023.

5. Developments in County Recording

In an ideal world, the National Moth Database would be split into counties, each with its own historic record. This is by no means the case and indeed Surrey itself lacks its own historic records or any means of extracting local datasets from the national database. The Present Surrey CMR is not in a position to take on the task of setting up a Surrey County Database. A local group is however preparing to attempt the task starting 2025 with the 2024 data and working forwards, then adding earlier years as and when manpower availability allows.

The above work will impact on the time taken to verify the records submitted by individual recorders. This Report will therefore be issued initially without CMR verification and may be subject to correction of some moth ID's at a later date.

6. Findings

From a total of 29 sessions, a total of 899 moths were trapped yielding 202 separate species. This compares very favourably with the 2023 results when from 50 sessions, a total of 684 moths were trapped yielding 154 species.

2024 was a particularly poor year for insects in general due to the very wet late spring. The higher count is therefore no doubt due to the better performance of the Skinner type trap with the two separate wavelength LED lights.

A spreadsheet was produced comparing the species trapped for the years 2022, 2023 and 2024. This can be seen in the attachments as the spreadsheet "AnnualBungalowMothTally2024". This will hopefully be updated every year to show the cumulative total number of species trapped at the Bungalow. The total number of individual species trapped up to the end of 2024 is 297.

There were no particularly unusual moths found, though it's nice to find those that make the journey from Europe such as the L-album Wainscot again. The Blair's Mocha was of interest as it has become more than just an immigrant and has recently started breeding in the southeast of England.

This year brought more Hawk Moths to the garden than previously with Elephant, Eyed, Pine and Poplar Hawks present. Previously, Lime, Privet and Small Elephant Hawk Moths have been trapped. Together with the Convolvulus Hawk Moth found on my neighbour's washing line and the Death's Head Hawk Moth found at Lord's Hill (which alas I did not see) that bring to a grand total of nine the number of Hawk Moth species found in Shamley Green in the last three years. With that total it would be churlish of me to complain that a Hummingbird Hawk Moth had not visited the garden whilst I was in.

What amazes me most of all though is simply the sheer variety of the night flying moths – why do they hide their light under a bushel?



Streamer

Pebble Hook-tip

Scorched Wing

The trap collected an assortment of Bycatch creatures including Spiders, Lacewings, Chafers, Caddis Flies and the Moths' Lilliputian nemesis, Ophion obscuratus (agg.). O. obscuratus and its relatives are commonly found in moth traps. They are ichneumonids, parasitiod wasps that lay their eggs in up to a quarter of their host caterpillars' population, leaving their own offspring to grow slowly inside, resulting in the caterpillars' eventual death when the wasp grubs finally emerge to pupate.



Ophion obscuratus (agg.)

Darwin's studies of the Ichneumonids contributed to his increasing doubts of a benevolent deity, writing: "I cannot persuade myself that a beneficent and omnipotent God would have designedly created the Ichneumonidae with the express intention of their feeding within the living bodies of caterpillars..."

7. Attachments

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2024BungalowMothTally (xl)
CumulativeBungalowMothTally2024 (xl)
2024BungalowMothPhotos (jpeg)
2024BungalowBycatch (Word)
2024BungalowBycatchPhotos (jpeg)
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8. Copyright

Permission is given to anyone to use the photographs and information herein for scientific or educational purposes.

John Portess 26 February 2025