

National Moth Recorders' Meeting 25th January 2014
Lynn Fomison and Tim Norriss

Dr Martin Warren opened the meeting by welcoming a lecture theatre full of moth-ers. A record 197 people had booked places. He was most impressed that in excess of 5,000 people had contributed records to the national moth recording scheme and recognised the success of the scheme as one of the greatest achievements within Butterfly Conservation. He saw the recording of moths as the start in a great journey to learn more about them and to use the data to aid their conservation.

NMRS Update Dr Zoë Randle. Some of the interesting statistics from the scheme were highlighted

- Lappet distribution down 72% since 2000
- But Devon Carpet increased range and RIS has shown that the population has increased 1279% between 1968 and 2012
- In 2012 an average of 4,000 records per vice-county was received in the scheme
- Anecdotal evidence suggests that it was a good year for migrants. Rosy Underwing being recorded by Les Hill in Dorset and by Mark Tunmore in Cornwall. Clifden Nonpareil had been numerous and widespread, as had *Palpita vitrealis*. Vestal has probably had its best year ever.
- 16.2 million records are held in the scheme and there is 97% coverage at 10k square level. However 30% of the squares have less than 100 recent (2000 onwards) records indicating a degree of under recording.
- 2013 Moth Night had been a great success with 1361 events and 40,000 records.

2014 National Moth Night is planned for 3rd to 5th July. The theme is woodlands.

In 2018 (which is the 50th Anniversary of Butterfly Conservation) a new atlas of the macro moths of UK and Ireland is to be published in collaboration with Moths Ireland. It will include records up to 2016 so the next three years of recording will be very important. Already some County Moth Recorders are identifying under recorded squares in order to focus recording efforts.

The NMRS on-line recording scheme is in the final throes of development and it is hoped it will be available very soon.

Last but not least a grant has been received from Defra to digitise the micro moth maps which to date have been operated as a totally manual system by John Langmaid and Mark Young . It is anticipated that c.500 will be done initially and will be available on line.

The rest of the meeting was devoted to seven talks. Highlights as follows

- **Moth-ing Gems from the Emerald Isle *Andrew Croy, Northern Ireland Macro-moth Recorder.***

With only 40 -50 regular recorders of which 12 were regarded as “dedicated obsessives” Andrew focussed on the great potential for moth recording in Northern Ireland and the huge likelihood of new species or historic ones being found. His own personal very special find was Stephen’s Gem. Andrew works for Ulster Wildlife and the organisation is so keen to promote moth recording on its reserves that it will provide free bed and breakfast! I am sure his excellent talk will have encouraged some to consider a trip there.
- **New discoveries in Gloucestershire *Neale Jordan-Mellersh, West Gloucestershire County Moth Recorder***

Neale gave an overview of the range of the very special habitats of the county and the recording coverage that was being achieved. To date 1689 species have been recorded in the county with approximately 10 new species added each year.

Neale’s account of his own mothing experience was most interesting. He had recorded an impressive 525 species in his urban Bristol garden. It sounded delightful with a wide range of native plants. He was a great believer in growing the plants to attract the moths. Most special of all was an oak tree – the next nearest one in the vicinity being a mile away! And also a lime tree as most people had had their front garden trees cut down! Neighbouring gardens had pines/ conifers and birches so this helped to encourage a range of species. It was quite a startling fact that about a 100 of the 525 species had been recorded by methods other than light trapping. He advocated looking for micros flying in the low sunlight early morning and evening. 40 species had been recorded as a result of sugaring. All in all very informative and inspiring
- **The new British checklist, why was it needed and what went into it? *Dr David Agassiz, Scientific Associate, the Natural History Museum***

David’s resume of the history of checklists was interesting to hear and he described some of the thinking that had gone into the new checklist. It is just available as a printed book and will be available online as an excel spread sheet in the future (NHM web site research-curation/ scientific resources.). People were keen to know when the new list would be used in recording systems. Richard Fox indicated it will come in gradually and will be incorporated in NMRS but old numbers and names will continue to be accepted.
- **General decline of moths in the Netherlands: towards a preliminary Red List *Dr. Ties Huigens, De Vlinderstichting***

Ties emphasised the importance of the decline by showing the importance of moths as indicators of habitat quality and their important role in ecosystems. Some plants are only pollinated by moths, white campion being one of these, and of course moths and their caterpillars are an important food source. One illustration of this was made by reference to Nightjars with 80% of their intake being moths. Interestingly the Oak Processionary moth figured in the top ten species chosen as food.

Ties showed that there were similarities in the numbers of species of moths in the Netherlands and UK and proceeded to highlight the declines that had

been experienced. Worryingly, in general, rare species had fared worse than common ones. Another feature of the decline was that species that overwinter as adults had fared better than other species. This led to speculation that a change in spring conditions was maybe a cause. Possibly colder weather affected larva adversely or conversely if vegetation had grown more than usual this could lead to a cooler micro climate around food plants.

The declines recorded were also mirrored in butterflies, bees and hoverflies. Reference was also made to a drop in the quality of nectar as a possible problem.

The Netherlands has a large research project Licht op natuur to investigate the long term effects of artificial lighting on moths, birds, amphibians, mammals and plants. It has involved a sophisticated system of street lights of four different types being erected in nature reserves!

Ties did not provide any real answers to the decline but drew attention to research taking place and the fact that very much more is needed as is large scale conservation effort and well connected nature reserves

- **The importance of hedgerows for moths in intensive farmland *Emma Coulthard, University of Northampton***

Emma outlined the research she was undertaking for her PhD. Her long interest in moths had led her to choose to study this species as an indicator of biodiversity in farmland hedges and her work had focussed on two farms.

One of these was in Higher level stewardship (which requires delivery of better outcomes for wildlife) and the other in entry level. Her studies looked at species present and how they were using the hedges. Light traps and torchlight surveys were employed. Bramble was the most popular flower for nectar in hedgerows. She was also keen to establish to what extent hedges were useful corridors for moths.

- **Shedding light on moths- the potential impacts of light pollution *Robin Somers-Yeates, University of Exeter***

Robin described the possible impact of light pollution on moths – that coming to light deflects moths from normal activity of feeding and breeding and thus wastes their time; direct mortality at some types of lights and can increase predation by bats. A frightening statistic was that 19% of total global electricity was used on artificial lighting and this is growing by 6% a year. The research he had undertaken initially was on the attractiveness of different types of street lights. There was a strong possibility that more energy efficient lights had a shorter wave length and were more attractive to moths. His next research will be looking at the effect of lighting on foodplants and caterpillars.

- **Control and Management of Oak Processionary Moth. *Andrew Hoppit, Forestry Commission***

Although Andrew might have felt he was stepping into the Lion's Den by giving a talk on killing caterpillars, his illustrations of the severe rashes that these can cause made the point that this is one hazardous creature!

He gave the history of the discovery, spread and attempts to tackle the pest. The problem was particularly bad around Kew and in the Bromley/ Croydon area where the large colony in the 250 acre grounds of a hospital in 2012 had not been located some years earlier when an adult had been trapped one kilometre away.

Defra is putting funding into containment of the London colonies and the eradication of any new sites of infestation. There was natural concern from the audience about the spraying of BT by helicopter on the copse at Pangbourne. Assurances were given that the effects of this on other species were being monitored and that no further aerial spraying would be undertaken before full evaluation. Views were also expressed by members of the audience on the import of trees into the UK.

Comments from Teis were interesting given that the OPM occurs naturally in The Netherlands and that the moth had got into the Kew area by way of trees imported from Holland. He said that spraying of BT is not allowed there and that one means of control might be stopping cutting grass under roadside trees so that predators can thrive.