CONTENTS

4. Eyarth Rocks
   News from our reserve
5. Butterflies of RSPB Conwy
   More than just birds!
9. Butterfly Hunt!
   Man on a mission
12. Moth trapping through the year
   Sifting the data
16. Mixed Fortunes of Nettle Butterflies
   Nettles are necessary
21. Butterfly and Moth Events
   Plan your summer!
26. Currant Clearwings
   Fruit tree beauties
26. Do you want to join the GMS?
   Citizen science in action
29. Memorable Moments from 2 Reserves
   Knowing your patch
30. Transect Recording
   Turning a walk into data
32. Flintshire Micro-moths...Help Needed
   Can you help?
35. Blaenau Ffestiniog Moths 2017
   Moth Report
36. Tales from Poplar-graphic Oceans
   LP cover beauties
37. Butterflies in Slovenia
   Idyllic Illyria

Cover photograph of mating Six-spot Burnet Moths at Newborough Warren
by Ilija Vukomanovic

Butterfly Conservation Wales
Gwcharhod Glöynnod Byw Cymru
50th Anniversary 50mlwyddiant

Published by the North Wales Branch of Butterfly Conservation.

Please note that the opinions expressed in this newsletter are not necessarily those of the Society or the Branch
**Letter from the Editor**

Welcome to your 2018 edition of the ‘North Wales Branch Newsletter’. This has become quite a bumper edition which is fitting for this celebratory year for Butterfly Conservation. This, of course, is down to all those contributors who have been generous with their time, sharing their experience and expertise, tapping on keyboards and sifting through photos. Many thanks, to all of them. The range of topics is broad, covering all of the lepidopteran ‘groups’- butterflies, moths (incl. day-flying) and micro-moths. I’m sure there is something for everybody. As the articles came in I fought to keep the size down using some judicial editing. But as more came in, I thought it best to add more pages, but still, keep a keen eye on the weight. I tested this on the local Post Office scales making sure it was still under 100g - for 2nd class postage!

On reading Julie Williams’ address in the latest ‘Butterfly’, about BC’s milestone golden anniversary, it made me think about the history of our branch. Ray Sandiford, who continues to be active in the conservation of butterflies and has contributed an article here (see page 16), told me that he approached BC Head Office, 23 years ago, in 1995, about starting up a North Wales Branch. He did so, and May 1996 saw the publication of its first Newsletter. Ray, who lived in Betws-y-Coed at the time, worked alongside others to set up the branch over the next few years. By 2001 the branch had 70 members and was running several events as well as producing excellent newsletters. In May of that year, at the AGM, a new committee was formed, with Ilija Vukomanovic as Chair. He said that he and the committee would take the Branch forward, building on the excellent start. Ilija, with the help of many others, continues to do just that. We now have 443 members, an excellent events programme and well-supported Newsletters.

For Butterfly Conservation’s 50th, we are having a special commemorative and celebratory event at Eyarth Rocks. This will be held on Saturday 19th May at 11am (see page 21 for details) - 16 years, almost to the day, since the opening of the reserve. As can be seen in the newsletter at the time (right), it was opened by our very own Iolo Williams, who was, apparently, known as ‘Birdman’ in those days! Managed by volunteers then, but now by Russel Hobson (Head of Conservation Wales), with the help of volunteers, the reserve continues to support a healthy colony of Pearl-bordered Fritillary (see page 4).

Mark Sheridan
EYARTH ROCKS by Russel Hobson

The cool spring in 2017 meant that Pearl-bordered Fritillary were later emerging than in recent years. Butterfly Conservation staff undertook a timed count on the 24th May and numbers had picked up to 2015 levels after a dip in 2016. This means the on-going trend remains positive.

![Graph showing butterfly numbers]

A female was also followed by Martin Wain (BC Morecombe Bay) and observed egg-laying on a violet leaf in quite a grassy sward. This less than seemingly ideal location near Rob’s bench might indicate they are able to use less bracken areas for breeding on this limestone outcrop.

Individuals were also seen on areas to the south of the reserve being successfully managed by the Nant Clwyd Estate. We are now negotiating a new Section 15 agreement with Natural Resources Wales to continue the habitat management work on the reserve.

(Aberrant form of Pearl-bordered Fritillary photographed by Andrew Livemore in 2014 – *Boloria euphrasone ab. pallida*)
BUTTERFLIES OF RSPB CONWY
by Julian Hughes, Ruth A. Morgan and Rob W. Morgan

Conwy nature reserve is a 50-hectare site on the east bank of the Conwy estuary in Llandudno Junction, most of which lies within vice-county 50 (Denbighshire). The nature reserve was created in the early 1990s from three million tonnes of estuarine silt that had been removed from the bed of the estuary during the construction of the A55 road tunnel and dumped on the saltmarsh and mudflats. Around half of the reserve area is water, in the form of two freshwater lagoons and an inter-tidal frontage, but since the site has been managed by RSPB Cymru (1993), the terrestrial parts of the reserve have been managed as woodland, scrub and grassland.

During the 22 years since the nature reserve opened to the public, ad hoc butterfly records have been gathered by visitors, volunteers and staff. Since 2015, two volunteers (RAM and RWM) have undertaken a weekly transect, walking 2,700 metres once each week between early April and the end of September, recording butterflies, dragonflies, bumblebees and a small number of day-flying moth species. The transect (shown as a yellow line in Fig.1) is undertaken in the best weather (dry, sunny, warm, calm) available during each week, subject to availability of the volunteers. Butterflies are observed and the species and number recorded, but not caught, as the species present regularly at Conwy cause little identification challenge.

In 2016, JH produced a simple checklist of the butterflies recorded at the site (this, and a checklist of moths and other taxonomic groups, are downloadable from http://tinyurl.com/conwylists). This article expands on that checklist, and uses the first three years of transect surveys to make an initial assessment of the status of each species.

From the limited data collected so far, several species had a much better 2017 than the previous two years, particularly Green-veined White, Speckled Wood,
Red Admiral, Comma and Common Blue. Cinnabar and Six-spot Burnet Moths were also more numerous in 2017. Ringlet appears to be establishing itself as a regular presence on the reserve, but Peacock and Small Tortoiseshell were marginally scarcer. Fig.2 shows that butterflies recorded on the transect were over three times more abundant in 2017 than 2016.

**Butterfly records**

**Dingy Skipper (Erynnis tages)** Recorded just once, on 18 May 1998, even though the reserve lies only a few miles to the southwest of Bryn Pydew, a limestone ridge with a small population of Dingy Skippers.

**Small Skipper (Thymelicus sylvestris)** Recorded on two dates in 2016 (17 and 25 July) during the weekly transect survey, the first records for the reserve. It is widespread but localised in this part of North Wales, with the Great Orme hosting the only established population nearby.

**Large Skipper (Ochlodes Sylvanus)** Aside from a single sighting in June 1996, there were no further records until three in July 2015 and one in August 2016 during transect surveys. The UK population has increased during the last decade, and with its caterpillar food plant (Cock’s foot, *Dactylis glomerata*) growing on the reserve, this may be another species likely to increase there.


**Large White (Pieris brassicae)** Moderate numbers: earliest 21/04/2014, latest 19/09/2017.

**Small White (Pieris rapae)** Moderate numbers: earliest 25/03/2012, latest 23/09/2016.


**Brimstone (Gonepteryx rhamni)** Small numbers: earliest date 09/04 2017, latest 19/10/2012.

**Wall (Lasiommata megera)** 3 occasions, always along the estuary track: 17/05/2014, 14/06/2015 and 23-24/07/2017.

**Speckled Wood (Pararge aegeria)** Moderate numbers, primarily in wooded areas close to the A55: earliest 28/03/2012, latest 28/09/2017.

**Small Heath (Coenonympha pamphilus)** Recorded twice, on 29/07/2008 and 19/062014. Usually at higher altitudes along the northern foothills of the Carneddau mountains and on the plateau of the Gt Orme.
Ringlet (*Aphantopus hyperantus*) A recent arrival (first record 28/07/2013), now becoming established. Small numbers: earliest 14/06/2017, latest 16/08/2016. As caterpillars use a range of grass species present at the reserve, there is every likelihood that they are now a breeding species.

<table>
<thead>
<tr>
<th>Date range</th>
<th>2015</th>
<th>27 June 2016</th>
<th>14 Jun-12 Jul 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>0</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

**Meadow Brown (*Maniola jurtina*)** Large numbers, primarily in the grazed southern part of the reserve: earliest date 6/06/2016, latest 25/09/2015.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>161</td>
<td>65</td>
<td>186</td>
</tr>
</tbody>
</table>

**Gatekeeper (*Pyronia tithonus*)** Large numbers, primarily in the grazed southern part of the reserve: earliest date 7/07/2015, latest 19/09/2017.

<table>
<thead>
<tr>
<th>Date range</th>
<th>10 Jul-10 Sep 2015</th>
<th>17 Jul-2 Aug 2016</th>
<th>12 Jul-19 Sep 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>200</td>
<td>191</td>
<td>247</td>
</tr>
</tbody>
</table>

**Marbled White (*Melanargia galathea*)** One on 22/08/2012 is the sole sighting. There are only a handful of records in North Wales (aderyn.lercwales.org.uk), suspected relates to a captive-bred release.

**Grayling (*Hipparchia Semele*)** Recorded on 28/08/2008 and 05/09/2015. It is presumed that these individuals were not of the locally endemic *thyone* subspecies which usually ceases to fly beyond July.

**Dark-green Fritillary (*Argynnis aglaja*)** Recorded on 20/07/1997 and 02/08/2008; the most abundant fritillary in the locality, so it is perhaps surprising that it has not been recorded more frequently.


<table>
<thead>
<tr>
<th>Date range</th>
<th>18 Jul-25 Sep 2015</th>
<th>17 Jul 2016</th>
<th>31 May-28 Sep 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>3</td>
<td>1</td>
<td>19</td>
</tr>
</tbody>
</table>

**Painted Lady (*Vanessa cardui*)** Recorded on 8 dates between 1998 and 2017, sometimes in multiples: earliest 31/05/2015, latest 31/08/2015.

**Peacock (*Aglais io*)** Small numbers: earliest 10/03/2015 (except 1 on 22/01/2016), latest 19/10/2012.

<table>
<thead>
<tr>
<th>Date range</th>
<th>20 Apr-20 Aug 2015</th>
<th>17 May-2 Aug 2016</th>
<th>10 May-15 Aug 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>12</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

**Small Tortoiseshell (*Aglais urticae*)** Moderate numbers: earliest 12/03/2015 (except one on 14/02/2015), latest 10/09/2015.

<table>
<thead>
<tr>
<th>Date range</th>
<th>20 Apr-10 Sep 2015</th>
<th>20 Apr-19 Jul 2016</th>
<th>31 Mar-12 Jul 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>18</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

**Comma (*Polygonia c-album*)** Small numbers: earliest 22/03/2011, latest 15/10/2013.

<table>
<thead>
<tr>
<th>Date range</th>
<th>20 Apr-27 Aug 2015</th>
<th>20 Apr-19 Jul 2016</th>
<th>9 Apr-28 Aug 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>8</td>
<td>5</td>
<td>21</td>
</tr>
</tbody>
</table>

**Small Copper (*Lycaena phlaeas*)** 1 record each year during 2012-15, ranging between 07/08 and 07/10.

**White-letter Hairstreak (*Satyrium w-album*)** One photographed on a thistle behind the Bridge Pond on 22/07/2016 is the sole record.

**Holly Blue (*Celastrina argiolus*)** The only records on our database are singles in May 1996, 2008, 2012 and 2015, and a pair on 15/08/2017; yet to be recorded on the transect survey, but thought that under-represents the true status and small numbers are present each Spring.

**Brown Argus (*Aricia agestis*)** One on 19/08/2013 is the sole record.

**Common Blue (*Polyommatus icarus*)** Moderate to large numbers: earliest 10/05/2017, latest 16/09/2016.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>76</td>
<td>42</td>
<td>158</td>
</tr>
</tbody>
</table>
Moth records
In addition to butterflies, the transect fieldwork also records easily-identifiable macro-moths, including Silver-Y (*Autographa gamma*) and Common nettle-tap (*Anthophila fabriciana*). Three species are recorded sufficiently regularly to merit reporting here:

**Shaded Broad-bar (*Scototeryx chenopodiata*)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>14</td>
<td>16</td>
<td>12</td>
</tr>
</tbody>
</table>

**Cinnabar (*Tyria jacobaeae*)**

This count is solely of larvae, usually feeding on Common Ragwort (*Senecio jacobaea*).

<table>
<thead>
<tr>
<th>Date range</th>
<th>18 Jul-25 Sep 2015</th>
<th>17 Jul 2016</th>
<th>31 May-28 Sep 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>3</td>
<td>1</td>
<td>19</td>
</tr>
</tbody>
</table>

**Six-spot Burnet (*Zygaena filipendulae*)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total transect count</td>
<td>220</td>
<td>188</td>
<td>628</td>
</tr>
</tbody>
</table>

Management for butterflies
The scrub and grassland are managed for a variety of invertebrates, with the objective of keeping a diversity of sward length and scrub structure. A small herd of Carneddau mountain ponies are the primary management tool, supplemented by mechanical cutting of vegetation to create micro-habitats and sheltered sunny bays within the scrub. Over time, it is hoped that the transect surveys (which are divided into habitat-defined sectors) will inform and monitor the effectiveness of the management.

Acknowledgement
Thanks to Tony Gallon for undertaking a number of the transect surveys when RAM and RWM were unavailable.

Volunteers play a crucial part in monitoring butterflies and moths at RSPB Conwy nature reserve and managing the habitat for them, at both a large- and small-scale.
BUTTERFLY HUNT!! by Steve Palin

I’ve been interested in butterflies and natural history for a long time. The Brooke Bond PG Tips picture cards were an early influence, and in 1963 when I was 8 years old, I collected all of their “British Butterflies” set and stuck them in the album. I have it still today. But living in Liverpool, many of the illustrated species seemed distant and inaccessible to me.

I’ve been in the teaching profession all my working life and this had also been an impediment to me seeing certain species during their flight times, which inevitably often clashed with the school terms. But after reading Patrick Barkham’s wonderful book “Butterfly Isles” in 2010, I became inspired to try and see all of our British butterfly species in my lifetime (not just all in one year like Patrick!). In 2009 I had taken partial early retirement so greater opportunities had opened up!

I had seen all of our common species by then, of course, along with some of the more unusual ones which flew in North Wales, including Pearl-bordered and Small Pearl-bordered Fritillaries at Eyarth Rocks, Dingy and Grizzled Skippers at the Wrexham Prison site, Silver-washed Fritillary, Purple and White Letter Hairstreaks at Marford Quarry, Green Hairstreak on the Denbigh Moors, Silver-studded Blue at the Great Orme and Marsh Fritillary at Cors Erddreiniog in Anglesey. I’d seen Large Heath at Whixall Moss and having lived in the Norfolk Broads, I’d often seen Swallowtails.

But I wanted to see all the others!

My first major butterfly “twitch” was to Fermyn Woods, Northamptonshire to see the Purple Emperor. I had long been a fan of the late BB’s nature writing and knew of his historic efforts to breed and swell the butterfly’s numbers at this site. I wasn’t disappointed! I had great views of the insects as they came down from the oak tops to extract salts and moisture from the footpaths. Numerous White Admirals also flitted around.
The next year I visited Glasdrum Woods near Fort William in Argyle, where a five-minute break in the brooding dark clouds and drizzle was just enough to bring out the Chequered Skippers and herald a very successful end to what had looked like being a very long and wasted journey!

A trip to the down-land slopes of Aston Rowant NNR in Oxfordshire followed, where I was lucky enough to see Adonis Blue, Chalkhill Blue and the “teddy-bear-like” Silver Spotted Skipper. It’s such a shame that the adjacent M40 noise intrudes into this otherwise magical site.

I had six target species for 2016. Arnside Knott was the venue where I photographed the High Brown Fritillary (left) and the Northern Brown Argus, whilst Noar Hill in Hampshire provided the Duke of Burgundy (right).
Then on to the Isle of Wight to photograph Small Blue and Glanville Fritillary (left). The later-flying Brown Hairstreak was seen at RSPB Otmoor in Oxfordshire.

Last year my trip to Daneway Banks in Gloucestershire with fellow enthusiasts Simon and Ros Mills from the NWWT allowed me to fulfil a long-standing ambition to see Large Blue (right) and what had long been an often-missed bogey species for me – the Marbled White. Moving on to Blean Woods in Kent, we had barely stepped out of the car before witnessing the delightful sight of Heath Fritillaries flitting about through the vegetation. Whilst there I was lucky enough to photograph the rare micro moth *Agrotera nemoralis* at its only known UK breeding site (though I didn’t know what I’d photographed at the time!). We also recorded Essex Skipper on the trip.

Of the 59 recognised UK species, my current tally is 52. It hasn’t all been a success story. My efforts to see Wood White and Black Hairstreak have ended in failure so far. Also, I’m not sure whether I’ll ever bother to visit Ireland to see Réal’s Wood White, as the distinguishing characteristics seem too technical to me for field identification. This year I have Black Hairstreak in my line of fire again, along with the Lulworth Skipper and Clouded Yellow.

I live in hope, but hit or miss it’s always such great fun searching (and hopefully I still have a couple of years left to do it yet!).
MOTH TRAPPING THROUGH THE YEAR by Andrew Graham (Recorder for VC48)

After many decades of moth recording in North Wales we now possess almost\(^1\) three-quarters of a million moth records, most of which arose from the use of light traps. The principal value of these data lies in indicating the presence of the species concerned. (Absence of records, of course, tells us nothing as many common species seldom come to light and are easily overlooked). Thus, the main positive outcome of all this recording effort is the ability to produce distribution maps and flight-time charts. However, there should be some other analyses possible with such a large dataset and my intention here is to use the data to examine how the number of species and total number of moths caught changes through the year. To some extent it is also possible to compare the main designs of moth trap, namely those based on Mercury Vapour light bulbs (MV), those based on fluorescent actinic light bulbs and the Rothamsted design. I will also pick out some of the most successful trapping sessions held in the database.

Unfortunately, different recorders have adopted widely differing approaches to recording their results and this lack of standardisation renders the data less useful than would otherwise be the case. Some moth trappers have only recorded macro-moths whereas others don’t discriminate against smaller moths and attempt to identify every moth caught. Some recorders merely look through their catch for something new or especially interesting and ignore everything else and quite a few people only record the presence of a species without counting the numbers. Other difficulties arise when results are amalgamated from several traps or over a period of time, e.g. monthly totals. All these problems mean that the data is not consistent and that any conclusions are problematical.

Modern databases represent an extraordinary intellectual achievement. It is possible to ask almost any question, relating to the data, and the answer comes back in the blink of an eye. To perform the same analysis manually, as would have been necessary only a few decades ago, would take a ridiculous length of time and would probably be incorrect due to human error.

The queries to be submitted to the North Wales Lepidoptera database are: please list the number of species and the total number of moths for each moth trapping event\(^2\) along with the date (week number), the trap type and site details. The ‘please’ isn’t necessary in Structured Query Language (SQL) but

---

\(^1\) 725,441 moth records as of 1\(^{st}\) May 2017.

\(^2\) An event is defined as a unique combination of date, site and method.
seems politer in English! Then plot the averages of these numbers for each week through the year. The results are shown below.

(Based upon 25,274 single-night trapping sessions using MV light, 9,333 single-night sessions with actinic traps and 7033 nights with Rothamsted traps)

These graphs clearly demonstrate the relative efficiencies of the three trap types with the MV catch (no. of species) being over 50% greater than the actinics and well over twice as effective as the Rothamsted design. What is surprising to me is the sharpness of the late July peak, the graph resembling the Matterhorn rather than a rounded hilltop. This feature is replicated in all three plots and also replicated for plots of macro-moths only and micro-moths only (not shown). A priori, I would have expected a more rounded peak or perhaps even something of a plateau lasting a few weeks. However, the reality seems to be that moth species diversity increases rapidly until about week 29 (late July) and then plunges just as dramatically. Of course, there are moths to be caught even in the depths of winter so the numbers never go to zero.
The plot for the number of moths counted per trapping session also shows the same dramatic peak and again demonstrates the superior pulling power of MV light bulbs, being more than twice as effective as actinic bulbs. (Rothamsted data proved to be inadequate for this analysis and is not shown).

This plot also shows up a marked spring peak and a smaller autumn peak, features which are also discernible in the species plots. There is a period in the spring, from about week 15 to week 20 (mid-April to mid-May), when catches decline in terms of numbers caught though holding more or less steady in terms of number of species.

I would interpret these subsidiary peaks as being partially a consequence of many species having two generations per year so that the overall graph is an amalgamation of two main patterns, i.e. of the univoltine and bivoltine species. Of course, many species are univoltine but peak at times other than late July. The late peaking (autumn) species mostly balance the early (spring) ones in the above graphs but there is no reason why the balance should be exact so it is entirely reasonable that the spring peak is the more pronounced. Different moths have evolved different strategies for surviving through the winter months, some as adults, some as pupae etc. Each strategy is fully effective, as proved by the continuing existence of the species, so it is meaningless to say that any one strategy is better than any other. However, the varying strategies are utilised unevenly by our Lepidopteran fauna. The spring peak in numbers counted is largely due to a few dominant species, including the Hebrew Character *Orthosia gothica* and the Common Quaker *Orthosia cerasi*, which overwinter as pupae and emerge in the spring at just the right time for the adults to utilise the copious food source supplied by flowering sallows. The flight charts for these two hyper-abundant species coincide precisely with the spring bulge in the Total Catch graph.
Catch size Moth trap catches can vary from zero to over 150 species depending on season, location and weather conditions. Even around Week 29 bad weather can lead to low catches but it is only at this time of year that exceptionally large catches are possible. The distribution in catch size within any particular week is evenly spread so the average figure is just that and should not be thought of as an expected figure, i.e. the distribution shows no marked peak though it tails off for high numbers.

It is fairly common to hear people talking about good nights with 100+ macros but whilst catches of this size may be unremarkable in other parts of Britain the North Wales Lepidoptera database includes only nine such events and most of these involved the use of multiple traps. Trapping sessions utilising a single trap on a single night which resulted in over a hundred macro-moth species are, it would seem, extremely unusual in North Wales. In fact, based on available records, there have only ever been two such events, one in Anglesey in July 2001 (104 macros, Cae Brych, Robinson MV trap, Charles Aron) and the other in Montgomeryshire in July 2006 (115 macros, Commins Coch, Rob-MV-125W, Peter Williams).

If we extend the definition of an ‘event’ to include multiple moth traps, all given as being at the same grid reference, then the top two records for single-night events are as follows: Roundton Hill, July 2014, 168 species (104 macros) and Middleton, July 2014, 168 species (99 macros). Both these events were run by Douglas Boyes.

Loosening the definition of an ‘event’ further, to include up to four nights trapped consecutively at the same locality, there have been some much larger species counts. The all-time record is 181 macros, over four nights with multiple traps. (Plas Tan y Bwlch, week 29, 2013, David Brown and course attendees). No micro-moths were recorded on that occasion but had they been the total might have been as high as 250 species.

Caveats I have already mentioned several reasons why these results should be taken as indicative only. Other complications include the non-random selection of trapping nights, i.e. a selective bias towards ‘good nights’, the huge variation in habitat, altitude and local climate across the region and the fact that the analysis is based only on the records available and on the level of detail contained within those records.

More careful and consistent recording would allow for more meaningful analysis. Ideally all moths should be identified and counted in each trap and recorded along with a six or eight-figure grid reference and a description of the moth trap including the bulb type and power.
MIXED FORTUNES FOR NETTLE BUTTERFLIES by Ray Sandiford

We are so privileged to have four named butterflies that have caterpillars that feed on the common nettle plant. But their future is precarious and I found 2017 to be a year of mixed fortune for each of them. There are big changes going on. Nettles are being invaded by the Himalayan Balsam, brambles and tall grasses. Some farmers are cutting down nettles at the time when the caterpillars are on the change to pupae. The ripping up of the ground to build houses etc., and fly tipping also threatens nettle habitat. How well will their numbers hold up against predation and parasitism? What effect, long term, will climate change have?

Each year for the past few years I have come to North Wales to collect caterpillars. I take them back home to Bolton to breed on in my garden under netting. I find the caterpillars around the coast at Criccieth, Borth Y Gest, the beautiful village of Beddgelert and around the valleys where the Ospreys breed from Garreg to Prenteg. Here we find old barns and farm land where all the four species are found. I find that if caterpillars are scarce, then the Isle of Anglesey usually yields good results, around the coast near Dwyran, down the country lanes to the Anglesey Sea Zoo and at Foel Farm. This year was pretty bad, probably because the fields that used to have large areas of nettles had been cut down by the farmer. In the country lanes nettles had been taken over by other plants and grasses. But I did find quite a lot of Red Admiral caterpillars on the Little and Great Ormes, but no Peacocks, Small Tortoiseshells or Commas.

THE RED ADMIRAL I’ve found that the Red Admiral lays eggs in country lanes, besides old walls of churches, for example, and on farmland. From mid-April to the beginning of May she lays one egg on the tip of the top of a leaf before flying to another plant. If it’s a sunny spot with plenty of food around she will lay quite a lot of eggs, as many as 400. The egg laying takes around a month before she dies. The male will live around a fortnight. The butterflies from these eggs usually start to emerge mid-June. In 2017 I found around 100 caterpillars to breed from and managed to get 70 butterflies, 4 of which were females. The caterpillars of the Red Admirals come in various colours, ranging from its normal colour of black, to green, brown and reddish. I walked down a country
a few years ago on Anglesey and I found greenish and brownish caterpillars on one side and all black on the other. The ones that I breed are mostly undercover, but have lots of light, and are all black. I did find a reddish one and this changed to black in a few days, probably because of the light. Some of the caterpillars died after Ichneumon wasps had stung them. These had either wasp eggs laid in them or had a virus passed on to them. I have noticed that some caterpillars have more larvae in them than others. Could they be the female ones that parasitic flies and wasps home in on, because they have more fatty substances and eggs ready to lay? From the rest, I bred around 1,000 butterflies. None of the caterpillars that I reared from the 4 females had any kind of parasitic fly or wasp in them. I am usually plagued with the Chalcid wasp (*Pteromalus puparum*) but none appeared this time. The first and second stage caterpillars can get attacked by various Ichneumon wasps and Tachinid flies. During the third stage, they can be attacked by the common and solitary wasps. At the fourth stage when the caterpillar is hanging up to go into pupae the Chalcid wasp can attack. The caterpillar takes around 24 hours to change to a pupa so the wasps have plenty of time to lay their eggs in the caterpillar or the soft tissues of the developing pupa.

We had butterflies emerging from June to September. By then, I had nearly 200 butterflies, which I took to be released at the Pensychnant Conservation Centre on Sunday 17th September. There were around 200 people there to see them fly to freedom. This event helps to get the message across that butterflies are declining and they need all the help we can give to stop this. After the release, I still had some caterpillars feeding but they had gone quite docile with the weather going colder. Some butterflies emerged from their pupae on bright days but most of the butterflies only flew on sunny days. By the 22nd September all had gone quiet, but would I get a third brood? I have had a third brood before, but some years ago, when again I had bred lots of butterflies. They survived the winter but died in February. I have had butterflies emerging on Christmas day and then over-wintering ‘till the spring but I let them go because it’s rather hard to breed them when the sun is low and find that they won’t feed. They just seem to bask in the sun on the netting of the butterfly house.
The Red Admiral butterfly is a unique specimen and so worthy of its name, for in September it navigates over the waters from Britain to breed or over-winter around the Mediterranean. I was lucky to see a migration when I was near the Penmon Priory, Anglesey. Walking along the coast I saw 500 plus, all feeding on Valerians to get ready for a long night flight. How far they fly at night depends on the air currents.

We have had a fantastic 2017 for the Red Admirals so let’s hope they manage to over-winter and the ones that emerge late from their pupae will not make the flight south because the weather would be against them.

Here’s a summary of breeding in previous years:

**2016:** I collected 70 caterpillars from North Wales that produced 40 butterflies from which I had only 3 females and managed to breed around 300 summer butterflies.

**2015:** I collected 40 caterpillars from North Wales that produced 25 butterflies from which I had only 2 females, and managed to breed around 100 summer butterflies.

**2014:** I collected 30 caterpillars from North Wales that produced 23 butterflies from which I had one female, so I didn’t bother breeding any butterflies.

**2013:** I collected 15 caterpillars from North Wales that produced 10 butterflies from which I had no females, so no breeding.

**THE COMMA:** 2017 has been quite a good year for this butterfly. I didn’t find the caterpillars in spring, but found around 50 Comma caterpillars later in the year. Comma caterpillars have tell-tale signs on how they eat the leaves by biting little holes in them. If you bend down and look up under the leaves that’s where you find them. There were lots of Ichneumon wasps in the area and I was hoping that some of the caterpillars would survive to be adults. But one day whilst cleaning the Comma cage I found 13 Tachinid Fly cocoons and noticed lots of Commas hanging down that had died and gone brown and limp. I knew that I was going to lose some of them, but not to the Tachinid flies! I have managed to get 7 butterflies which have settled down in hibernation. My prediction could well be that we won’t find as many Comma’s and next year’s butterfly count will be down.
THE PEACOCK: 2017 has been a poor season with not finding one caterpillar from all the usual places I visited. I found nettle patches that I had never visited before but still there was nothing to be found. What a different story to last year when I found thousands of caterpillars and took around 250 to breed. These fed up on the Hops in the butterfly house. It was in the third skin stage when the caterpillars started to hang down from the plant and grubs of the ichneumon wasp *Phobocampe confusa* started to emerge, not from one or a couple, but most of the caterpillars. The larvae came out and dangled on single strand of silk, started to weave a cocoon around themselves, then went hard and just dangled in mid-air. However, I managed to get 15 butterflies which over-wintered. I had an idea that the Peacocks were going to be down in 2017, but didn’t think it would be so bad.

THE SMALL TORTOISESHELL: In 2017 I didn’t find any Small Tortoiseshell Caterpillars in Wales at all. I had felt over the last few years that the butterfly was declining, I had also noticed that the butterfly had been hibernating early and not having a second brood. People phoned me to ask for advice on what to do with hibernating butterflies, if they wake up through the winter months, particularly when they turn the central heating on. The Small Tortoiseshell seem to have a thing for going in houses, sheds, garages, outbuildings and old buildings to hibernate. It’s after hibernation they have problems with trying to get out and usually fly to the windows and die there from starvation or end up caught in spiders’ webs. My advice is to feed it with cotton wool soaked in water with added sugar, then put in a safe cool place such as small closed cardboard box in a shed to continue hibernating, not forgetting to release it in Spring!

What can we do to help stop any decline of the nettle butterflies?
- manage the right habitats for each species.
- stop the spread of Himalayan Balsam, brambles and grasses that over-grow nettles.
- stop people cutting nettles down at the wrong time.
- have a pot of nettles in the garden along with nectar plants.

Let’s hope that climate change isn’t doing too much damage to the butterflies - only time will tell. And has the mobile phone anything to do with their decline?

The Red Admiral seems to have had a good 2017 but for the Peacock and Small Tortoiseshell, it’s been bad so let’s hope things improve for 2018.

Please help by letting me know if you see caterpillars on nettles whilst on your walks.
Ray: 07792336547 and 07480945294  
j.melia2@ntlworld.com
NORTH WALES BRANCH EVENTS

Looking back on a successful 2017......

During 2017 we had a varied programme with well-attended events. Highlights were our first transect recording workshop, led by Vic Hitchings, which 11 people attended. Vic went through the various transect recording methods indoors, but unfortunately, inclement weather meant we only saw roosting Silver-studded Blues during the field work.

We also held a joint event at Marford Quarry with NWWT to search for various butterflies during a July visit. 30 plus people were greeted by a fine summer’s day and had great views of Silver-washed Fritillary and Purple Hairstreak.

Once again the AGM was very successful, with 25 people being treated to some very interesting talks. Vic Hitchings took us around the world in 80 butterflies; Zoe Randle gave a talk about her work on the National Moth Recording Scheme. Finally, Stephen Palmer (left) gave a fascinating talk about micro moths and their recording.

......and looking forward to our anniversary year!

For 2018, we have several events that catch the eye. We have our 50th Anniversary event at Eyarth Rocks in May when we will be treated to a walk led by Russel Hobson, the BC Head of Conservation in Wales.

Also in May, we will be searching for Marsh Fritillary at Cors Erddreiniog.

Vic Hitchings will be providing a refresher course of his transect recording workshop in June.

During July, we will be discovering clearwing moths.

There’s lots going on, so please come along to our events in 2018.

Ian Gorton
Events and Publicity Officer
Butterfly and Moth Events 2018

Sunday 6th May 2pm  Butterfly Walk at Llanymynech Rocks
A joint event with Wrexham Branch of NWWT. Simon Spencer leads us in the search for Grizzled Skippers, Green Hairstreaks and Pearl-bordered Fritillaries.
Please note, this event will be cancelled if it’s raining. Check with contact. No dogs.
Llanymynech Rocks Nature Reserve: (GR: SJ 270 219)
Meet at car park at end of Underhill Lane, SY22 6HD
Contact Steve Palin on 01248 471116 or stevepalin@supanet.com

Monday 7th May 8pm Moth Group Meeting at Pensychnant
An informal meeting of North Wales Moth-ers and natural history enthusiasts. All welcome.

Tuesday 8th May 2pm  Ashworth's Rustic Caterpillar Search
We’ll search for caterpillars of this N Wales endemic as they bask in the spring sunshine, noting their micro habitat and food-plant. The more eyes the better.
Meet at Pensychnant  Contact Julian Thompson on 01492 592595 for info.

Saturday 19th May 11am  Open Day at Eyarth Rocks
This will be our 50th anniversary event as Russel Hobson, Head of Conservation at BC Wales, will be leading a walk targeting the Pearl-bordered Fritillary. The day will showcase the conservation work that is taking place to ensure that this threatened species prospers.
Bring strong footwear, lunch, drinks and warm clothing. No dogs.
Meet at SJ127 553 a lay-by near Eyarth Bridge and the entrance to reserve.
Booking essential Contact Ian Gorton iangorton180969@btinternet.com

Saturday 26th May 12:30pm Cors Erddreiniog: for Marsh Fritillary
A guided walk by Vic Hitchings and Robert Wynn to search for the Marsh Fritillary.
The walk will be of 2-3 hours duration over undulating ground.
Strong footwear and warm clothing. No dogs.
Meet at car park at Maes Newydd, Capel Coch LL77 7UR – (GR: SH 4587 8215)
Booking essential Contact Vic Hitchings on 07716 172406

Monday 4th June 8pm Moth Group Meeting at Pensychnant
An informal meeting of North Wales Moth-ers and natural history enthusiasts. All welcome.

Friday 8th June 8.30pm-11.30pm  Nightjars and Nightlife
Primarily, an event to see and hear Nightjars but Julian will have moth traps set up too.
If the weather behaves see lots of moths - many common but some very local.
Stout footwear and midge protection essential! No dogs.
Meet at Gwydyr Forest, Cyffty Mine Car Park (GR: SH 773 588)
Booking essential with Mark at 07505214073/mark.sheridan.mgc@gmail.com

Saturday 16th June 12.30pm-3.30pm  Transect Recording Workshop
A butterfly transect refresher and a field work session (weather permitting).
Led by Victor Hitchings, who runs the Mynydd Marian transect.
To be held at Llysfaen Village Hall, Dolwen Road, Colwyn Bay, Clwyd, LL29 8SS
Booking essential with Ian Gorton at iangorton180969@btinternet.com

**SEE PAGE 30 for details of last year’s course**
Monday-Tuesday 11th/12th June  Moth Trapping at RSPB Conwy
A privileged opportunity to trap on the reserve, hoping for the Obscure Wainscot, and other obscure wainscots! We’ll have a ‘show-and-tell’ session when the reserve opens at 9:30am.
Contact Julian Thompson for details and times on 01492 592595.

Weekend 16th/17th June  National Moth Night
The theme of this year’s National Moth Night is Pyralids, so we will search for grass moths at dusk, 9pm on Saturday, before setting the traps. On Sunday morning, 11am, we will examine the catch with a cuppa. I will convince you that moths are not just boring and brown (some are brown, but none are boring!) Good photo opportunities. Donations appreciated.
Held at Pensychnant  Contact Julian Thompson on 01492 592595 for info.

Friday 22nd June 9.30pm-11.30pm  Glow-worms and Moths
Essentially an event to see these glowing beetles on the Great Orme but come to see the variety of moths attracted to the moth traps. Bring torch. No dogs.
Meet at Pump House Shelter, West Shore, Llandudno (GR: SH 770 822)
Booking essential with Mark at 07505214073 / mark.sheridan.mgc@gmail.com

Sunday 24th June 10.30am-3pm  Great, Great Orme Butterflies
Warden, Sally Pidcock, leads a 3ml walk to see butterflies (including the Orme’s Silver-studded Blue and Grayling), and other wildlife.
Plus, learn about the Orme’s history and conservation.
Meet at West Shore Toll House (GR: SH 768 823)
Booking essential with Mark at 07505214073/mark.sheridan.mgc@gmail.com

Mon - Tues 25th/26th June Moth Trapping at Ty Uchaf, Pentrefoelas
A privileged opportunity to trap overnight in the ancient award-winning meadows at Ty Uchaf Farm, a very special and rare habitat so we are hope to find some interesting species.
Contact Julian Thompson on 01492 592595 for times and arrangements.

Monday 2nd July 8pm  Moth Group Meeting at Pensychnant
An informal meeting of North Wales Moth-ers and natural history enthusiasts. All welcome.

Sunday 8th July  2pm-5pm  Minera Quarry : Orchids and Butterflies
Simon Mills leads a joint visit with NWWT Wrexham Branch, in search of butterflies and Fragrant, Pyramidal and other orchids in maybe the best site for them in Wales.
Minera Quarry NWWT Nature Reserve: (GR: SJ 258 519)
Meet at end of Maesyffynnon Road, LL11 3DE
Contact Steve Palin 01248 471116 stevepalin@supanet.com for more info.

Weekend 14th/15th July  Ashworth’s Rustic Weekend
Our annual search for Pensychnant’s rarest moths, the Ashworth’s Rustic and Weaver’s Wave. Traps set at 9pm and like some nuts stay all night; or come at 11am on Sunday to see the catch over a cuppa. 1000s of moths of over 100s species (weather permitting). Photo opps.
Held at Pensychnant  Contact Julian Thompson on 01492 592595 for info.
Saturday 14th July 1pm  Lake Vyrnwy Clearwing
A joint event with RSPB and Montgomeryshire Moth Group to try to lure Welsh Clearwings
with pheromones, as well as looking for fresh emergence holes and exuviae.
We will take a stroll and record any other diurnal moths that may be on the wing.
Take the B4393 to the north of the lake: take the road towards Bala for one mile: cross
cattle grid: the road slopes down to a stream at the bottom of the valley:
Park / meet by the bridge. (GR: SH 959 256)
Contact Ian Gorton on 07966 154608 iangorton180969@btinternet.com

Mon – Thurs 16th-19th July  Week 29
Taken all-together, the 750,000 North Wales Moth records show the 29th week of the year to
be the most biodiverse, having the most individuals of the most species. Whether this is true
for all invertebrate taxa we don’t know. We will devote this week to recording as many
species as possible, setting the moth trap every night and having books and microscopes for
identification of all species groups. Everything from book-lice to badgers. Come along!
**SEE PAGE 12 FOR ANDREW GRAHAM’S PIECE ABOUT WEEK 29**

Friday 20th July  Pensychnant Bioblitz!
This big day is to be the culmination of week 29, recording as many species of plant, animal
and fungi as possible within a 24hour period, and showcasing the results of all the Week 29
surveying. There will be guided walks, and displays by many groups including Butterfly
Conservation and Pensychnant’s Moth Group. All records will be collated by Cofnod.
If you want to help with recording (anything), or just want to see and join in - all welcome.
Contact Julian Thompson on 01492 592595 for more information.

Monday 6th August 8pm Moth Group Meeting at Pensychnant
An informal meeting of North Wales Moth-ers and natural history enthusiasts. All welcome.

Monday 13th August 8.30pm ‘til late  Sandhill Rustic Search
Another rare moth! We will be searching for this rare marram specialist on Conwy Morfa by
Meet at Morfa car park (SH: 762 786) West end of beach.
Contact Julian Thompson for info on 01492 592595.

Sunday 2nd September 10am.  Moths for the Glaslyn Ospreys
Overnight, moth traps will be set at the Glaslyn Osprey Hide, at Pont Croesor
SH 593413. On Sunday morning, we will have a ‘show-&-tell’ session in the Centre.
All welcome with donations to Bywyd Gwyllt Glaslyn Wildlife.
We saw a Death’s-head Hawk-moth in 2016!
Contact Julian Thompson on 01492 592595 for info.

Monday 3rd September 8pm Moth Group Meeting at Pensychnant
An informal meeting of North Wales Moth-ers and natural history enthusiasts. All welcome.

Saturday 6th October 2018 North Wales Branch AGM/Members’ Day
SEE OVER THE PAGE FOR DETAILS....

The monthly Moth Group Meeting at Pensychnant will continue to
be held on the first Monday of the month at 8pm
An informal meeting of North Wales Moth-ers and natural history enthusiasts. All welcome.
North Wales Branch AGM/Members’ Day
Saturday 6th October 2018

Once again we have three fascinating speakers lined up who will cover a wide range of topics. Andy Banthorpe, joint County Moth Recorder for Bedfordshire, attends the monthly moth meetings at Pensychnant whenever he visits North Wales and he and his wife Melissa have developed a reputation for turning up unexpected and exciting new records for the area. Lucy Morton is one of Butterfly Conservation’s National Reserves Officers and has worked on a number of well-known reserves including Prees Heath. Martin Davies is a long-standing member of the European Butterflies Group (formerly EIG). His quest to study and record European Butterflies has taken him from the Arctic to the Mediterranean and from Spain to Romania where he has located and photographed many of Europe’s rarest and most elusive species.

Programme

10.30am Arrival and Tea/Coffee
11.00am Brief AGM and election of officers
11.30am **Miners, Rollers and Case-bearers – An Introduction to Micro-moths** Andy Banthorpe

Andy will share his enthusiasm for micros and tell us about some of the unusual new records he and Melissa have turned up while visiting North Wales.

12.30 – 2.00pm Lunch Please bring a packed lunch.

2.00pm **Managing Butterfly Conservation’s Nature Reserves** Lucy Morton

Lucy will tell us about Prees Heath and other reserves, and the work being undertaken to secure the future of the Wood White in the West Midlands.

3.00 – 3.15pm Tea and coffee

3.15pm **In Search of Rare and Local European Butterflies** Martin Davies

A wide-ranging look at the European butterfly fauna with a particular focus on rare, local and endemic species.

4.15pm (approx.) Close

VENUE: Pensychnant Conservation Centre and Nature Reserve, Sychnant Pass, Conwy, LL32 8BJ

Directions: Pensychnant is at the top of the Sychnant Pass, 2½ miles from Conwy or Penmaenmawr on the North Wales coast.

Grid Reference: (SH:752 770) (OS Landranger Map 115)

Ilija Vukomanovic
Branch Chairman
STATEMENT OF INCOME AND EXPENDITURE FOR THE YEAR ENDING 31st MARCH 2018
Compiled by Bob Lee (Treasurer) (with no expectation of change before publication).

<table>
<thead>
<tr>
<th>Income</th>
<th>2017-2018</th>
<th>2016-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership</td>
<td>1680.00</td>
<td>1554.00</td>
</tr>
<tr>
<td>Donations</td>
<td>110.00</td>
<td>133.19</td>
</tr>
<tr>
<td>Input VAT</td>
<td>3.03</td>
<td>1.60</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td><strong>£1,793.03</strong></td>
<td><strong>£1,688.79</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>2017-2018</th>
<th>2016-2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newsletter - Printing</td>
<td>398.00</td>
<td>449.11</td>
</tr>
<tr>
<td>Newsletter - Mailing</td>
<td>206.79</td>
<td>203.14</td>
</tr>
<tr>
<td>Room Hire</td>
<td>20.00</td>
<td></td>
</tr>
<tr>
<td>Wales Funding Pot (note 1)</td>
<td></td>
<td>1,000.00</td>
</tr>
<tr>
<td>Ground Rent Eyarth Rocks (note 2)</td>
<td></td>
<td>150.00</td>
</tr>
<tr>
<td>AGM - Room Hire / Catering / Mailing / speakers</td>
<td>224.09</td>
<td>178.07</td>
</tr>
<tr>
<td>VAT</td>
<td>237.01</td>
<td></td>
</tr>
<tr>
<td>PAT test</td>
<td>30.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td><strong>£828.88</strong></td>
<td><strong>£2,267.33</strong></td>
</tr>
</tbody>
</table>

Balance for Year 964.15 -578.54
Cash Funds last year end 2,524.89 3,103.43
Cash funds this year end **£3,489.04** **£2,524.89**

Note 1 Payment to cover groundworks at Eyarth Rocks has been deferred to the 2018-2019 financial year
Note 2 Although a cheque was issued to cover ground rent at Eyarth Rocks it was not cashed and has now lapsed

North Wales Branch Committee

Chairman
Ilija Vukomanovic 01492 530752 Ilijavuko@hotmail.com

Secretary
Julian Thompson 01492 592595 jpt.pensychnant@btinternet.com

Treasurer
Bob Lee 01244 550993

Membership Secretary and Newsletter Editor
Mark Sheridan 01492583820 mark.sheridan.mgc@gmail.com

Events and Publicity Officer
Ian Gorton 07966 154608 iangorton180969@btinternet.com

Butterfly Conservation Wales / Gwarchod Glöynnod Byw Cymru
Head of Conservation Wales / Pennaeth Cadwraeth Cymru
Russel Hobson 01792 642972 rhobson@butterfly-conservation.org

Unit 4, Cwm Road, Hafod, Swansea, SA1 2AY.
CURRANT CLEARWINGS
by Peter Silcocks

Currant bushes have been growing at Glyn Bach for over 35 years and probably much longer. There are six bushes (two varieties) growing in a fruit cage. These bushes have been subject to benign neglect and pruning has been avoided since the discovery of the Currant Clearwings (*Synanthedon tipuliformis*) some eight or nine years ago. Emergence of the adults seems to occur in the last week of June. They are quite sympathetic to the observer, resting on the upper surface of the leaves of the food plant between midday and 3.00pm. On overcast days, they seem to hide. Their flight range seems to be very restricted never appearing to stray more than a metre or so from the food plant. While this behaviour probably increases their chance of finding a mate it probable militates against the dispersal of the species. The literature suggests that alternative food plants might be red currants or even gooseberries. The fruit cage in question has six healthy Redcurrant bushes some 20 feet away which are studiously ignored and just outside the cage are a number of gooseberry bushes also meeting indifference. The numbers of observed individuals, seems to be very variable from a maximum of 2 up to 12. Exuviae appear about two thirds of the way up the bushes on branches that are about 10mm in cross section though this may not be a prescriptive size. These moths are a great joy in showing easily identified sexual dimorphism with three yellow cross-bands in the female and four in the male. While I have witnessed mating on one occasion I tried to attract males by putting a female in a women’s stocking with a plastic cup in the foot to form a container. This was singularly unsuccessful - maybe the stocking was the wrong denier!

I do however recommend spending some time looking for this very smart lepidopteran as I suspect that it is far more frequent than records suggest.

Would you like to join the Garden Moth Scheme?
by Norman Lowe

Last year, I gave an introduction to the Garden Moth Scheme, a citizen science scheme which has been monitoring the numbers of common British and Irish moths since 2007. The main aim of the GMS is to coordinate records to get standardised data which can be used for future study. In addition to the published papers referred to in my previous article, John Wilson has now had a provisional acceptance from the Journal of Insect Conservation of a new paper...
covering the relationship between moth catches and dark skies. Unfortunately, the previous article came out after the beginning of the recording season which starts each year in early March. This year, however I hope that the article reaches you in time for some readers to be inspired to join the scheme. This is because we are particularly anxious to get more records from North Wales. Last year we had 42 sets of records from Wales, of which 11 were from North Wales. But this year although we have improved to 43 sets of Welsh records, only 9 of them were from North Wales.

Table 1 below shows the mean numbers of the 20 most-recorded species for North and South Wales in 2017. 15 of the 20 were common to both sets of results. 5 species, in green, were in the Top 20 in South Wales but not in the North. However, Buff Footman, Agriphila straminella, Spruce Carpet, Riband Wave and Small Square-spot (shown in red) were in the Top 20 in the North but not in the South. Interestingly, the first two were recorded in very high numbers in one (different) garden each. This meant that because there were only 9 gardens in the dataset, the mean numbers were greatly boosted since individual gardens have a greater effect on the mean than if there are more sites in the dataset. A good reason to have more North Wales recorders in GMS!

<table>
<thead>
<tr>
<th>GMS N Wales Common Name</th>
<th>Mean</th>
<th>GMS S Wales Common Name</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Large Yellow Underwing</td>
<td>101.22</td>
<td>1 Large Yellow Underwing</td>
<td>185.24</td>
</tr>
<tr>
<td>2 Hebrew Character</td>
<td>42.00</td>
<td>2 Heart and Dart</td>
<td>75.35</td>
</tr>
<tr>
<td>3 Flame Shoulder</td>
<td>40.11</td>
<td>3 Flame Shoulder</td>
<td>64.38</td>
</tr>
<tr>
<td>4 Heart and Dart</td>
<td>30.56</td>
<td>4 Hebrew Character</td>
<td>60.79</td>
</tr>
<tr>
<td>5 Common Quaker</td>
<td>26.56</td>
<td>5 Setaceous Hebrew Character</td>
<td>45.74</td>
</tr>
<tr>
<td>6 Brimstone Moth</td>
<td>24.11</td>
<td>6 Brimstone Moth</td>
<td>41.03</td>
</tr>
<tr>
<td>7 Buff Footman</td>
<td>22.89</td>
<td>7 Common Quaker</td>
<td>30.94</td>
</tr>
<tr>
<td>8 Common Rustic agg.</td>
<td>22.89</td>
<td>8 Light Brown Apple Moth</td>
<td>26.00</td>
</tr>
<tr>
<td>9 Dark Arches</td>
<td>20.56</td>
<td>9 Common Marbled Carpet</td>
<td>25.62</td>
</tr>
<tr>
<td>10 Clouded Drab</td>
<td>20.56</td>
<td>10 Flame</td>
<td>23.85</td>
</tr>
<tr>
<td>11 Agriphila straminella</td>
<td>19.00</td>
<td>11 Buff Ermine</td>
<td>18.91</td>
</tr>
<tr>
<td>12 Uncertain/Rustic agg.</td>
<td>17.89</td>
<td>12 Garden Grass-veneer</td>
<td>18.79</td>
</tr>
<tr>
<td>13 Dingy Footman</td>
<td>17.78</td>
<td>13 Clouded Drab</td>
<td>18.79</td>
</tr>
<tr>
<td>14 Spruce Carpet</td>
<td>17.56</td>
<td>14 Dingy Footman</td>
<td>18.32</td>
</tr>
<tr>
<td>15 Common Marbled Carpet</td>
<td>17.22</td>
<td>15 Lesser Brd-bordered Yellow Uwing</td>
<td>17.71</td>
</tr>
<tr>
<td>16 Small Phoenix</td>
<td>15.89</td>
<td>16 Common Footman</td>
<td>17.65</td>
</tr>
<tr>
<td>17 Lesser Brd-bordered Yellow Uwing</td>
<td>15.67</td>
<td>17 Uncertain/Rustic agg.</td>
<td>17.59</td>
</tr>
<tr>
<td>18 Riband Wave</td>
<td>12.56</td>
<td>18 Dark Arches</td>
<td>17.59</td>
</tr>
<tr>
<td>19 Small Square-spot</td>
<td>12.22</td>
<td>19 Common Rustic agg.</td>
<td>17.29</td>
</tr>
<tr>
<td>20 Buff Ermine</td>
<td>12.11</td>
<td>20 Small Phoenix</td>
<td>15.62</td>
</tr>
</tbody>
</table>

There is also scope to look at changes in numbers through time. Table 2 (over) shows the Top 20 for the whole of Wales. Some might find this a morass of numbers but interesting facts can be picked out. So, 2017 seems to have been an average kind of year with only one species, Flame Shoulder, recording its highest average number over the 11-year period.
Table 2 GMS Welsh results 2007 to 2017 showing mean numbers per trap

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Yellow Underwing</td>
<td>167.65</td>
<td>117.8</td>
<td>139.5</td>
<td>90.8</td>
<td>105.9</td>
<td>94.3</td>
<td>201.5</td>
<td>248.6</td>
<td>251.9</td>
<td>234.0</td>
<td>159.2</td>
</tr>
<tr>
<td>Heart and Dart</td>
<td>65.98</td>
<td>64.5</td>
<td>164.0</td>
<td>93.3</td>
<td>36.4</td>
<td>54.0</td>
<td>134.0</td>
<td>92.3</td>
<td>61.0</td>
<td>86.9</td>
<td>228.0</td>
</tr>
<tr>
<td>Flame Shoulder</td>
<td>59.30</td>
<td>28.0</td>
<td>31.3</td>
<td>51.8</td>
<td>49.0</td>
<td>24.7</td>
<td>27.3</td>
<td>43.5</td>
<td>53.0</td>
<td>35.4</td>
<td>38.8</td>
</tr>
<tr>
<td>Hebrew Character</td>
<td>56.86</td>
<td>31.8</td>
<td>48.5</td>
<td>72.1</td>
<td>32.9</td>
<td>72.8</td>
<td>103.9</td>
<td>80.3</td>
<td>51.5</td>
<td>32.9</td>
<td>58.8</td>
</tr>
<tr>
<td>Set Hebrew Character</td>
<td>38.42</td>
<td>17.0</td>
<td>20.3</td>
<td>26.8</td>
<td>34.1</td>
<td>12.4</td>
<td>41.4</td>
<td>62.8</td>
<td>23.1</td>
<td>27.8</td>
<td>19.6</td>
</tr>
<tr>
<td>Brimstone Moth</td>
<td>37.49</td>
<td>24.9</td>
<td>16.9</td>
<td>39.2</td>
<td>30.5</td>
<td>16.0</td>
<td>16.9</td>
<td>19.8</td>
<td>23.5</td>
<td>18.4</td>
<td>27.6</td>
</tr>
<tr>
<td>Common Quaker</td>
<td>30.02</td>
<td>25.7</td>
<td>31.5</td>
<td>43.7</td>
<td>12.3</td>
<td>26.4</td>
<td>71.9</td>
<td>49.7</td>
<td>42.8</td>
<td>22.7</td>
<td>66.2</td>
</tr>
<tr>
<td>Common Marbled Carpet</td>
<td>23.86</td>
<td>21.6</td>
<td>14.8</td>
<td>20.7</td>
<td>44.5</td>
<td>19.4</td>
<td>14.7</td>
<td>17.2</td>
<td>38.6</td>
<td>19.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Light Brown Apple Moth</td>
<td>22.70</td>
<td>23.3</td>
<td>14.9</td>
<td>13.5</td>
<td>20.8</td>
<td>15.9</td>
<td>7.7</td>
<td>9.6</td>
<td>18.3</td>
<td>20.4</td>
<td>18.5</td>
</tr>
<tr>
<td>Flame</td>
<td>21.14</td>
<td>11.0</td>
<td>17.6</td>
<td>18.4</td>
<td>20.3</td>
<td>8.7</td>
<td>12.6</td>
<td>26.0</td>
<td>16.0</td>
<td>8.9</td>
<td>10.8</td>
</tr>
<tr>
<td>Clouded Drab</td>
<td>19.16</td>
<td>14.2</td>
<td>21.4</td>
<td>29.9</td>
<td>11.4</td>
<td>23.2</td>
<td>47.5</td>
<td>32.0</td>
<td>21.1</td>
<td>12.8</td>
<td>19.6</td>
</tr>
<tr>
<td>Common Rustic agg.</td>
<td>18.47</td>
<td>16.1</td>
<td>23.8</td>
<td>19.0</td>
<td>26.0</td>
<td>12.7</td>
<td>24.4</td>
<td>27.6</td>
<td>19.6</td>
<td>15.5</td>
<td>9.4</td>
</tr>
<tr>
<td>Dark Arches</td>
<td>18.21</td>
<td>17.6</td>
<td>39.8</td>
<td>38.4</td>
<td>20.7</td>
<td>31.3</td>
<td>51.9</td>
<td>53.9</td>
<td>33.1</td>
<td>48.6</td>
<td>38.2</td>
</tr>
<tr>
<td>Dingy Footman</td>
<td>18.21</td>
<td>11.8</td>
<td>13.4</td>
<td>26.0</td>
<td>22.2</td>
<td>16.4</td>
<td>13.6</td>
<td>25.1</td>
<td>20.3</td>
<td>17.3</td>
<td>12.4</td>
</tr>
<tr>
<td>Uncertain/Rustic agg.</td>
<td>17.65</td>
<td>14.7</td>
<td>25.8</td>
<td>16.0</td>
<td>22.2</td>
<td>17.3</td>
<td>14.4</td>
<td>16.6</td>
<td>27.7</td>
<td>11.5</td>
<td>10.1</td>
</tr>
<tr>
<td>Buff Ermine</td>
<td>17.49</td>
<td>11.8</td>
<td>16.0</td>
<td>22.2</td>
<td>17.3</td>
<td>14.4</td>
<td>16.6</td>
<td>27.7</td>
<td>11.5</td>
<td>10.1</td>
<td>16.8</td>
</tr>
<tr>
<td>Lesser B-b Yellow U/wing</td>
<td>17.28</td>
<td>17.9</td>
<td>19.1</td>
<td>21.7</td>
<td>48.5</td>
<td>27.2</td>
<td>33.4</td>
<td>23.0</td>
<td>25.8</td>
<td>45.1</td>
<td>14.3</td>
</tr>
<tr>
<td>Garden Grass-veneer</td>
<td>17.05</td>
<td>13.4</td>
<td>38.9</td>
<td>21.2</td>
<td>12.0</td>
<td>7.5</td>
<td>16.0</td>
<td>9.6</td>
<td>7.6</td>
<td>6.2</td>
<td>19.9</td>
</tr>
<tr>
<td>Common Footman</td>
<td>16.16</td>
<td>12.7</td>
<td>20.7</td>
<td>26.0</td>
<td>28.1</td>
<td>12.8</td>
<td>14.1</td>
<td>20.7</td>
<td>13.6</td>
<td>14.1</td>
<td>14.7</td>
</tr>
<tr>
<td>Small Phoenix</td>
<td>15.67</td>
<td>10.4</td>
<td>7.3</td>
<td>13.2</td>
<td>18.0</td>
<td>8.6</td>
<td>7.4</td>
<td>11.7</td>
<td>13.2</td>
<td>9.7</td>
<td>6.0</td>
</tr>
</tbody>
</table>

But perhaps it’s easier to visualise the results by charts. So right is a chart showing the mean numbers of 4 common Welsh species.

Looking further down the lists, some species such as Dark Arches and Small Quaker seem to be showing a worrying downward trend.

We are always looking for new recorders especially in North Wales so if you’d like to take part please contact me at norman@enviro-consulting.com, preferably before the recording season starts in early March.
MEMORABLE MOMENTS AT TWO LOCAL RESERVES by Arfon Thomas

My season photographing butterflies and other small creatures starts towards the end of April and lasts into October. The Mariandyrys NWWT reserve in Glan-yr-afon, near Llangoed in Anglesey is the first place I go to and although 2017 in general was not the most satisfying, I did in fact enjoy June and August at this location. What stands out was the sighting and photography of four matings of Brown Argus and one mating of Common Blues. The Brown Argus matings were on Hemp Agrimony and Wild Marjoram and I am particularly happy with a view on Hemp Agrimony (top right) where both the butterflies and flowers are in good condition and the composition is appealing. I think that it conveys the beauty of these very small and wonderful creatures with their distinctive and colourful patterns and markings. I always look out for occasions when two different butterflies or other creatures occupy a flower and are, more or less, in the same plane so that both are in focus and in August I was successful with a Brown Argus and a green Flower Beetle feeding on Hemp Agrimony. The colours were most appealing. August was a good month for me at Mariandyrys since I was able to photograph Comma on Hemp Agrimony and Wild Marjoram and Gatekeeper, Common Blue and Peacock feeding on Hemp Agrimony. However, the highlight undoubtedly was the discovery on 4 August of a White Letter Hairstreak feeding on Hemp Agrimony (above), the first specimen that I have seen. There is a Wych Elm nearby on the site. I wonder whether I will be as lucky again this year? June was again, a good month for Small Pearl-bordered Fritillaries and Ringlets. I did also get some pictures of the micro moth.
Small Purple and Gold. In June, as usual, I visited the Great Orme and there seemed to be a good number of Silver-studded Blues. I always search for other species as well and in previous years have been successful in capturing pictures of the Cistus Forester moth perching and feeding on Pyramidal Orchid and Bell Heather. Two other small creatures are similarly coloured in a beautiful green namely the Flower Beetle and the Speckled Bush Cricket. One very lucky picture contained the metallic green Flower Beetle and Cistus Forester feeding together on a Scabious flower. Again, the colours were most appealing. Grayling is usually quite numerous on the Orme. In 2015, one picture in particular, pleased me from the Orme, a pair of Silver-studded Blues feeding at the apex of a very shapely and colourful Pyramidal Orchid with both tongues clearly visible. It was a pleasure to capture this beautiful moment in nature.

**TRANSECT RECORDING**

by *Vic Hitchings*

Butterfly Recording Transect Walks provide the core of the United Kingdom Butterfly Monitoring Scheme (UKBMS) activities. It has been running for over 40 years and provides an unparalleled data set for environmental monitoring. A Transect Recording Workshop was run at Llysfaen Community Hall on Saturday 10\textsuperscript{th} June 2017. The aims of the workshop were to explain the transect walks, provide training for members who may wish to join an existing transect walk, to provide the same for those who may wish to run or join a Wider Countryside Butterfly Survey square and to encourage members to join existing or future surveys. It was attended by BC members and consisted of five talks. Most of the time was concerned with the recording walks but also included data input, other survey methods and how the data gathered is processed, reported and used.

*Introduction and Workflow (Talk 1)*

**Workshop talks**
**Transect Walks (Talk 2)**
This talk was designed to inform and encourage members to take part in fixed-route transects (Pollard Walks). These walks form the core of the UKBMS with over 1,200 different transects walked in the first 30 years of the scheme (1976-2005). They provide the highest quality data within the UKBMS. Walks are undertaken on a weekly basis from April to the end of September. Topics covered were; walk characteristics – transect width, time etc; recording rules; species identification; weather; transect dates; transect walk – design; data collection and recommendations based on the real-world case of Mynydd Marian. As this is the major component of the survey year more time was spent on this talk.

**Data Input (Talk 3)**
Data input was described in some detail and used screen captures from the UKBMS website screens. Items covered were data input via the online in UKBMS Online Transect Walker; data entry; data – Annual Summary; Annual Summary Plot and Annual Summary Download.

**Other Methods (Talk 4)**
There are four other survey methods used by Butterfly Conservation and the UKBMS. The main other method other than a weekly transect is the Wider Countryside Butterfly Survey. Another, monitoring Marsh Fritillary Larval Webs is also undertaken in the North Wales area but is of more specialist interest.

**Wider Countryside Butterfly Survey (WCBS)**
Butterfly Conservation recorders are taking part by surveying new random 1km squares within each Butterfly Conservation Branch region. These surveys are undertaken twice a year and follow the same methodologies as the Transect Surveys. Items covered were, setting up a new square: finding and marking a route, when to survey and recording criteria, recording butterflies seen off the survey lines and submitting data.

**Reduced effort surveys (egg counts, larval counts etc.)**
Three other recording schemes were outlined, albeit briefly.
1: Monitoring Butterflies by Annual Timed Counts
2: Monitoring Marsh Fritillary Larval Webs
3: Brown Hairstreak Egg Counts (for completeness)

**UKBMS Butterfly Conservation UK Results (Talk 5)**
This talk outlined what happens to the data gathered on the surveys. This consisted of summaries of, data processing and analysis (undertaken by the UKBMS, results for a site, summaries and reporting (at National level) and the National Butterfly Recorder’s Meeting (annual in March in Birmingham).

**Field work**
A field session was planned but had to be cancelled due to the inclement weather and a summary of the Mynydd Marian site was presented as a case study.

**Post Workshop Note**
Since the workshop, there is a plan in place to set up a Wider Countryside Butterfly Survey Square on Anglesey and a transect walk on Bryn Euryn Nature Reserve.
FLINTSHIRE MICRO-MOTHS... HELP NEEDED! by Helen Bantock

Although not resident in Flintshire, three years ago, I agreed to become County Recorder for micro-moths in VC51, as no one in the county had the time available to collate the records. In 2016, the Butterfly Conservation Moths Count recording scheme was enlarged to include micro moths as well as macro moths and it was important that what records we had should be verified. Lepidoptera are good indicators of biodiversity and the micro moths are under recorded.

This article is to ask for help from VC51 residents, or those living nearby, in collecting some more micro moth records. Even with the relatively few recorders who sent records in 2017 there were at least 10 New County Records* (NCR), including Borkenhausenia minutella, which was thought to be extinct in the UK but one was seen this year in a hedge and an image obtained. Fortunately, it is a very distinctive moth and so could be identified from this. However, micro moths are often far from cooperative and often so worn so that they cannot easily be identified from an image. For these reasons, dissection, which I am happy to undertake, is often needed and guidance in this matter is in the Moths Count grading guidelines and verification details, which are available either on the Butterfly Conservation website or the North Wales database http://www.trawsoed.com/NWLeps.aspx.

I think that there may be moth enthusiasts who record the macro species but are uncertain about the micros they may find at the bottom of a trap. To give an idea of results from keeping micros from traps I can relate that I recently helped out another colleague in the Greater London area. Out of 18 micro moths so far dissected I have come across one NCR and all the specimens will be valuable. If alive, moths should be killed quickly in a deep freeze for about an hour and then air dried for 48 hours before being stored in wax or paper packets. If moths are left in air tight tubes they may become mildewed and dissection may not be possible.

Micro-lepidopterists traditionally look for feeding signs, as often this is the easiest way to identify the species - most of which are plant specific. Records can be obtained by looking for larvae and leaf mines in the summer and autumn. The larvae illustrated on Orpine were seen in the autumn - the adult moths fly in the summer and are the smallest, greyest and least spotty of the white Yponomeuta group.

It is easy to find leaf mines when one starts to look and the only kit needed is a hand lens and some small plastic bags or pots to keep them in if they need to be examined more closely. The main problem is identification and good images are needed (taken by photographing the leaf against a window so that any larvae can be see). An extremely useful book by Ben Smart, ‘Micro-moth Field Tips’ gives details of the larvae and leaf mines to be found throughout each month of the
year. Leaf mines found in VC51 this year included *Choreutis pariana*, which was a NCR. A useful website is [http://www.leafmines.co.uk/](http://www.leafmines.co.uk/).

*A Choreutis pariana* larva eats away the parenchyma of crab apple leaves *Choreutis pariana* which emerged 12 days after pupation of the larva

*Yponomeuta sedella* larvae in a web on Orpine in the autumn with adult moth inset.
For all butterfly-lovers it can be fun to look for day flying micro moths, some of which are shown below.

*Nemophora degeerella* male - note the cross-band is two thirds along the forewing and the antennae four times the length of the forewing but only a little longer than the forewing in the female. *Adela croesella* is smaller with the crossband half way along the forewing.

*Incurvaria masculella* - often seen flying around hawthorn in April/ May sunshine. There are several species of *Incurvaria* in North Wales. *Incurvaria pectinea*, which is very similar to *I. masculella*, is also quite common, flying around birch and hazel.

*Micropterix calthella* - these tiny plain golden moths are seen in flowers from late April. *Micropterix aruncella* (insert) is often with them.

*Pyrausta purpuralis* flies in grassland - foodplant is Thyme.

I am very happy to provide further advice and support. My email address is listed elsewhere in the newsletter under **VC51 Micro-moth Recorder**.

*Choreutis pariana, Scythropia crataegella, Pammene rheiabella, Elachista gangabella, Borkhausenia minutella, Incurtinea argentimaculella, Stigmella samiatella, Stigmella sakhalinella, Adela croesella.*

*NB.* Most of these are quite common moths nationally but there were no previous records in VC51.

A useful starting out guide is the **Field Guide to the Micro-moths of Great Britain and Ireland** by Phil Sterling and Mark Parsons with illustrations by Richard Lewington.
This is a report on the first full year’s recording with my home-made moth trap, which was sited at four locations in and around the town:

1. **Home**, my back garden in the High Street, with a lot of street lighting.
2. **Oakeley Square**, completely rural, on the western edge of town.
3. **Bryn Egryn**, next to open mountain terrain south of the Diffwys Casson Mine area.
4. **Tanygrisiau**, below open mountain terrain at the northern end of the village.

I also had the privilege of one night at Gwaith Powdwr, sited at the Settling Shed.

154 species were recorded; 115 macros and 39 micros. These numbers include five ‘window entrants’ at home and 15 species found only at Gwaith Powdwr. My thanks go to Andrew Graham for his assistance with identification, especially of micros. Here are the dates, numbers of species (and individual moths) for each occasion.


**Bryn Egryn.** 11 May: 26(52), 13 Jun: 29(57), 11 Oct: 6(8), 4 Dec: 5(5).


**Gwaith Powdwr.** 30 Aug: 31(72).

Early attempts often yielded an empty trap, despite suitable weather, including a temperature of 5° C+, and numbers were predictably lower at home than on the edge of town. Domestic arrangements and some poor weather meant that I missed a lot of August and September.

---

![Images of moths: Buff Tip, Garden Tigers, Sallow Kitten, Spruce Carpet]
A number of species stood out as most frequent: Brown Silver-line, Hebrew Character, Chestnut, Brindled Pug, Flame Shoulder, Small Phoenix, Early Grey, Common Quaker, Clouded Drab, True Lover’s Knot, Common Grey, Large Yellow Underwing, Red-green Carpet and Common Marbled Carpet, in all its forms. A few of the more spectacular ones included Poplar Hawk, Small Elephant Hawk, Puss, Sallow Kitten, Great Prominent and Garden Tiger. 3 Ashworth’s Rustics turned up - 1 each at Bryn Egryn(13/06), Oakeley Square(6/07), home (26/07).

The adventure continues....

**TALES FROM POPLAR - GRAPHIC OCEANS** by *Ric Cheyney*

You wait 64 years for a poplar hawk moth, then two turn up together. Personally, I’ve always been a butterfly man. Moths are of the body: intensely physical, zombie-eyed at night, they flap and batter about, devoid of finer feeling. Butterflies are of the soul: delicate, sun-powered, their effete demeanour is quite literally flighty, balletic, other-worldly.

So, I was shocked to discover this pair of Poplar Hawk-moths on May 12th 2017, in a garden not far from Pont Briwet, Llandecwyn (SH 62223 37567). For a start, I had no idea this species existed. And to subsequently learn that it is probably our *most common* hawk moth only served to remind me how deeply ignorance can persist into old age. And then, just *look* at them: the delicate mimicry of dry dead leaves, the crinkled, brittle-looking fragility of their wings. These moths are decidedly of the *soul*. They’ve been made up by Roger Dean for an old Yes album cover. Their wings are sails made of leaf-cloth to carry their barkish bodies over oceans of adventure to the grail of….er….well, poplar trees, I suppose.

I am and shall remain, basically, a butterfly man. But the Poplar Hawk-moth has prompted me to re-examine my prejudices more than a little.
BUTTERFLIES IN SLOVENIA
by Malcolm Watling

In the late 1950s my Uncle Maurice Watling wrote a book, “This is Illyria”, about his expedition to the Alps in Slovenia. Ten years later my family followed during our own holiday, and eventually, in July 2014 I had the chance to return. I stayed with family members in a holiday chalet in Ribčev Laz, eastern end of Lake Bohinj. Unless otherwise stated, the weather was clear blue sky with blisteringly hot sun!! At this stage my knowledge of European butterflies was somewhat elementary and the photos were taken with a non-zooming camera which didn’t give particularly good close-ups.

Tuesday 15th. I drove to Great Dunmow, near Stanstead, for guest house overnight, the week’s parking, and lift to the airport at 5.15a.m. for the 7.00 flight to Ljubljana.

Wednesday 16th. My brother picked me up from the airport for the 55 min. drive up to Ribčev Laz. After lunch, a wander around the village revealed Large Skipper and Silver Washed Fritillary outside the chalet, photo of Chalkhill Blue, video of Wood White, also Brimstones and Mountain Green Veined Whites. Later we went in the car to Planinska koča na Vojah, where it was left for the drive home at the end of a proposed 3-day koča (mountain hostel) trek. The regular afternoon thunderstorm had just started. I had a good umbrella, but the wet slippery limestone rubble and my rate of progress on the way down confirmed
that I should not attempt the kočas! We stopped off in Stara Fužina for a meal, very recuperative! [c. 3.5 km walk, downhill]

**Thursday 17th.** A small walk first thing; in the tourist shop I bought the all-important local 1:25000 map. This showed a range of colour coded footpaths and interesting visitor features. Near the chalet, my first **9-Spotted Moth.** These delightful little day-flying things are abundant everywhere here.

The others set off for the 3-day koča expedition, then I set off on my main walk, over the bridge north to Stara Fužina. I crossed the road to a meadow and saw my only **Scarce Swallowtail** of the trip, **Brimstones, Whites,** and took a photo of a **9-Spotted Moth.** The **Meadow Brown** was the most common butterfly almost everywhere, despite the fact that I hardly mention it in this account. Turning right over the bridge of the Mostnica, I followed the road to the cycle track along the north bank of the Sava Bohinjska.

Along the section near the village was a **Swallowtail,** seen twice, and a cf. **Boloria sp.** The first part of the track is close to the river but high above it in the woods. A dark **Lycaenid** dashed past. Sunny clearings down at river level produced more **Silver Washed Fritillary, Erebia sp., Large Skipper, Wood White,** cf. **Essex Skipper,** later on another **Boloria sp.** and **High Brown Fritillary.**

The upper, woodland edge slopes of the meadows at Zabrševje were good, having lots of **Brimstone, Wood White, Silver Washed Fritillary, Large Skipper, Marbled White,** another darkish cf. **Boloria sp.** and some **Hairstreaks.** All the Hairstreaks, subsequently seen, seem to have been either **White Letter, Sloe** or **Ilex,** but I could never get close enough to settled ones for a photo.

Lunch was on a nicely shaded bench next to a hut by the track, and **Swallowtail** (two, or the same one twice?). I continued on and added **Jersey Tiger** and **Pearly Heath** to the list. At about two o’clock I turned back at the point where the track enters woods east of Kamnje. It started clouding over at this time, but got a photo of an **Erebia** on a flower. In 15 minutes, I was back at the lunch place. On the hut wall, under a roofed seating area, were posters about the occurrence of the Jersey Tiger Moth. Unfortunately, one of the two photos, was of a Scarlet
Tiger! By the above-river section, a **Hairstreak** and the first **White Admiral**. Soon after three I heard the first thunderclap from the mountains, was back at the chalet in about half an hour, and it started raining by four o’clock.

[6km walk, 4h10m, no climb]

**Friday 18th.** I left the chalet early, and from the village centre could see the sun reflecting on the windows of Triglavski Dom, the koča near the summit. The route was over the bridge and north through Stara Fužina. At Hudičev Most I turned right up the path towards Preval, intending, if possible, to get to the heights around Uskovnica. The path became too rough and steep for my liking, so I turned left along a wide, fairly level track. This turned out to be the level one running north along the east side of the Voje valley below Za Prevalom. Elevenses in the woods. A few butterflies along here included another **Pearly Heath** and a **Speckled Wood** – very old and worn. Reaching Češenjski Most at 11.30, I had a look at a ravine we had passed on Wednesday, then continued across to the track to Planinska koča. The usual species, including more **High Brown Fritillaries** and my second **White Admiral**. I turned south and had lunch and butterflying on the open meadow area N.E. of Klanica. Quite a rich site: new ones were **Knapweed Fritillary**, cf. **Heath Fritillary**, **Small Skipper, Small Heath, Latticed Heath Moth** and a **Small Blue**. Sauntering down slowly, I looked aside at meadows and glades. The area between “Nature Points” 22 and 20 (on map) is particularly good, especially lots of **Marbled White, Large Skipper, Chalkhill Blue** and a **Comma**. I reached the bend in the track where it turns toward the village and went over the stile onto the path running west above the lake. The first part was very close grazed and almost devoid of insects, but where it goes through the woodland edges there are really good rough pasture/scrub areas. Here were plenty of butterflies, especially **Brimstones, Chalkhill Blue**, and a blue looking like the Common with solid white fringes, but with colour of the Adonis. This could be **Turquoise Blue** but I couldn’t get a photo. The micro-moth cf. **Pyrausta aurata**, and another **Swallowtail**. After a rest and snack, a **Small White** and another **Hairstreak**. I followed the path into the woods, with **Pearly Heath**, masses of **Marbled White** and third **White Admiral**. I had mistaken the “intermittent river” symbol near the end of the path for another path, but it wasn’t, so I “jungle-bashed” my way down to the lakeside. There was more superb limestone grass/scrub at the bottom at Bljava. A **Burnet Moth**, didn’t land! Mid-afternoon, another rest, sitting enjoying the smell of crushed **Wild Thyme**. Then east along the lakeside path towards the village, seeing **Holly Blue** and **Painted Lady**. I walked for a while with a chatty
lady with a toddler in a pushchair. She insisted on unfolding my map to show me marvellous walks miles away; her enthusiasm was gratifying!! After a rest by the car park at the end of the lake, I was back at the chalet by five.

[12.5km walk, c.7.5hrs, 120m climb]

Saturday 19th. My intention was to try and get to Rjava Skala, the top of the cable car, and then decide how to get down! From the chalet, I went through the village, then left opposite the bridge. As I passed the big hotel, a large buff-coloured moth, struggling skywards, was snatched out of the air by a passing bird! The route led up to steep mountain forests, mainly high Beech, with occasional conifers, very serene but generally lacking in butterflies. At Zagradec I had a small detour where I hadn’t spotted the red dot on a tree indicating the route, then passed a building composed of bee-hives, busy! Then came the steep zigzag section. The path was in good condition but rather too steep for my liking in some places. At 11.30 I got to the “T” shaped section of big track above Repkovca. As with all these tracks the verges provided really good butterfly habitats. I was finding the climb too exhausting, so at a crossroads with the big track on the 1100m contour I decided to return via the zigzagged track/ski runs. This turned out to be an excellent choice and had lunch on a good stump in the woods. At Stareč Raven, a clearing with a building and what looked like a tree-house, were a Red Admiral and a Painted Lady, and I got a photo of Arran Brown with a High Brown Fritillary. I reached Bukovska Dolina by two o’clock. Here were Oak Eggars, and a Large Wall. I had a half hour’s rest and butterflying at a track corner, with a superb smell from some large-leaved plants. Like a lot of the corners, there was a big flattish area full of goodies including some cf. Heath Fritillary. Further down this section I saw a summer brood Map, like a miniature White Admiral. The Whites were generally much too nervous and reluctant to settle, but I did get a good look at one, a Green Veined White, summer brood, or a male Mountain Green Veined White, in which the underside greening of the veins didn’t reach the outer part of the wing. Unfortunately, it flew off before I could attempt a photo. Later on, another Comma, and I actually collided with a Scarlet Tiger!
Later, at 4.25, near Mala Raven, a couple in a passing car stopped and offered me a lift, which I gratefully accepted! After a ten-minute drive, they dropped me off at the shops. [7hrs walk, c.9km, 570m climb].

When I got back to the chalet the rest of the party had returned from their koča trek, full of the woes of nasty snowfields, ankle injuries, aches and pains, and worst of all, failure to reach the summit of Triglav, the main peak of this region.

**Sunday 20th.** A short walk in the morning, along the road south of the lake nearly as far as Naklova Glava and back. Three **Swallowtails**, occasional **Blue Damselflies**, a **Small White** and a **Pearly Heath**. On the way back I spoke to a Danish lady who had been trying to photo one of the Swallowtails. [c.4.5km walk, no climb]

Lunch out. I was late, having been on the walk! That afternoon I had a rest and looked up European butterflies online.

**Monday 21st.** This was a damp day so I took just a couple of short walks nearby. In the afternoon, we visited Slap Savica, the spectacular waterfall at the top of the valley.

**Tuesday 22nd.** I intended to have a quiet strolling day, keeping low altitude. From the chalet, I went along the road to Stara Fužina. I looked at a place on the road west from the village where there is a level area with a playground (“Nature point 21” on the map). Took a photo looking back down at Ribčev Las. The west and north sides of this site had good butterfly banks. It was cloudy, but still very hot, so it was mostly kicked-up **Meadow Browns** which were obvious. The sun started shining hazily as I moved on. At the corner with the stile I carried on up the hill, then diverted down to a short section of path which connects through to Hudičev Most. The first section of this path, before it enters the wood, is a really good spot. I photo’d **Chalkhill Blue** and the dark **Marbled White**. Elevenses by the bridge, then east along the track to the road. Saw an **Erebia** with no white markings on the underside, a **Red Admiral**, and took a photo of **Woodland Brown**, the only one I saw the whole week. After Sv. Pavel church I took the footpath towards Studor. This whole path is another superb woodland edge habitat for butterflies, with nice meadows at the Studor end. It clouded over for most of the way, brightening up towards the village. **Essex Skipper** confirmed at a
clearing near a barn at the eastern end. Had lunch, sitting on a row of limestone rocks in front of an old digger at the beginning of the tarmac section. The sun came out. A Burnet Companion and Swallowtail on a good rough meadow area above the road just at the edge of the village. I reached the village centre at 12.30 by the old house museum. After a false turn, found the road NE and took the zigzag track going north then west to Preval and further north. I thought I’d explore a couple of bends of this to finish before heading back. It was intermittent hazy sun and clouds now. Through gaps in the woods cooler air poured down from above, most refreshing! One section along here lacked any fence or barrier! It was on a fully built-up section of track about 10m long. From below it is visible amongst several avalanche/rockfall barriers. Several Speckled Woods here. I got to the second bend, above Srednja Vas, and had lunch and a rest on an amazing viewing platform, with bench, hanging over the precipice. An Oak Eggar dashed past, as they do! Spent about twenty minutes on a fairly level piece of meadow I had noticed on the way up. It was now sunny and butterflies were out. First confirmable Large White, male, and photos of very darkly marked Chalkhill Blue. I saw what looked like a Fritillary with no spots, a Scarce Copper. My attempt at a photo only shows it blasting off into the distance. Back in Studor, I met a British couple with super-duper cameras who had also got photos of Scarce Copper, up in the Voja valley. The yellow path was sunnier on the way back. At the end of the path I had a snack and rest at the picnic table under the tree by the church. Returned along the main road through Stara Fužina and reached the chalet at 4.30.

[12km walk, 7hrs, 150m climb, in 2 sections.]

Wednesday 23rd. For the return journey, the flight was at 10.45a.m. from Ljubljana to Stanstead. I was met by the guest house host, collected the car and returned home by 8.30p.m.

This trip was a wonderful return to my holiday experiences of nearly fifty years previously, when I had collected butterflies in this and a few other parts of Europe. It inspired me to get a better camera and the latest European butterfly guide!
County Butterfly and Moth Recorders
Send records by e-mail to the appropriate recorders’ e-mail below.
To check which Vice County (VC) you’re in go to [herbariaunited.org/gridrefVC/](herbariaunited.org/gridrefVC/)
Find more at [butterfly-conservation.org/110/recording-and-monitoring.html](butterfly-conservation.org/110/recording-and-monitoring.html)
See records of N. Wales butterflies and moths at [trawsgoed.com/NWLeps.aspx](trawsgoed.com/NWLeps.aspx)

**Butterfly Recorders**

*Montgomeryshire VC47*
Douglas Boyes  [douglasboyes@gmail.com](mailto:douglasboyes@gmail.com)
Bridge Cottage, Middletown, Welshpool, Powys, SY21 8DG.  **01938 570418**

*Merionethshire VC48, Caernarvonshire VC49 and Anglesey VC52*
Andrew Graham  [angrhm@globalnet.co.uk](mailto:angrhm@globalnet.co.uk)
Trawscoed, Llanuwchllyn, Bala, Gwynedd LL23 7TD.  **01678 540370**

*Denbighshire VC50 and Flintshire VC51*
David Hinde  [butterflyrecorder13@gmail.com](mailto:butterflyrecorder13@gmail.com)
28 Fender Way, Pensby, Wirral CH61 9NR.  **0151 648 3887**

**Moth Recorders**

*Montgomeryshire VC47 (All species)*
Peter Williams  [peterwilliams526@btinternet.com](mailto:peterwilliams526@btinternet.com)
"Pandy", Commins Coch, Machynlleth, Powys SY20 8LG.  **01650 511583**

*Merionethshire VC48 (All species)*
Andrew Graham  [angrhm@globalnet.co.uk](mailto:angrhm@globalnet.co.uk)
Trawscoed, Llanuwchllyn, Bala, Gwynedd LL23 7TD.  **01678 540370**

*Caernarvonshire VC49 (All species)*
Julian Thompson  [julian.pensychnant@btinternet.com](mailto:julian.pensychnant@btinternet.com)
Pensychnant, Sychnant Pass, Conwy, LL32 8BJ.  **01492 592595**

*Denbighshire VC50 and Flintshire VC51 (Macro-moths)*
Justin Williams  [northwalesmoths@hotmail.co.uk](mailto:northwalesmoths@hotmail.co.uk)
The Old Orchard, Sunnyridge Ave, Marford, Wrexham LL12 8TE.  **01978 851381**

*Denbighshire VC50 (Micro-moths)*
Bryan Formstone  [bryanformstone@dsl.pipex.com](mailto:bryanformstone@dsl.pipex.com)
15 Beech Avenue, Gresford, Wrexham LL12 8EL.  **01978 855174**

*Flintshire VC51 (Micro-moths)*
Helen Bantock  [hbantock@yahoo.co.uk](mailto:hbantock@yahoo.co.uk)
101 Crouch Hill, London, N8 9RD

*Anglesey VC52 (All species)*
Charles Aron  [aronmycology@aol.com](mailto:aronmycology@aol.com)
4, Refail Fields, Pentraeth, Anglesey, LL75 8YF.  **01248 450129 / 07766613417**
North Wales Branch

You can find the North Wales Branch web page here butterfly-conservation.org/304/north-wales-branch.html

Visit the site to find out about your local branch and to……

• learn more about our North Wales reserve at Eyarth Rocks
• view previous branch newsletters
• discover recommended places for seeing butterflies
• read the latest news from Butterfly Conservation

And - if you have any questions to ask or information to pass on - use the contact option there.

Another way to contact the branch and other members, is through our Facebook group at…
www.facebook.com/groups/277847912412601/

The Facebook group is a good place to -

• post your sightings of butterflies and moths
• ask for help with species identification
• keep up-to-date with your local events
• share interesting Lepidoptera-related news

Many thanks to everyone who has contributed to this newsletter.

If you, too, would like to see your article in print, the next newsletter deadline will be 28th February 2019. I look forward to hearing from you with your contribution!

Mark Sheridan