ISSUE 64 | AUTUMN 2018

Cornwall Butterfly Observer



MINING FOR BUTTERFLIES

This exciting new project kicked off in the summer, and is already producing great results. Find out more on page 10

VOLUNTEER WITH CBC

Our achievements as a branch rest on the commitment of our amazing volunteers. It's not all hard work - there's lots of laughter and good company, too! Find out more on page 19, and from some of our volunteers on pages 8, 21 and 27

RECORDING

Our County Recorders explain how our butterflies (page 12) and moths (page 14) have been faring this year

Butterfly Conservation
Saving butterflies, moths and our environment
50th Anniversary

Cornwall Branch
www.cornwall-butterfly-conservation.org.uk

Photos:

Front cover: Silver-studded Blue (Cerin Poland)
Back cover: Painted Lady (Philip Hambly)
This page: Background - field trip to Crowdy Reservoir; lower - two conservation groups (grazing ponies and CBC field trippers) on Bodmin Moor (both photos by Tristram Besterman)



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Chairman's report

Hello all. Well - what a summer! Although proving difficult for our farming community, we could not have asked for more for our Lepidoptera. Certainly, here at Lethytep I have seen far more butterflies than for many years. The Big Butterfly Count figures may well be announced before you receive this newsletter, but with over 90,000 records sent in, the results will undoubtedly prove very interesting. I am also anticipating some great results for the rarer species that we have in Cornwall. You will find more detail of our local butterfly and moth records from page 12 onwards.



Small Skipper at Lethytep (photo: Philip Hambly)

Our membership continues to grow, undoubtedly due to the wonderful work of our committee and volunteers, and I hope you will all have enjoyed some of the events that been provided for you during the summer months. Please encourage your family and friends to join Butterfly Conservation [Cornwall Branch] - we have our eyes firmly focussed on 1000 members in the very near future! There are sometimes special offers available for prospective members - please contact Kathy Wood via mail to membership@cornwall-butterfly-conservation.org.uk if you or any friends are interested.

We are embarking on a very special new project shortly: to update, revise and print a spiffing new version of the *Cornwall Butterfly Atlas*. This is likely to take some considerable time to produce, so don't expect anything for a while yet, but be assured it will be well worth waiting for! We will keep you informed of our progress (and find out more on page 11).

Our committee members, group leaders and field trip managers are frequently asked by volunteers and newer members how and where they should record their Lepidoptera and other relevant sightings. The leading destination for Lepidoptera sightings in Cornwall is through the ERICA database, an online resource established in 1987 currently holding nearly 4 million records. CBC has produced guidance for recording, which can be accessed at http://www.cornwall-butterfly-conservation.org.uk/recording.html

In this edition you will find an account of the experiences of some new neighbours of mine who joined CBC just a few months ago. If you have any suitable stories which you think might be of interest to our membership, please do forward them to me, or any committee member. Around 500/600 words would be ideal. We cannot guarantee to include contributions in a particular edition, but we will do our best. It need not be specifically about butterflies - just of interest!

As I write this in early September, the weather remains calm and mild and there are still a good number of butterflies around. I saw a Brimstone today and a couple of really fresh Small Coppers, the usual Large Whites, and a tired Speckled Wood, all when riding on my lawnmower! And I was entertained most handsomely by a family of three kingfishers on the lake. They were quite oblivious to the lawnmower, which was making a huge racket, and enabled me to pass within a few yards of them! They were too preoccupied fishing for small rudd and showing off to the dozens of swallows circling the lake, which were having a drink in preparation for their marathon journey any day soon. Mother Nature at her very best!



One of the Lethytep Kingfishers patiently waits (photo: Philip Hambly)

With best wishes to you all

Philip Hambly
CBC Chairman

Fifty years of Butterfly Conservation

Membership Secretary Kathy Wood considers how Butterfly Conservation has moved on since its 25th anniversary year in 1993

This year, 2018, is the 50th anniversary of the foundation of Butterfly Conservation, a good time to reflect on the past, how BC has changed, what has been achieved so far and where we should go from here. Cleverer people than I have been doing this regarding the conservation of Lepidoptera, but there is also some interesting social history.

I recently discovered a 1993 newspaper cutting, kept by my mother and hitherto unknown to me, about the 25th anniversary of BC, described as "the fastest-growing wildlife charity in Britain", with information about the most threatened species and what was being done to help them. Covering almost a whole page in a weekend broadsheet, it promised that over the coming weeks there would be more articles telling readers how they could help, starting the following week with "advice on creating a butterfly-friendly garden". Details were also given of how to join, ("write to…." - no website or direct debit in those days!). What wonderful publicity, and how we would love to see something similar.



CBC members enjoying the view on a field trip to Penlee Point (photo: Tristram Besterman)

Membership nationally had rocketed from 3,500 in 1990 to 10,000 in 1993. Now there are over 34,000 members, and the rate of growth is inevitably much slower, at around 10-11% a year. However, it has been over 19% in Cornwall Branch at the last two November counts, and as at 17th August our membership comprises 536 households, and 760 individual members. Back in 1993, members who wanted to get involved locally paid an extra £3.50, in addition to £10 annual subscription to the national organisation, for optional membership of their local Branch. Now members automatically become members of their local Branch, and can pay £6 a year for membership

of extra ones. We have fifty members not resident in Cornwall and the Isles of Scilly, including one who lives abroad, who have chosen to join us because of a special interest in Cornwall, often as a holiday destination. They, their records and their £6s are very welcome. Also we do not now expect prospective volunteers to become members before they start work, though most of them do join once they see what useful work the volunteers do and how much fun it is.

There was no mention of moths. Perhaps they were still regarded as pests by a public who knew nothing about pollination or food for bats and nestlings, but all about what would happen to your Sunday suit if you put it away without mothballs (wrongly blaming all moth species for this sin).

When Butterfly Conservation began in 1968 the initial aim was “to conserve all species for as many people in the UK to see and enjoy as possible”. That was great at the time, but the idea that butterflies are simply there for our enjoyment sounds very dated now, when we have realised that it's not about us. The updated aim, "Saving butterflies, moths and our environment" suits the Butterfly Conservation of the 21st century much better.

There are still many potential members who have never heard of Butterfly Conservation. Please do what you can to tell them about the work it does and encourage them to join.



A Silver-washed Fritillary, with its fellow nectar-seekers - a Brimstone and a Honey Bee - visited Jim Cooper’s garden to feast on Buddleia (photo: Jim Cooper)

New encounters

Liz Thomas tells us how she and her husband Andrew, neighbours of our Chairman Philip Hambly, have enjoyed their first year of butterfly volunteering adventures in Cornwall

Andrew and I retired from city life last year and settled in Cornwall to start a long anticipated life in the countryside. We have watched birds for many years, but more recently developed an interest in butterflies. We had regular trips to local sites in the South East searching for rarities but enjoying any butterflies we saw.

It was not long after our arrival to Cornwall that our neighbour Philip Hambly dropped in. Never one to miss an opportunity, he introduced us to the world of wildflower meadows and, more specifically, butterfly conservation. We wanted to be more active in our natural world interests so jumped at the chance to help. We joined Cornwall Butterfly Conservation (CBC). The welcome pack and website were excellent, full of useful information.

It was not long before we volunteered to help in a project clearing scrub land in a nearby quarry. The aim was to increase the numbers of the rare Pearl-bordered and Small Pearl-bordered Fritillaries. Armed with enthusiasm, wellies and a packed lunch we joined the volunteers on a remarkably sunny morning in March at the De Lank Quarry near Bodmin. The site itself was something to behold. The entrance to the quarry was dramatic: sheer walls of granite flank the road looking like some Egyptian archaeological wonder. The CBC's volunteer coordinator, Jo Poland, welcomed the team of 16 or so volunteers and ran through the health and safety procedures. We donned our 'high vis' jackets and, armed with saws and loppers, were led to an overgrown track where we were to spend the next few hours.

"We wanted to be more active in our natural world interests, so jumped at the chance to help"

The team of volunteers were a friendly bunch who worked enthusiastically sharing their experiences and demonstrating their commitment to conservation work. We spent the day cutting back brambles and branches opening up a grassy ride so that the small violet plants, food for the fritillary caterpillars, had space to grow and flourish. We enjoyed this day so much that we joined the team a couple of months later to complete the track clearance.

The next venture we embarked on was to set up a butterfly transect in order to record our local butterfly numbers. This entailed the two of us walking a set route once a week from April to September, one counting the different species seen, the other scribbling them down. It has not only been fascinating to observe the monthly variations in numbers and types of butterflies, but it is also an important part of conservation work nationally.

In April we attended the CBC annual general meeting. This event was much more than a committee meeting. There were speakers giving information on work carried out by members in Cornwall, including results of butterfly counts from the previous year, and other reflections and experiences. It was good to meet people, and they served great pasties, cream teas and cakes!

We also volunteered at the CBC Golden Open day which was a wonderful event celebrating wildflower meadows and their benefits for wildlife.

We have found our experiences with the CBC enlightening, enjoyable and fulfilling. We have met some great people and would recommend involvement and volunteering to anyone.



Volunteers hard at work at De Lank Quarry in February 2018 (photo: Malcolm Pinch)

Mining for butterflies

Read on to find out more about this exciting new project

With your help, Mining for Butterflies got off to a great start this summer, with 18 volunteers visiting 33 mining sites and recording 26 species and 1,361 butterflies. This included sightings of six UK priority species: Dingy Skipper, Silver-studded Blue, Small Pearl-bordered Fritillary, Wall, Small Heath and Grayling. This was a fantastic achievement, and we hope you can continue recording butterflies and day-flying moths on the mining sites in your area over the next two years.



The Mining For Butterflies project got underway earlier this year after we were successful in securing generous grants from the Postcode Local Trust and World Heritage Sites. This project is one we have been trying to move forward since initial work in 2015, and an exciting three-year work programme surveying former metalliferous mining sites in Cornwall is gathering pace. Our principal aim is to record butterflies and day-flying moths through the flight season for at least three years with special attention to the UK priority butterfly species. With the help of Natural England, the National Trust and Cornwall Council we have identified a number of sites in the Redruth – Camborne – Gwennap area where butterfly distributions are not well understood and where we are focusing our efforts. The longer term aims include identifying and expediting conservation opportunities on these sites in conjunction with the relevant owners and stakeholders, long-term monitoring of the lepidoptera and giving educational talks to local community groups.

The grant from the World Heritage Site also enabled us to continue to fund our Volunteer Coordinator, Jo Poland, who has been able to visit a number of new mining sites this year. Although we have had groups of volunteers monitoring some of the

sites, we wanted to increase the number of sites visited, particularly from May to September. We therefore emailed our members for help in recording and had a fantastic response with 40 members agreeing to visit the newly assessed sites or other mining sites near to where they live. Thank you!

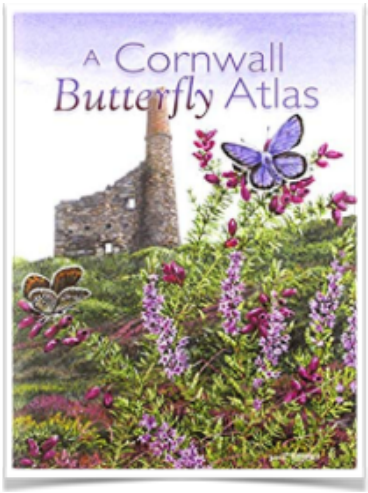
A report will be available later in the year but the good news is that with additional funding from the Postcode Local Trust we can move into the next phase of the project. With the help of a local ecologist, Sarah Board, we are now assessing 20 additional sites in the targeted area. It is a huge task as many of the sites are remote and scattered with differing habitats and biodiversity. Your help will be needed in monitoring these new locations.

If you would like to know more or get involved in Mining for Butterflies please contact Sue Allen at susanallen1953@yahoo.co.uk. As usual your records should be sent on the relevant form or by email to the County Recorder Dick Goodere at gooderes@talktalk.net

Butterfly Atlas for Cornwall

Good news about funding for an updated Cornwall Butterfly Atlas

Part of the funding we received earlier this year is to help compile and publish an updated Atlas of Cornwall's Butterflies, and so all of your county records are valuable to us. Our target is to have the new book ready to publish in 2020 and will incorporate all of the Mining for Butterfly records that we manage to gather. If you would like to join a small team to help move this forward, we will be pleased to hear from you: please contact Jerry Dennis at jerrypdennis@aol.com for more information.



The original (and excellent) Cornwall Butterfly Atlas, is written by John Wacher, John Worth, and Adrian Spalding, and was published in 2003

Recording

Read on for updates on butterfly and moth records and surveying

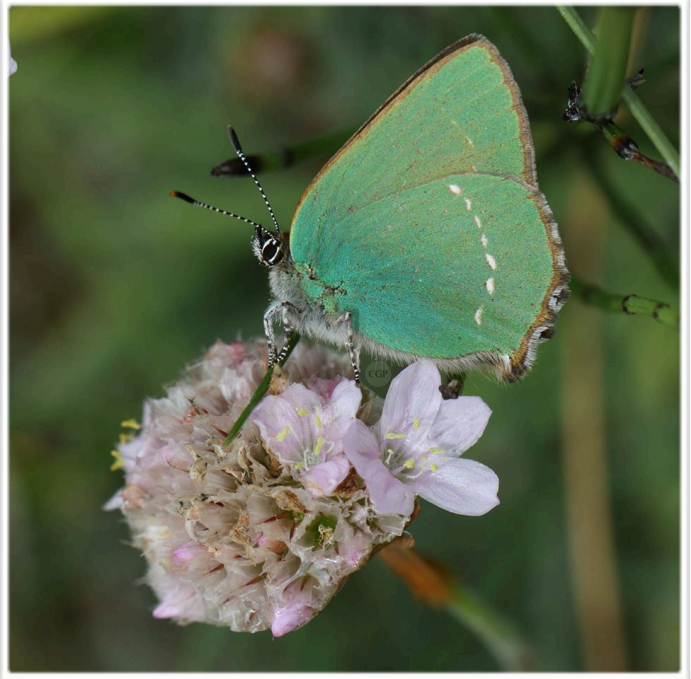
Butterfly annual report 2018

Dick Goodere, County Butterfly Recorder, reports on 2017

Since my last annual report, more records have come in to add to my 2016 total, but the numbers are nevertheless nearly 1,700 lower than in 2017. Despite this, butterfly numbers are down by over 3,000 on the previous year. In several instances, the number of records for a particular species have stayed almost the same but abundance is definitely down. However, the biggest contributor to this drop in numbers must be laid at the door of the Silver-studded Blue whose numbers amounted to 9,435 in 2016 and only 4,635 in 2017. This has been quite a blow, as we have been heralding the Silver-studded Blue as one of Cornwall's biggest success stories.

The butterfly seen in most numbers in 2017 was the Meadow Brown, of which 11,719 were counted.

Records come from a variety of sources, including local individual recorders and transects. Other records come via Butterfly Conservation HQ and include: the Big Butterfly Count, Garden Survey, the Wider Countryside Scheme, ibutterfly apps and Migrant Watch. Records from BTO have not been received for the last two years but I am more hopeful in 2018, following discussion with BTO Cornwall.



The Green Hairstreak is one of the butterflies of which numbers have remained stable in Cornwall (photo: Cerin Poland)

For the second year running, I have compiled a "Winners and Losers" list comparing the butterflies which have increased or decreased from the previous year (see the end of this report for a ink to the full data). Yearly figures do not tell us a great deal as we need to incorporate bigger time scales to really see what is happening to the various species, but it is nonetheless interesting to look at what is happening from year to year and to try and make sense of sometimes quite significant ups and downs, which can perhaps be matched with the weather patterns, or the lack of recorders in particular areas, but often have no apparent explanation.

The national picture, as compiled by the UK Butterfly Monitoring Scheme, also reflect concerns regarding the Grizzled Skipper, which has declined by 24%, and the Grayling by 27% compared with the previous year. There was also concern nationally about the Wall, but this species appears to have held its own in Cornwall in 2017.

Threatened and scarce species

I now want to give a brief recap of what is happening to our rarer butterflies. The two butterflies that are the focus of the All the Moor Butterflies project, the Marsh Fritillary and Pearl-bordered Fritillary, are of particular interest. The project, which is now in its second year, illustrates how both targeted conservation work and survey work on Bodmin Moor have had a real impact on both records and numbers and there is really good news that five new sites have been discovered.

Unfortunately we have had very few records of Marsh Fritillary from The Lizard this year so numbers over Cornwall as a whole could have been even higher if more of these had been submitted. Discussions are taking place with Natural England for both habitat management advice and survey work with our volunteers later this year on The Lizard and hopefully some funding maybe forthcoming.

Natural England recently obtained a licence to reintroduce Marsh Fritillary on a section of Goss Moor. Potted Devils-bit Scabious plants were placed on Hayle Kimbro on The Lizard where they were used by the resident Marsh Fritillaries to lay their eggs, and then the pots were transferred to Goss Moor last September. CBC has expressed reservations about these introductions and we continue to have concerns about the lack of monitoring of the donor site in order to ascertain whether the removal of eggs has affected the population of Marsh Fritillary there.

I hope that 2018 brings a return to the huge Silver-studded Blue numbers of 2016. They were down last year on my own transect. They did emerge a few weeks earlier and the weather could have affected the numbers, but it is possible that scrub

clearance which included privet on Upton Towans has been a significant factor. However, the numbers of Silver-studded Blue were also down on Penhale Sands, although there was significant under-recording there this year which may also have contributed. Other butterflies which are also resident on Penhale include Brown Argus, Dingy Skipper and Grizzled Skipper, which all declined dramatically in terms of records and numbers. I am hoping that we will get more records from this area this coming year.

The good news for the Grizzled Skipper is that CBC member Cerin Poland is now CBC species champion for this butterfly and, with a special ID Workshop organised at the end of May, I am certain we should see a big improvement in recording and numbers in 2018, especially in the Penhale area.
Although the declines may be less dramatic, the long term picture for most of our UKBAP species is very worrying with a decline in abundance, for example, of the Small Heath and Grayling in recent years.

There were no unusual butterflies to report this year with the exception of the White-letter Hairstreak, which was recorded in the St Germans area in July. This now means that three of these have been seen in the last three years, which must indicate that this elusive butterfly is still resident in Cornwall.

I would like to offer a big thanks to all of you who have provided records. There has been an impressive increase in the number of recorders. There were 676 in 2015, 706 in 2016 and 826 in 2017. These records are so important because we can begin to identify where there are concerns related to changes in numbers, records and distribution so we can focus on improving our conservation and monitoring work and also helping to contribute to the national picture. Please continue to send your records directly to me. All I need is Date, Species, Location, 6-figure Grid Reference and Numbers.

A full copy of the County Recorder's report, with data tables, is appended to the minutes of the 2018 CBC annual general meeting (http://www.cornwall-butterfly-conservation.org.uk/resources.html).

Moth report, autumn 2018

Leon Truscott, County Moth Recorder, brings us his latest report

So far, 2018 has been a relatively quiet year, with generally low numbers, especially of immigrant species. At the time of writing (early September), nearly all records received of the latter were of the regular migrants. However, there were still some very interesting records of our scarce and local residents, as well as some new county records.

On 8 May, Rob Davey found a tenanted leaf mine of *Eriocrania sangii*, a species new to Cornwall.



Ethmia dodecea (photo: Carol Hughes)

Another species new to Cornwall is *Ethmia dodecea*, which Carol Hughes (CH) trapped at Ruan Lanihorne on 5 July. *Teleiodes vulgella* is a common species in England and Wales, but scarce in the southwest. All ten Cornish records are from Torpoint, but at three different sites. One came to my own trap there on 19 June. A single *Parachronists albiceps* was trapped at Great Trethew on 21 July (John Nicholls), the third for Cornwall.



Cochylis molliculana (photo: Marilyn Edyvean)

On 7 June, John Cook (JC) recorded *Cochylis nana* at Fairy Cross, the sixth Cornish record. On 5 August, Marilyn Edyvean recorded *Cochylis molliculana* at Trevose Head. This is another new species to Cornwall, presumably part of a range expansion from southeast England. Another record from JC is *Celypha rosaceana*, trapped on 30 June in Newquay. This is only the sixth record for Cornwall; nearly all the others are also from the north coast.



Celypha rosaceana (photo: John Cook)

Bactra furfurana is a rather local moth in Cornwall, most records coming from the far west and The Lizard. Cerin Poland found and photographed one at Penhale Sands, a new site, on 20 August. *Ancylis myrtillana* came to my garden trap in Torpoint on 28 May. This is the second Cornish record following one at a different Torpoint garden in 2010. The fourth Cornish record of *Cydia coniferana* came to light at Cabilla Wood on 1 June (JC).

Agrotera nemoralis is a rare moth in Britain, breeding only in woodland in



Bactra furfurana (photo: Cerin Poland)

North Kent and here in Cornwall at the Mount Edgcumbe Estate, although Mount Edgcumbe has not been checked for it in the last couple of years. A single moth was found on a wall at home in Saltash on 2 June by Mark Hepton (photograph taken). *Cydalima perspectalis* (Box-tree Moth) originates from east Asia, but has now colonised much of Europe. It is now considered a major pest in some areas as it can defoliate whole Box hedges and trees. There was a single Cornish record in 2014, but 2018 produced a second, on 6 July at Newquay (JC).

The rare migrant *Catoptria verellus* came to Dave Gibbon's (DG) trap, and was photographed by Phil Boggis (PB), at the Friends of Kilminorth Wood moth night on 6 July. This was the first record for mainland Cornwall, the only previous Cornish record having been one on St Agnes, Scilly in 2014. A Small China-mark (*Cataclysta lemnata*) came to light and was photographed at Ruan Lanihorne by CH. It is still very scarce and local moth in Cornwall.Bilberry Pug (*Pasiphila debiliata*) is a nationally notable species and equally scarce and local in Cornwall. Three were recorded at the Kilminorth Wood event of 6 July, one at each of the three moth traps run – by PB, DG, and Pat and Tony James (P&TJ).

It was a very interesting year for the Scarce Merveille du Jour (*Moma alpium*), a nationally rare (RDB3) species. P&TJ recorded one on the 6 July night at Kilminorth Wood. Although Kilminorth is a known site, this is the first record there since 2011. Remarkably, it was also recorded twice at Philip Hambly's events at Lethytep, Penadlake. One came to light at Mary Atkinson's trap on 31 May, as did another at Jenny Evans's trap on 16 June. Lethytep is on Trebant Water, a tributary of the River Fowey, so these are our first records away from the Looe river valleys.



Catropia verellus (photo: Phil Boggis)

A Marsh Obllique-barred (*Hypenodes humidalis*) was trapped (and photographed) by Bob Dawson at Normandy, St Mary's, IOS on 10 July.

I believe this is the first authenticated record, not only for Scilly, but for Cornwall. Red Sword-grass (*Xylena vetusta*) is normally considered a migrant or wanderer in Cornwall, but two larvae were found during one of the moors surveys at Crowdy (Laura Fox) and photographed by Cerin Poland. I cannot trace any previously documented records of larvae in Cornwall.

Wider Countryside Butterfly Survey

WCBS Branch Champion Kelly Uren explains how the WCBS scheme works, and how you can help

The Wider Countryside Butterfly Survey was established in 2009 to improve data on the population status of butterflies across the countryside as a whole. It is an important monitoring tool as it tackles the observational bias introduced by only counting butterflies in habitats rich in Lepidoptera. Over 800 1 km squares have been randomly allocated across the UK which require monitoring by volunteers during the peak butterfly flight period. Butterflies are widely regarded as important environmental indicators and the WCBS generates high quality data on the population status of common and widespread butterflies. The data gathered feeds into the UK Butterfly Monitoring Scheme [UKBMS] which produces annual population trends for butterflies in the UK.

During the 2017 WCBS season a total of 86,032 butterflies of 46 species were counted. 18 habitat specialist species were seen along with 25 common and widespread species and 3 regular migrants. For the 8th consecutive year Meadow Brown was the most widespread butterfly, occupying 86.6% of squares.

What's involved?

A minimum of two visits at least 10 days apart, are required to each square between May and August and the number of butterflies are counted.

There are 25 WCBS squares located in Cornwall, but currently less than 50% of these are being monitored. Would you be able to help us improve these figures for 2019? The more data we can gather, the greater the picture we will have relating to butterfly abundance in our beautiful county.

If you live near one of our vacant squares (see page 18) perhaps you might be interested in helping us gather data.

WCBS squares "up for grabs"

Square	Location	Near to
SS2311	Stribb	Kilkhampton
SW6130	Carleen	Godolphin Cross, Helston
SW6727	Near Flambards	Helston
SW7224	Gear	St Martin, Helston
SW7725	Gillan Creek	Manaccan
SW7844	Threemiles tone	Truro
SW7956	Rejerrah	Cubert, Newquay
SW9358	Gaverigan Manor	St Dennis
SW9867	Higher Tregolls	Wadebridge
SX1382	Roughtor Farm	Crowdy Reservoir, Camelford
SX1673	Blacktor Downs	Colliford Lake, Bolventor
SX2683	Trenault	Trewen, Launceston
SX2760	Horningtop s	Menheniot Station, Liskeard
SX3486	Dutson	Lanstephan, Launceston

Please do contact Kelly Uren on ktherese@hotmail.co.uk for further details.

In brief

Of beavers, butterflies, and wise children...

Membership Secretary Kathy Wood reports that, after hearing an interesting talk by Cheryl Marriott (of Cornwall Wildlife Trust) about the recent beaver reintroduction, she told her grandson (aged seven years) about some of the fascinating facts she had learned. She says: "When I mentioned that beavers coppice trees away from the river, apparently to increase the amount of light reaching the soft, low-growing plants which are their summer food, his face lit up. 'That would help butterflies and moths, too, Granny!' If he can see the connection straight away for himself at the age of seven, we should be able to educate adults so they understand it, too".

Talking of trees...

Trees are good for some species of butterflies in their own right, of course, coppiced or not. You might be interested in this Woodland Trust scheme, providing free trees for planting to schools and local communities - details of how to apply are at https://www.woodlandtrust.org.uk/plant-trees/free-trees/.

Investing in our future

Jo Poland, CBC Volunteer Coordinator, reports on an exciting year for our volunteers

Last year, we asked our volunteers what they would like us to provide to help them further develop their Lepidoptera knowledge and skills, and they asked for more training. The Volunteer Coordinator Sub-committee put their heads together, and came up with a wonderful programme of training workshops for this year.

They began in May, with an "Ants and Blues" workshop at Gwithian Church Hall, under the expert tuition of ant expert Lorraine Munns, together with Dan Hoare, who is our Head of England Regions at Butterfly Conservation. This unique event was attended by 26 people, including colleagues from other partner conservation organisations, and Cormac. Everyone learned so much about the Silver-studded Blue butterfly and its incredible reliance upon certain ant species. The skills gained meant our volunteers have subsequently been able to locate Silver-studded Blue larvae by observing the activities of ants – no mean feat when you consider that these caterpillars are only 4 to 6mm in length!

Then, at the end of May, we offered a two-day Grizzled Skipper workshop based at Goonhavern Village Hall. We visited Penhale Sands on the first day, and then the nearby MOD land on day two. These are now thought to be the only two locations left in



A happy crowd of volunteers at the Silver-studded Blue workshop in May (photo: Jo Poland)

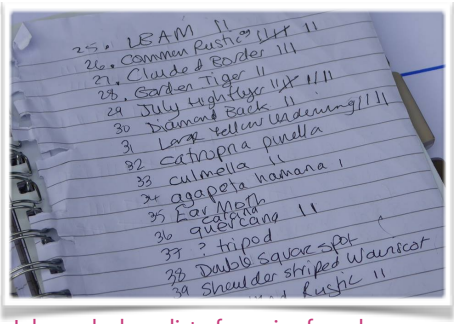
Cornwall for this beautiful little butterfly, a UKBAP species. We were wonderfully supported by Jon Cripps, the Penhale Dunes Ranger for Cornwall Wildlife Trust. Sixteen volunteers attended, and the Grizzled Skipper was found flying on both sites, with an exciting new area discovered on the MOD land! Volunteer and CBC species champion for the Grizzled Skipper, Cerin Poland, delivered a very professional and informative presentation on the butterfly, and we were proud that it was a volunteer-led course. Running it over two days really consolidated the learning, and great feedback was received from all those that attended.

In mid-July, we offered a two-day workshop for the Silver-studded Blue butterfly, again based at Goonhavern Village Hall and visiting Penhale Sands and the MOD site. Unfortunately, Jon Cripps was unable to join us this time, but we were trusted to go into the MOD site independently, observing strict Health and Safety rules as this area is still used by the military. CBC species champion for the Silver-studded Blue, Sally Foster, was unable to cover the first day and requested that another volunteer took her place. Cerin Poland stepped up to the mark again, and delivered another fantastic presentation that he had put together with Sally's approval. Fourteen volunteers attended on both days, and we were delighted that National Trust staff also joined us. The weather was amazing, the sites were stunning, and the students were all so enthusiastic in their learning. By the end of the second day, everyone could distinguish between a Common Blue, Silver-studded Blue and a Brown Argus! Another thing of note was that we had a high proportion of younger people on this course, including Tom Wilson, who completed his Duke of Edinburgh Silver Award hours by volunteering for us at many events this summer. We were also delighted that James Beaumont, a zoology graduate from University of Exeter, chose to write about his workshop experience in a blog, which is included at the end of this article.

"The enthusiasm and engagement of the group members was brilliant"

Finally, at the end of July we held a two-day moth event at the beautiful home of members near Truro. Again, this was a volunteer-led event, with Alison Norris playing a key organisational role and Shaun Poland providing the expertise for CBC volunteers who wanted to take their mothing further. Thirteen volunteers attended on the first night and received tuition from Shaun on techniques, and he led us all further into the wonderful world of moths answering many questions. Thirteen volunteers and 33 members of the public attended on the morning of the second day to see the traps





Learning for all ages at the moth event in July; and a long list of species found (photos: Malcolm Pinch)

opened. Approximately 80 species were identified from the two traps. Additionally, £86.71 was received in sales and donations....but the educational part was the priceless bit! Everyone who attended over the two days had such good things to say. This comment on our Facebook page from member of the public Richard Green (who attended with his family and young children) really says it all: "We all had a lovely morning - the enthusiasm and engagement of the group members was brilliant. Thanks to you all for a great event."

The investment in our volunteers continues to pay dividends, and we have been so pleased by the level of expertise they are achieving and most importantly sharing with other groups. We have been asked to run all of these events again next year, so watch this space. Learning together in this very collaborative way is helping to secure a brighter future for Lepidoptera in Cornwall.

Butterfly bonanza - and moths, too!

The "Bad Luck Birder" (aka James Beaumont) blogged about the July Silver-studded Blue workshop: read on to discover what he found out

I went on an AWESOME two-day course with Butterfly Conservation, learning all about the Silver-studded Blue Butterfly and its life cycle and habitats. The first day comprised learning about the butterfly itself, whilst the second day revolved around finding the butterfly and working on identification confidence.

The Lepidopteran lunacy began straight from the off, with Willow Beauty, Yellow Shell, Bee Moth and *Blastobasis adustella* in my moth trap in the morning, with Dingy Footman and my first ever Early Thorn on my walk to the train station. At the other end, Truro station yielded LOADS of moths, including a smart True Lover's Knot, whilst I waited for my lift to Goonhavern village hall.

The Silver-studded Blue is having a good year in Cornwall, thanks to the good weather here, and there's hope that there could be a second generation on the way if the weather stays this way! Females have been reported in previously unoccupied territories, which is causing entomologists to think that the hot weather is advancing the dispersal of the females, which can hopefully boost the numbers for next year. This species depends on a couple of species of ant who tend to the caterpillars in return for a sugary secretion, so when we were in the field, these ants gave us a clue as to the presence of "Silver-studs".

Day two saw us venture onto Ministry Of Defence land north of Penhale Sands, where there were butterflies EVERYWHERE! In total, we counted 18 species of butterfly, including plenty of Silver-Studded Blues. The male is a bright electric blue, whilst the females are brown on the top. The key differences between the Silver-studded and the Common Blue are the pale "studs" on the edge of the underwing on the Silver-Studded and an extra spot on the underside of the front wings on Common Blues.

These 18 species were complemented by a selection of day-flying moths including Silver Ys, Striped Wainscot, Six-Spotted Burnets, and Galium Carpet, as well as Emperor Dragonflies laying eggs, Ravens and a group of three Choughs to complete a wonderful two-day experience.

Thanks to Butterfly Conservation Cornwall, in particular Jo Poland for organising and ensuring everything ran smoothly.

James is a zoology graduate from University of Exeter, and is a keen birder and moth-er. Check out his blog at https://badluckbirder.wordpress.com/



Images from Cerin Poland's presentation, highlighting some of the identification features distinguishing the Silver-studded Blue, Brown Argus and Common Blue

"Citizen scientists": a thank-you

Dick Ashford, with Jonathan Jones and Jamie Burston, hunts for the White-letter Hairstreak, and finds out how it is faring in the wake of Dutch Elm Disease (*see the CBC website for a fully referenced version of the article*)

When searching for my last butterfly I turned to a citizen scientist. In doing so, I began to realise their importance. A network of them discovered the jet stream by recording the spread of the ash cloud from Krakatoa, as it circled the globe. Gregor Mendel, who founded the science of genetics, was a monk. Today, citizen scientists contribute in many areas, notably in astronomy and ornithology. And citizen scientists have been recording changes in our butterfly populations through the UK Butterfly Monitoring Scheme (UKBMS) for the last 40 years. Citizen scientists are all ages and come from all walks of life.

By the end of last year I had seen and photographed 58 of our 59 butterflies and was left with just the White-letter Hairstreak (WLH). In 2017, I made several unsuccessful attempts to see it. Some were hampered by bad weather and in others I was just looking in the wrong part of a large site. Local knowledge is essential and success more likely if visiting the site on a BC field trip where the leader will take you to the right place. So, although I was excited to hear that the WLH had been recorded in the county, it was the article in the newsletter by young citizen scientist Jamie Burston that caught my eye. Jamie is a young wildlife and portrait artist from Sussex, who has studied the butterfly in detail. His online article on the Sussex BC website is a detailed treatise on all aspects of the butterfly and its foodplant the Elm. Helpfully for me, there are tips on how and when to see the butterfly. But clearly the best bet was to contact him and hope he would agree to take me to it. So, following an introduction from Jo Poland, we made contact and agreed to meet at a BC outing in Sussex.

Unlike Patrick Barkham, who saw the WLH in a North London park, where the Elms were scarred by dogfights, and which he described as 'a psycholand', we were travelling to the genteel retirement town of Seaford on the south coast. I imagined rows of bungalows, shingly beaches and old people's homes. My friend Jonathan had joined me for the early start.

Meeting in a church car park, Jamie gave us a run-through of the WLH life cycle. The caterpillar feeds on Elm, so the butterfly has suffered badly in the aftermath of Dutch Elm Disease. The eggs are laid on the junction between old and new growth on the tree's sunny side. After overwintering, they hatch in

late February or March, producing characteristic holes in the leafbud tips. Mature caterpillars cause distinctive damage, leaving a diamond shape at the top of the leaf (see photo below).


WLH caterpillar leaf damage

They usually pupate in bark crevices, but have been documented pupating on English and Wych Elm leaves. On emergence, males fly around the treetops, squabbling over territory by characteristically spiralling upwards above the trees in dogfights. This distinguishes them from the Purple Hairstreak, which is on the wing at the same time, and tends to tumble around the tree in a more languid style. The female WLH is more elusive, only visiting the tree canopy when ready to mate. It is also a morning butterfly, which I had already found my cost, as we had started early, something I am less than keen on. Of course, I already knew that all the tree-flying Hairstreaks were fiendishly difficult to photograph, especially using a pocket camera with no viewfinder! However, as we headed out I felt confident that I would have no difficulty in getting that last elusive shot. We were soon pointing cameras and binoculars skyward at the tops of the Elms.

Jamie then turned to Dutch Elm Disease. The fungus *Ophiostoma novo-ulmi* is carried by the adult Elm Bark Beetle. They pick up fungal spores on their body as they emerge from an infected tree. Females also collect spores when laying eggs in an infected tree: they can lay many thousands of eggs in galleries beneath the bark. Adult beetles also spread spores by seeking out healthy Elm on which to feed, causing open wounds from feeding damage in the crotch of branches. In this way, the beetle introduces fungal spores into the tree's xylem (the tree's circulation). The fungus then spreads through the tree's circulation, slowly starving it. This produces the tell-tale leaf wilting and browning, and tree die-back. The rootstock, however, can survive and, even now, old affected Elms are producing new shoots. These survive for some years, as the characteristic fissured bark frequented by the beetles doesn't form until the sapling is about 10 years old. At this point it is re-infested and again dies back.

It was getting hot and we had had lots of treetop sightings, but I couldn't get my binoculars on it, let alone get a photo. Even Jonathan with his huge telephoto lens was having difficulty getting a decent shot, resulting in neck

ache and the need to lie down! So, although we had seen it, it was becoming clear that we weren't going to get a proper photograph on this outing. This was not good.



WLH feeding on thistle
(photo: Dick Ashford)

Although we weren't doing well, the WLH has done much better than expected since the arrival of Dutch Elm Disease. More mobile than previously realised, its treetop lifestyle has meant that large populations can remain undiscovered. Andrew Middleton and Liz Goodyear from Herts and Middlesex BC (more citizen scientists) have discovered many colonies in the Home Counties. Also, as English Elm was being wiped out, councils replaced it with disease-resistant varieties such as 'Sapporo Autumn Gold', on which the butterfly survives quite happily. We learned that Brighton has a relatively favourable climate for Elms, and holds the National Elm Collection with 124 different sub-types of Elm. "Where is this held?" I asked Jamie. His reply that the trees were on the streets and in the parks of Brighton was a surprise. Furthermore, since the first outbreak of the disease in 1971, East Sussex County Council has had a Dutch Elm Disease policy. More recently, it has formed the Elm Partnership, bringing together local interest groups, and is at the forefront of research into the most effective control measures. Any sightings of die-back can be reported to the council, who will send out their team to aerial prune and destroy infected branches, sometimes saving the tree. Infected trees are more attractive to the beetle than uninfected trees, owing to their lower water content. This has led to the idea of 'Priority Pruning' or the 'Tree-trap' approach. Here, selected infected trees are left to attract more beetles until just before the adults emerge in the spring. They are then destroyed. This looks to be lowering the beetle population, which will continue to be monitored. Much of the pressure for this work and the ongoing monitoring has come from citizen scientists in the form of the "Save the Elm" campaign. Indeed we now also have the "Great British Elm Search", with its own website. All this work maintains the health of the Elm stock of the town, which is an encouraging crossover between politics, civic pride and the environment.



Jonathan, Dick and Jamie at the end of a successful day

Luckily for us, the WLH will leave the safety of the tree-top to nectar. So, , we headed to Brighton. There Jamie kindly took us to another less well-known location, where the WLH comes down from the trees to nectar on a large patch of thistles. There were many fresh specimens, in profusion. As they gorged on nectar, we held our cameras within inches of them. Jamie pointed out their tails, like false antennae, which are more pronounced in the females. In common with several other hairstreaks, the WLH also has lines converging on the tails and small eyespots at their base creating an image of the head. The 'W' which gives it its name enhances this illusion. This 'false head' strategy is widely used (e.g. Swallowtails) to mislead or confuse predators. These and other ruses used by butterflies are beautifully described in Philip Howe's book "Seeing Butterflies".

Replete with photographs and then further repleted with coffee and cake, Jamie took us to another park to look at some of the more recent disease-resistant Elm plantings. These included the beautiful columnar *Ulmus* 'Columella'. After posing for selfies, we said farewell and headed sedately home.

On his website (https://jamieburstonart.wordpress.com/), Jamie sells a number of beautiful graphite/pencil reproductions of the WLH and gives a percentage of all his sales to the planting of disease-resistant Elms. This led me back to thinking about his continuing and generous contribution, and the ongoing contribution of our other citizen scientists. UKBMS is one of the largest citizen science projects in the world. By recording butterfly populations we can judge the health of the whole environment. We are beginning to see the impact of climate change on our butterfly populations, for example, in the northern spread of the Comma and the gradual disappearance of The Wall. We can only hope that as time goes by and the world's population hurtles toward 10 billion, our citizen scientists are not just the chroniclers of the planet's destruction.

Musings of a first-time "moth trapper"

Graham Price explains why he is now hooked on moth trapping

It all started last September where, as a relatively new CBC member, I helped at an event organised in the Luxulyan village hall. It was all quite jolly parading around with my butterfly head apparel! On the stall were some moths trapped the previous night by Alison, our CBC Secretary. On listening to her talk about them I had a sunshine moment, realising that I had no idea how amazing moths are. Yes, like most of the population I was guilty of thinking moths were those rather boring little things that many years ago my mother used to deter with moth balls. By the time I left Luxulyan, I was hooked.



Green Arches (photo: Graham Price)

The first step was to procure a book, and Paul Waring and Martin Townsend's Field Guide seemed the place to start. It didn't take much persuading for my unsuspecting wife to place it under the Christmas tree. Then, arriving a little late at the excellent CBC AGM at St Erme, I was seated at "THE MOTH TABLE", with, among others, Leon Truscott and John Nicholls.



Elephant Hawk-moth (photo: Graham Price)

I needed a moth trap, and one caught my eye on the Anglian Lepidoptera web site, endorsed by Jo Poland. Good enough for me, I thought. It arrived and was easily assembled. This was just prior to the next Lethytep Open Day which John

Nicholls had persuaded me (not very reluctantly!) to attend. I admired his moths and their amazing camouflage, and was particularly struck by the Elephant Hawk-moth. “When you do your first trap”, John said, “you will get one of those in your garden”.

Well, a few nights later I set up my brand new trap in our fairly small back garden, having re-read the email full of helpful tips that Alison had sent me. I wondered just what I would find at the crack of the following dawn. Well, to my delight I had about 30 individuals, with several Heart and Dart moths. And there it was - a beautiful Elephant Hawk-moth, just as John had predicted.

Needless to say it took me all day to identify about 20 moths. This is the fascinating part, of course, and I surprisingly quickly started to find my way round the field guide. My other first time particular favourite was a lovely and still very green Green Arches (identified for me by Leon).

Everyone is so helpful. I thank Alison particularly and John and Leon but for any would-be new Moth Trapper, I give you a stern warning

....**YOU WILL BE HOOKED!**

Flying frogs

Tristram Besterman on the joys of wildlife in his own garden

Every sensible young woman learns at an early age to be wary of kissing a frog, lest he turn into a prince, which could lead to no end of bother. Particularly in Cornwall, where princes and dukes seem to be interchangeable.

In our garden on the outskirts of Liskeard, a far more agreeable metamorphosis occurred this summer, when our frogs grew wings. Not quite literally, perhaps, but figuratively, certainly.



A pondful of frogs (photo: Tristram Besterman)

When we moved into our house in 2008, the half-acre of garden became a work in progress. Determined to make it as wildlife-friendly as possible, the first thing we did was to dig a pond. The next spring, we were rewarded by the sight – and sound – of frogs cavorting obligingly, clumps of spawn burgeoning across the

shallows within hours. Later that year, we discovered froglets by the score in the long grass close to the pond at the end of the garden, under the spreading branches of a large Silver Birch. For this reason, that grass, a mixture of Cock's Foot and Couch, has remained uncut ever since.

Fast forward ten years to July 2018. The far end of the garden was suddenly a-flutter with a multitude of dark brown wings. A mass hatching of Ringlet butterflies had just taken place and continued over the next couple of weeks. It was very hard to be precise about numbers, but with two of us comparing notes, we reckoned at its peak, there was a population of at least fifty. Very active in the hot, dry spell, they were constantly on the move, dipping down and out of the long grass in a skittery flight associated with egg-laying. We found a few 'in cop' – about the only time they paused for breath. Much later in the month, as numbers declined, most were basking on the leaves of our raspberry canes close by, where they were nectaring.

Inspired by this reward for leaving the grass alone, we left the rest of the 'lawn' uncut for the remainder of the summer, restricting our mowing to the edges of beds and a few passage-ways through. Cuckoo-flower (with Orange-tip larvae), Self-heal, Red Clover, Yellow Hawkbit and Yarrow have flowered and seeded. Who needs a boring, carefully tended monocultural lawn?!



Ringlets (photo: Tristram Besterman)

What was striking about the mass emergence of Ringlets was the reminder that if you do the right thing for one species – in this case, for frogs – nature will reward you in unexpected ways. Grass and especially Cocksfoot is a favourite foodplant of Ringlet caterpillars. As CBC chairman Philip Hambly is fond of observing, his way of farming Lethytep is not new: he is returning to time-honoured methods that most farmers have forgotten. His wildflower-rich meadows are both friendly to nature and produce the most nutritious fodder for stock.

The message is not new. The central theme of Aristophanes' play, *The Frogs*, written nearly 2,500 years ago, is "old ways good, new ways bad". Interfering as little as possible seems to suit us, too: when you look after nature it looks after you.

Finding Chalkhill Blues on…chalk hills!

Our regular butterfly tourist, Roger Hooper, headed to Hampshire for some surprises

I feel really lucky that I still have links with Hampshire, an area I left 40 years ago when I moved to Cornwall. I was born in Portsmouth, and my daughter, who was born in Cornwall, now lives there. Her house is on Portsdown Hill, which looms over the northern edge of the city, and is made of that stuff butterfly enthusiasts love….chalk.

Doing my research in advance before a recent visit, I found a website called *Alan Thornbury's Hampshire Butterflies*, which includes very detailed site directions. One was for the exquisite Chalkhill Blue, a species I had yet to see. Its location came as a bit of a shock as it was behind the last houses in a huge estate called Paulsgrove, a place I knew only too well from my time as a telephone engineer in the mid-1970s. Now, if there was a combination of things you would never dare do at that time, it would be to walk around on the slopes of the hill behind the Paulsgrove estate, looking for butterflies. It was a very dodgy place.

The last road on the estate before you enter a huge chalk quarry is called Lime Grove. Alan Thornbury's website said park here and walk up onto the open chalk grassland below the Royal Navy buildings. We used to go there, as telephone engineers, in twos, so that one of you could guard the van. Now I was going to park my nice car there and look at butterflies!

I can only say I was amazed at the changes. The houses looked really nice and everything was quiet and tranquil. As soon as I left the hawthorn scrub behind and walked onto the grass, Chalkhill Blues were all around me, with dozens upon dozens flying about a metre above the turf. They were mostly males and were plunging down on any female they saw. Some of the poor girls were colourless, the scales simply worn away by testosterone-charged males.

I met a chap there who turned out to be the warden of the site because, believe it or not, it is now a Portsmouth City Council Nature Reserve. What progress! Better still, lots of the scrub clearance and eradication of motorbikes and petty vandalism had been done by the now benign residents of the once scary Lime Grove. It now belongs to the Chalkhill Blues.

That big quarry I mentioned earlier has a huge chalk cliff at the back and is visible for miles away from the south. The Alan Thornbury website said it was a good spot for Small Blue and that tempted me over there. It was a strange feeling being in the quarry. I had seen it from a distance as a child, and now here I was in my early sixties standing in it for the first

time. There were some lovely bright Brimstones plus several Brown Argus but I hadn't found a Small Blue. I saw a man further along the foot of the quarry and could see he was watching the ground, as I was. I asked him if he had seen any Small Blues, but he said the ground vegetation wasn't right for them at the moment. I told him I was looking for them after reading advice on *Alan Thornbury's Hampshire Butterflies*. "Oh, I hope you enjoyed my website", he said. It turned out I hadn't found a Small Blue but I had found Alan Thornbury! He recommended going to the BC flagship reserve of Magdalen Hill Downs near Winchester and told me they were quite often seen in a tiny ancient chalk-pit on the reserve. That would be for another day as I had to leave to meet my daughter.



Roger also recommends Magdalen Hill Downs in Hampshire , where he took this wonderful picture of Chalkhill Blues (photo: Roger Hooper)

The next morning was hot and sunny and I was left kicking my heels while my daughter was out. I thought there must be some good butterflies about near her house given that it was on a huge hill made of chalk. Unfortunately, the City Council thought it would be nice to get rid of acres of natural downland flora and replace it with bland green lawns in lots of places for people to sit on and do nothing. However there were a few places close by where ponies were grazed and rough grassland still prevailed, so I took a walk further up the hill for a look. It was well worth the effort. There were lots of butterflies and all but two, a Meadow Brown and a Ringlet, were Marbled Whites. Immaculate big fresh ones too, that were nectaring on the very big knapweeds flowering in their purple glory. Quite a few people asked me what I was looking at and asked about the butterflies. More than one said they walked there for years but had never really looked at them but now saw just how pretty they were. It's sad that people never see what nature puts right in front of them.

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