ISSUE 69 SPRING 2021

Cornwall Butterfly Observer



SMALL PEARLS ARE IN THE AIR

Jerry Dennis tells us more about one of our loveliest spring butterflies (page 8)

BUTTERFLIES OF CORNWALL: ATLAS FOR THE TWENTY-FIRST CENTURY

Save the date for the public launch on Saturday, 26 June 2021…and don't forget to order your pre-publication copy (page 6)

FIELD TRIPS AND EVENTS 2021

We've prepared an exciting programme of field trips and events for 2021: hopefully they can go ahead this year (page 13)

Butterfly Conservation
Saving butterflies, moths and our environment

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

Photos:

Front cover: Common Blue (Cerin Poland)

Back cover: Small Heath (Cerin Poland)

This page: Crowdy Reservoir volunteer search day (Tristram Besterman)



Contents

What's in store for you in this edition of our newsletter?

Page

Chairman's report 4

Butterflies of Cornwall: Atlas for the Twenty-first Century 6

Free pocket guide leaflets
Find out how to get hold of some educational leaflets about the butterflies of Bodmin Moor 7

Small Pearls are in the air
Find out more about the Small Pearl-bordered Fritillary from Jerry Dennis 8

Membership news 12

Field trips and events 2021
Our programme of field trips for the coming year 13

Fun for all the family!

Butterflies and moths from around the world 18

Cornish Social Butterfly Quiz 19

Recording

Butterflies, 2020 20

Moths, spring 2021 22

Transects, 2020 26

Committee contacts 28

Chairman's report

You will not be surprised that I start my report by acknowledging the terrible impact that COVID 19 has had on our personal lives over the last 12 months and express hope that the future brings some relief for us all. The pandemic has also had consequences for many of CBC's key activities, such as field trips, conservation working parties, butterfly workshops, training and fundraising events. It has also had an impact on Butterfly Conservation's Head Office, which has sadly had to lose staff members because of funding issues.

Thankfully, due to our wonderful legion of recorders and our species champions, butterfly records continued to be submitted with enthusiasm as usual throughout 2020. What we really did miss, because of restrictions around the number of people meeting, was simply sharing the enjoyment of being out in the field and learning from each other as well as the other benefits which come from such social interactions. Our conservation work had to be halted and this will inevitably have consequences, particularly if restrictions continue. Our planned scrub clearance in areas such as De Lank Quarry to aid the Pearl-bordered Fritillary and the programme we wanted to put into action on mining sites all had to be abandoned.

However, at the time of writing this report, the amazing vaccination programme and the tentative road map out of the pandemic has given us all hope that some form of normality will return this summer. Our cautious optimism is reflected in the long list of field trips for 2021 which is to be found in this issue. Please check our website regularly to ensure that the planned trips are able to go ahead.

There is no doubt our biggest achievement in the last few years has been the updating of our very popular Cornwall Butterfly Atlas published at the beginning of this century. This new version has been re-named *Butterflies of Cornwall: Atlas for the Twenty-first Century*. It has involved a tremendous effort undertaken primarily on a voluntary basis by members of the Atlas Working Group over the past two years. On a personal level, it helped keep my wife, Maggie, and myself occupied and stimulated through lockdown. Sarah Board was appointed our endlessly patient and incredibly hard working scientific editor, and our dedicated editor-in-chief, Tristram Besterman, probably never dreamt how much this task would take over his life! I hope by now you will have all ordered a pre-publication copy, details of which are on our website. We look forward to the launch of the published document in June of this year at Lethytep, which all members are welcome to attend, subject of course to any COVID restrictions.

One of our most successful projects over the past six years has been led by Jo Poland, our Volunteer Coordinator, who has recruited and supported over 400 volunteers since 2014. Jo's enthusiasm and dedication to the cause has

been crucial to its success. Although Jo has decided to step down, the committee have agreed that this project must continue and we hope to be advertising for a new coordinator in the near future. However, Jo continues to be involved as the Volunteer Coordinator for the *Growing Goss Project*, which is managed by Natural England.

In September our Chairman, Philip Hambly, retired after 10 years at the helm. As Vice-chair I agreed to step in and act as Chair for a period of six months until I retire from the committee in April. There is no doubt Philip will be a very hard act to follow but I hope this will not deter people from coming forward. We would be delighted to receive any expression of interest from our legion of volunteers and members. We are also badly in need of a new Treasurer as Helen Barlow has recently left the Committee. I can guarantee that if you join us, you will have the support of a very hardworking, enthusiastic and dedicated group of people. In the meantime, Tristram Besterman and Jim Cooper will hold the fort by co-chairing the committee from April.

Finally, I would like to thank everyone for supporting us in the important work we are doing to save some of our most threatened Lepidoptera species and, 'fingers crossed', we will be able to start work together again this year.

Dick Goodere
Acting CBC Chairman



Hummingbird Hawk-moth, mid-Cornwall, summer 2020 (photo: Shaun Poland)

Butterflies of Cornwall: Atlas for the Twenty-first Century

Prepare for the publishing event of the year!

Tristram Besterman, Chair of the CBC Atlas Working Group, explains

Tucked in with this newsletter, you will have found the flyer describing *Butterflies of Cornwall: Atlas for the Twenty-first Century*. It gives you the opportunity to buy a copy of this landmark book at a discount before the launch date, so grab the chance to order your copy now and save £9 before the pre-publication offer expires on 16 May.

Butterflies of Cornwall is the product of sustained teamwork over more than two years. A great many people have made an indispensable contribution to the book: as recorders, authors, photographers, editors, advisers and as funders. If you are one of these, as you might well be, **thank you for your support**. And if you're not, then you can support us by ordering your pre-publication copy now. The details are on the flyer and on the Cornwall Butterfly Conservation website if you click on the 'Atlas' tab.



Two of the images that will appear in *Butterflies of Cornwall*. Bodmin Moor where Devil's-bit Scabious has helped to create a stronghold for the protected Marsh Fritillary butterfly. Photos by Tristram Besterman (landscape) and Cerin Poland (butterfly)

I'm delighted to say we're on schedule, having achieved our fundraising target of £10,000 and all the text and images have been sent to our publisher, Pisces Publications. This is something of a milestone and quite an achievement for a voluntary organisation.



Please save the date

One thing we have all had to learn from coronavirus is to live with uncertainty. That said, we hope nonetheless to celebrate the publication of *Butterflies of Cornwall* with a public launch on **Saturday, 26 June 2021**. We would love you to join us at **Lethytep, Penadlake, near Looe PL13 2PG** any time between 11am and 5pm, when Philip and Faith Hambly have kindly offered to host the book launch. Bring friends and family: the more the merrier (COVID-19 rules permitting). As well as meeting the team that produced the book, you'll have the run of Lethytep's wonderful wildlife meadows, woods and lakes.

Thank you. We look forward, fingers crossed, to seeing you there.

Tristram Besterman, Chair, CBC Atlas Working Group

Free pocket guide leaflets

The *All the Moor Butterflies Project* finished successfully in February 2020, just before the world changed. One of the outcomes of the project was the production of a range of interpretation materials to enable a greater understanding of the target butterfly and moth species and the locations where they could be found.

Thus, 10,000 beautiful and educational *Butterflies of Bodmin Moor Pocket Guide* leaflets were produced with the aim of being distributed in Cornwall to volunteers, partner organisations, wildlife groups, schools, accommodation providers and others. Unfortunately, along came COVID and we were unable to distribute them.

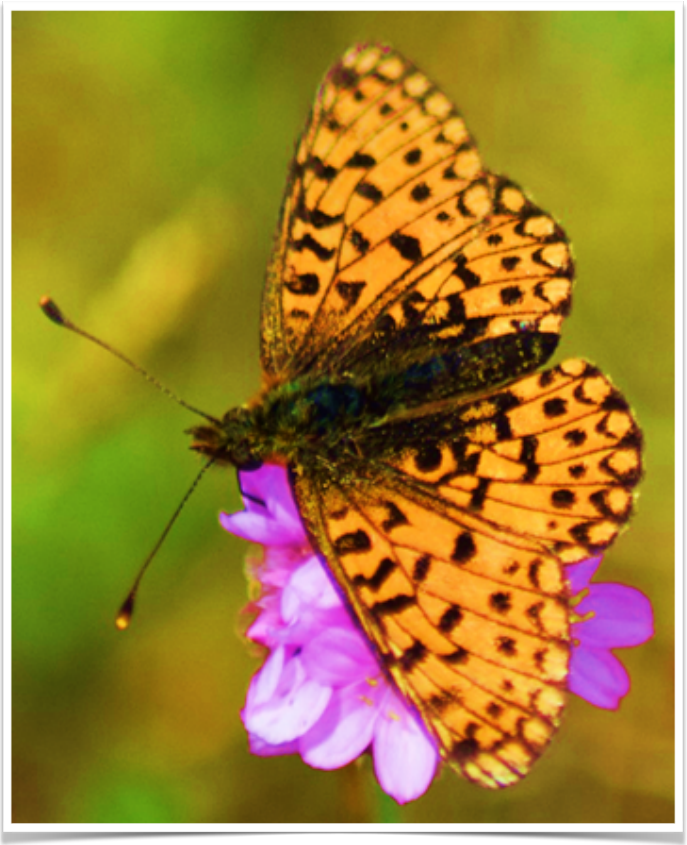
However, we are now in a position to be able to post them out and one of our wonderful volunteers, Sue Allen, has agreed to be the distribution point.

You can contact Sue by email: susanallen1953@yahoo.co.uk to place an order for a batch of leaflets.

The leaflet is also available to download from our website here: http://www.cornwall-butterfly-conservation.org.uk/BodminPocketGuide.pdf

Small Pearls are in the air

Jerry Dennis, CBC's Grayling and Small Pearl-bordered Fritillary Species Champion, tells us more about a lovely butterfly of spring



A male Small Pearl-bordered Fritillary in typical open wing pose on thrift (Photo: Jerry Dennis)

The Small Pearl-bordered Fritillary *Boloria selene*, or Small Pearl for short, is our commonest Cornish fritillary, both in terms of the number of butterflies recorded and the number of places it is seen. And what a delight it is to catch a first glimpse of the year on a sunny spring day. It lives in colonies in places where there are Common Dog-violets *Viola riviniana*, which is the principal larval foodplant and grows throughout Cornwall. Look for damp grassy areas with violets

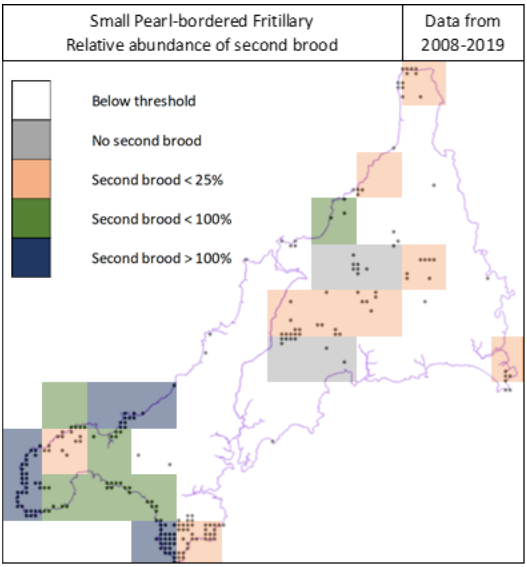


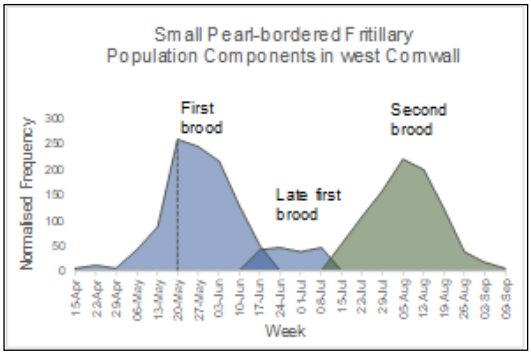
A female displaying the '730' forewing marking
(photo: Jerry Dennis)

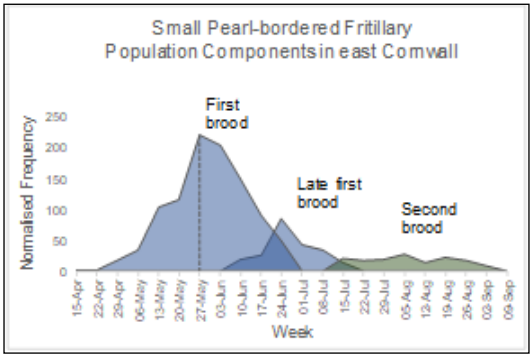
growing near bracken or gorse and you may be lucky enough to find one or more. A tip for identifying the butterfly and distinguishing it from other fritillary species is the '730' marking on the upper side of the left forewing. If you cannot remember such an unremarkable number, mentally add up the number of days in two years and hopefully the butterfly you have spotted will confirm the answer!

We are fortunate that the butterfly is holding its own here because, as a Section 41 species, it has declined nationally by 52% in the last 10 years due mainly to loss of habitat. It is well established in coastal places where grazing and salt air can keep scrub and grass in check to allow violets to grow, but is more vulnerable inland where changes in woodland management have unintentionally lost important glades and clearings. We have experienced a slight reduction in numbers recorded at our inland sites in central and eastern Cornwall in recent years, whereas records are increasing on our coastal sites.

The butterfly is bivoltine (producing two broods per year), with the first brood appearing late in April, peaking in mid to late May and then







extending into June. The partial second brood emergence begins early in July and continues to September, peaking in early August. This brood is quite variable in the county, as illustrated on the map.

The black dots show where the butterfly has been recorded since 2008. The relative abundance of the second brood is calculated as a percentage of the average size of the second brood divided by the size of the first brood in each hectad (10-km square). At inland sites, the second brood is relatively small or even non-existent. The second brood abundance is more significant along the Atlantic coast, where it is locally more than 25%, and in the extreme west and south of the county it is even higher: in several hectads it exceeds the size of the first brood.

The data collected over the last 12 years shows that inland and elevated sites have slightly later first broods and much smaller second broods. The average weekly distribution of the number of Small Pearl records (not sightings) between 2008 and 2019 shows a stark contrast between the west and the east of the county (see graphs to left).

Record numbers are normalised for display and comparative purposes. First brood distributions are quite

similar, but the eastern sites, dominated by inland records, peak a week later than the western sites. Second brood records are similarly timed but greatly reduced in the east compared to the west. There are some late first brood records that cross the first–second brood divide in some years, such as in 2013.

What is causing this variation? Distribution is consistent with a more exposed and cooler environment delaying the first brood by about a week at the elevated sites compared to the coastal locations. The larval offspring of the first brood choose either to mature and become part of the second brood or, alternatively, to remain in larval form until the following spring to become part of the next year's first brood. With more of the larvae in elevated areas arriving at this decision point later than at coastal sites, perhaps more of them naturally choose the long life in larval stage.

There is another factor, however, that may be significant. In elevated areas, the Common Dog-violet becomes less widespread and an alternative foodplant, the Marsh Violet *Viola palustris*, is present. The local climate may be controlling the distribution of violets and, in turn, their availability to support the second brood larvae. With potentially less food available, again more larvae may be genetically programmed to choose the long larval stage.

Depending on where you live, and what lockdown restrictions are in place, why not try and find some Small Pearls nearby. You will be greatly rewarded if you do. We would like to hear about when and where you saw the butterfly and also what species of violet, if any, were nearby. Please send your records to records@cornwall-butterfly-conservation.org.uk.

The Branch is very grateful to have received a generous legacy donation of £500 from the estate of the late John Ruppersbery.

John passed away in July 2019, and is sadly missed by family and friends. As well as being a highly respected lepidopterist, John championed youth cricket and nature conservation. He had a particular interest in the Pearl-bordered Fritillary. We do recommend reading his wonderful article about the species, mainly set in the New Forest but mentioning Cornwall, written for Hampshire and Isle of Wight Butterfly Conservation: https://bit.ly/3kHgV9H.

Membership news

Branch Membership Secretary Kathy Wood brings us the latest Branch membership information

I am pleased to tell you that, even in this strange autumn and winter when none of our usual conservation activities have been happening, a few people have joined CBC. So welcome and thank you to all of you, and we hope to see you at some of our summer activities soon. Sadly, we have also lost a few existing members, possibly because of the economic problems caused by the pandemic.

Unfortunately, I am unable to give you any exact figures about membership on this occasion. All memberships are processed through Butterfly Conservation's Head Office, who have had to cut down drastically on their running costs and therefore staff. Before the pandemic struck, they had contracted to have a new membership database provider. As seems to be inevitable with all computer upgrades, this has caused a lot of problems, which have been compounded by the staff cuts.

As a result, I have not received the usual accurate monthly updates for several months now, and have therefore been unable to email new members to welcome them and tell them what's going on. I apologise to them and ask them, and everyone, to keep looking at our website (www.cornwall-butterfly-conservation.org.uk) and social media (links on the website) for up to date information. I have been told that the database situation will be sorted out by the end of March and normal service will then resume. Let's hope so. Meanwhile, please be assured that none of this affects the security of your contact details, only the sanity of some Head Office staff and all Branch Membership Secretaries.

Head Office have also changed to a new system for bulk emails. This includes those they send out on behalf of individual branches. To make sure you receive them safely and they don't end up in your junk folder, please put the following address in your contacts: branches@butterfly-conservation.org, and make sure that I have your up-to-date contact details. If you're not sure, please let me know of any changes anyway. You can contact me on my official email address (on the contacts page of the Branch website and every edition of Cornwall Butterfly Observer).

Please do what you can to publicise Butterfly Conservation and CBC, and help us increase our membership. Look at the ideas which have appeared in previous editions of this magazine, such as Issue 60 (summer 2016), page 5, available on the Resources page of our Branch website. The more members we have, the more we can do for butterflies and moths. Thank you.

Field trips and events 2021

Welcome to Cornwall Butterfly Conservation's programme of field trips for 2021, an exciting mix of new sites and old favourites. As before, we have also organised a few trips in partnership with other local conservation organisations. The importance of recording is increasingly being recognised, so we will be encouraging everyone to note what they find on these field trips so that we can continue to build a better picture of Lepidoptera distribution across Cornwall.

Our field trips are fun and friendly and open to all - including accompanied children - whatever level of experience you have and whether or not you're a member of Cornwall Butterfly Conservation. Please always come prepared for Cornwall's changeable weather and mixed terrain – waterproofs, good walking shoes or boots, sun cream etc., as well as water and lunch/snacks. Please be aware that we would prefer dogs not to be brought because we will be in wildlife-sensitive areas.

Postcodes have been included. However, please bear in mind that they may not be as accurate as grid references in pinpointing meeting places, particularly on coastal walks where there are no obvious landmarks and the postcode covers a larger than usual area, so you may find the following link useful – grab a grid: https://www.bnhs.co.uk/2019/technology/grabagridref/gagr.php#map.

****IMPORTANT** Please check our website prior to each field trip in case of cancellation due to COVID restrictions, weather or other complications. You can check our website events page http://www.cornwall-butterfly-conservation.org.uk/events.html for details of field trips and upcoming events.**

Monday 17 May: BUTTERFLIES OF PENHALE

Near Cubert, 10 am

This is a joint walk with Cornwall Wildlife Trust. We will be joined by Andy Nelson, Dynamic Dunes Public Engagement Officer, who will give an update on the project and its aims. In addition to seeing a variety of spring wild flowers, we should find Brown Argus, Dingy Skipper and Grizzled Skipper, which is now only located on this site in Cornwall. Please meet by the M.O.D. South Gate near Treworthen Farm, Cubert (SW783566). Postcode for Treworthen Farm: TR8 5PZ. Please bring a packed lunch. Places are limited so **booking is essential**.
Leader and contact for booking: Cerin Poland (01872 540371 or 07814 790250).

Thursday 20 May: DE LANK QUARRY

Near St Breward, 11 am

This is a beautiful walk down to the De Lank River, with the chance to see the rare Pearl-bordered Fritillary and other spring butterflies, such as the Brimstone. Much conservation work has been undertaken by volunteers on this site, and this will be a chance to see the impact of this valuable work. Please bring a packed lunch and tough walking shoes. Long trousers and long-sleeved shirts are also advised. Meet at the small car park (SX099753) PL30 4NQ on the right before the entrance to the Quarry, which should not be entered. Parking is very limited so car share is essential.
Leader and contact: Sue Allen (01872 240246).

Saturday 22 May: SILVER-STUDDED BLUE BEACH EVENT

Perranporth, time to be confirmed

The global *Nature 2021* event will take place to coincide with the UN Conference on Biodiversity. Across the UK and the whole world, participants will create large images of locally endangered species by laying down an item of coloured clothing in a mapped-out template, forming a mosaic. In Perranporth, the mosaic will represent the Silver-studded Blue. It is envisaged that participants will be allocated a zone in advance, and given a time slot within which to bring the clothing, so that the mosaic can be constructed from the inside out. This 'rolling' deposit system means that people do not stay in close contact for any period of time, in order to ensure COVID safety. Exact location and further details to be confirmed.
Contact: Jo Poland (01872 540371)



Silver-studded Blues (photo: Cerin Poland)

Sunday 30 May: PREDANNACK, THE LIZARD

Near Mullion, 11 am

This fieldtrip is in partnership with the Natural England (NE) team on The Lizard and we will be looking for newly-emerged Marsh Fritillaries. Meet at the National Trust car park at Higher Predannack Wollas Farm (SW669162) TR12 7EZ. Please bring a packed lunch.
Leader: Duncan Lyne (Lizard NE team).
Contact: Dick Goodere (01736 753077).

Thursday 3 June: CHAPEL PORTH

Near St Agnes, 12 noon

Join us looking for Green Hairstreak butterflies along this beautiful cliff walk. The terrain can be steep and rough in places, so we advise a walking pole and sturdy footwear, but the views are spectacular. Meet at Wheal Coates NT cliff top car park (**not the beach car park**) (SW702500) TR5 0NT. Please note that there are parking charges for non-NT members. Please bring a packed lunch.
Leader and contact: Kathy Wood (01872 864344).

Sunday 6 June: GREENSCOMBE WOODS

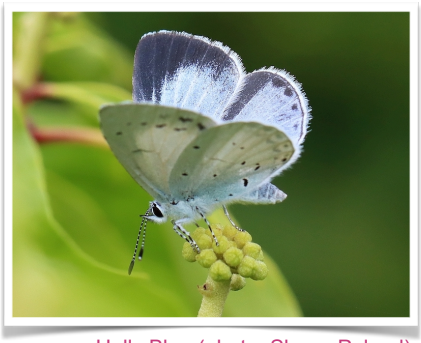
Near Luckett, 10.30 am

Come and join us on a field trip to Cornwall's only site for the nationally rare Heath Fritillary butterfly, which is now established here after a successful reintroduction in 2006. This walk has several steep inclines that can be slippery, so we advise a walking pole and sturdy footwear. Local expert on the species, Richard Vulliamy, will be leading the trip. Meet in Luckett Village car park (SX389737) PL17 8NJ. Please bring a packed lunch.
Leader: Richard Vulliamy. *Contact*: Tristram Besterman (01579 349146).

Tuesday 15 June: CUBERT COMMON

Near.Crantock, 11 am

Cubert Common, a gently undulating SSSI-designated area of sandy grassland owned by the NT, is one of the few enclosed commons in England. We will be looking for a wide variety of butterflies (including Brown Argus, Dark Green Fritillary, Silver-studded Blue and Small Heath), moths, other invertebrates and also rare plants. The meeting point is the NT car park near Polly Joke beach (SW776599) TR8 5QS, which is relatively small so car sharing is advised. Directions: Drive through Crantock village and shortly afterwards turn left onto the road to Treago Farm. Drive through the farm, follow the track and park in the NT car park (at Treago Farm there is a gate crossing the track which you will need to open and close). Please bring a packed lunch.
Leader and contact: Jo Poland (01872 540371).



Holly Blue (photo: Shaun Poland)

Thursday 1 July: UPTON TOWANS

Near Hayle, 11 am

Join us on a walk through this extensive sand dune complex situated between Gwithian and Hayle: a Cornwall Wildlife Trust (CWT) reserve and an SSSI. The main target species will be Dark Green Fritillary and Silver-studded Blue, but there will be many other Lepidoptera species and wildlife to see. Meet by the gate, in front of the large chimney at the entrance to the CWT reserve (SW 579396) TR27 5BJ. Please bring a packed lunch.
Leader and contact: Dick Goodere (01736 753077).

Saturday 26 June: CORNWALL BUTTERFLY ATLAS: LAUNCH DAY

Lethytep, near Looe, from 11 am

Save the date! The official ***Butterflies of Cornwall: Atlas for the Twenty-first Century*** launch party day! Philip and Faith Hambly invite you to celebrate this momentous day at their farm, Lethytep, with its wondrous wildlife area of walks, lakes and wildflower meadows. Visitors are welcome to explore Lethytep for themselves, following signposted routes. It is a haven for butterflies and much more besides! Food, including pasties, will be provided, and as this is also one of our major fundraising events there will be a tombola and a bric-a-brac shed! We ask for a £6 donation to help cover food costs. To get to Lethytep (SX175588) PL13 2PG, turn south off the A390 Liskeard to Lostwithiel road at East Taphouse, taking the B3359 to Looe and Polperro. After 3.3 miles, take the road to the right signposted Penadlake: the event will be signposted from here. Park in the field next to the house (space for 100+ cars).
Leaders and contacts: Jo Poland (01872 540371) and Philip Hambly (01503 220385, http://www.lethytep.co.uk).

Saturday 3 July: POLDICE

Near St Day, 11 am

The valley landscape here bears witness to the concentrated mining activities that took place in this World Heritage Site. The area, at first, looks to be the last place to find butterflies but, even in this barren, polluted landscape, plants have become established and butterflies have found a niche, including Silver-studded Blue, Small Heath and, later in the season, Grayling. This large site has many ruined mine buildings and uneven/steep tracks which are shared by cyclists, so we advise a walking pole and sturdy footwear. Meet by the lay-by (SW737430) TR16 5PZ opposite Truro Auction Centre; there is more parking a little further along the road towards Crofthandy on the left (SW737428). Please bring a packed lunch.
Leaders and contacts: Sue Allen (01872 240246) and Roger Hooper (01209 820610).

Sunday 11 July: PENLEE RESERVE AND PENLEE POINT

Near Rame Head, 11 am

We expect to see Marbled White butterflies, as well as Small Heath and Dark Green Fritillary, on this walk. There are spectacular views from this south coast meadow that is buzzing with life! Please bring a packed lunch. Meet in Penlee Battery car park (SX436491) PL10 1LG.
Leaders and contacts: Roger Hooper and Tristram Besterman (01579 349146).

Thursday 15 July: CABILLA WOODS

Glynn Valley, 3 miles east of Bodmin, 12 noon

Join us for this walk through the CWT reserve described as “one of the largest and possibly finest ancient woodlands in Cornwall”. Our target species is the Silver-washed Fritillary with a chance of seeing the aberration f. valezina. There should also be many other butterflies, including Comma, Ringlet and Gatekeeper. Please bring a packed lunch. Directions: Proceed along the A38 from the A30 heading towards Liskeard. About a mile past the Bodmin Parkway junction, turn left down Le Ball Hill. Cross over a small bridge and immediately turn right. There are only limited places for parking (SX129652) PL30 4BE, so car sharing is advised.
Leader and contact: Roger Hooper (01209 820610).

Saturday 17 July: CHURCHTOWN FARM

Saltash, 2 pm

We are joining the Friends of Churchtown Farm for a walk to identify and learn about the butterflies and moths that make their home at this CWT reserve on the banks of the River Lynher. Directions: Follow the signs for Saltash Community College to Wearde Road and park in the access road to the school (SX421581) PL12 4AS.
Leader and contact: Sue Allen (01872 240246)

Thursday 22 July: CARNON VALLEY

Near Devoran, 11 am

Join us for a walk along the Carnon Valley in a landscape still dominated by the mining industry, which was visited regularly for our *Mining for Butterflies* project. This gentle walk uses the Coast to Coast cycle/walking track from Carnon Valley Car Park to Bissoe Cycle Hire (where there are toilets) and back. We hope to see plenty of common butterflies and, near the pools on the way, dragonflies and maybe even the Scarce Blue-tail damselfly. We will explore the CWT Bissoe Valley Nature Reserve and the Arsenic Works where Silver-studded Blue has been recorded. Please bring a packed lunch. Directions: From the A39 at the Devoran roundabout take the road heading towards Bissoe. Go straight over the first cross roads, under the viaduct,

then take the next left and the car park is on your right (SW783408) TR37LN.
Leader and contact: Sue Allen (01872 240246).

Sunday 25 July: GODOLPHIN WOODS

Near Godolphin, 1.30 pm

Join us for this interesting walk through Godolphin Woods. There will be a wide variety of Lepidoptera but the target species will be the Purple Hairstreak. Please bring a packed lunch. Directions: Coming from Leedstown, turn left at Townshend, then at Godolphin Bridge the road swings to the left: some distance along this section there is a parking area on the left where a track runs down to the river. It is possible to park here, but it is better to drive down the short track and park in the larger car park at the bottom on the right (SW600324) TR13 9RE.
Leaders and contacts: Perry Smale and Judi Swift (01736 448304 or 07412 262184) and Roger Hooper

Wednesday 4 August: LUNDY BAY

Near Polzeath, 1.30 pm

Join us for a beautiful walk along one of our butterfly transects walked by the National Trust. We hope to see a selection of butterfly species, including Silver-washed Fritillary, Brown Argus, Common Blue and Clouded Yellow. We will be joined by a member of the NT local team. Meet in the NT car park (SW952795) PL27 6QZ. Overflow car park available. Please bring a packed lunch.
Leaders and contact: Kelly Uren (07429 354011) and Jim Barker

Tuesday 10 August: GWENNAP HEAD AND PORTHGWARRA

Near Land's End, 10.30 am

This beautiful location boasts an abundance of butterflies, including Grayling, Small Pearl-bordered Fritillary, Clouded Yellow, Small Heath and many more. Meet in the Porthgwarra car park (SW370217) TR19 6JR, where charges apply. There is a cafe; please bring a packed lunch.
Leaders and contacts: Jerry Dennis (07956 041263) and Jim Cooper (01872 560710).

Sunday 15 August: WINDMILL FARM NATURE RESERVE

Near The Lizard, 11 am

Windmill Farm was purchased jointly by the Cornwall Bird Watching and Preservation Society and Cornwall Wildlife Trust in 2001. This 85-ha (210-acre) farm is home to an array of habitats, including wet and dry heaths, hay meadows, wetland, ponds and arable land. The mix of habitats means the site is home to a huge variety of plant, bird and invertebrate species. We will join the volunteer ranger and hope to see late summer butterflies, including the Small Pearl-bordered Fritillary and Grayling and, around the pools, dragonflies and damselflies. There is also the chance of seeing Marsh Fritillary larval webs. Meet at the car park by the windmill which is down a lane off the A3083 (SW693152) TR12 7LH. Please note dogs are not allowed anywhere on this site. Please bring a packed lunch.
Leader and contact: Sue Allen (01872 240246).

Details of all these field trips can be found on the CBC website: http://www.cornwall-butterfly-conservation.org.uk/events.html

****REMEMBER**** **Please check the website before every event in case we have had to make changes or cancellations.**

Butterflies and moths from around the world

We have some gorgeous species in the UK, but have you ever wondered what beautiful butterflies and marvellous moths are out there globally? Did you know there is a moth that can grow bigger than your face? Or that there is a butterfly so good at camouflage that it looks just like a leaf? We are going to take you on a quick trip round the world to meet three of these amazing creatures.

Atlas Moth *Attacus atlas*
The Atlas Moth can grow to have a wingspan of 27 cm! Native to China, India, Malaysia and Indonesia, its caterpillar must spend every second eating. The adult's proboscis does not work, so it survives off the energy stored during the caterpillar phase of its lifecycle, and consequently only lives for one to two weeks before its energy stores run out.





Orange Oakleaf *Kallima inachus*
There are eight to ten species within the *Kallima* genus, each one of which is a champion of stealth. With underwings that make it look like a dried leaf, the Oakleaf lives in tropical Asia where, in the dry seasons, its camouflage helps it avoid predation by birds. There is a lot of variation in the underwing patterns between individuals, which confuses predators even more.

Luna Moth *Actias luna*
One of the largest moths in North America, the beautiful Luna Moth starts out as a hungry caterpillar. Like the Atlas Moth, the adult is unable to eat and has no digestive system, so only lives for one week. It is a favourite snack for bats, but disorientates its predators by spinning its wingtips: this disrupts the bat's echolocation by bouncing the sound in different directions, allowing the moth to escape.



Sources: https://www.nhm.ac.uk/discover/spotlight-the-atlas-moth.html; https://www.butterflyidentification.com/orange-oakleaf.htm; https://www.learnaboutbutterflies.com/India%20-%20Kallima%20inachus.htm; https://kids.nationalgeographic.com/animals/invertebrates/fact/luna-moth; https://www.thespruce.com/the-non-pest-luna-moth-2656240; https://www.ifl.org/goddess-of-the-moon-the-life-history-of-the-luna-moth/

Welcome to our second Cornish Social Butterfly Quiz: The Newsletter Edition!

To kick things off this year, we've got a Spring Quiz for you to dip your proboscis into! There are 10 questions with 10 fluttering points available. Feel free to do some internet research to help you find the answers.

Happy quizzing! The answers are on page 25.

Let's test your spring butterfly ID skills in **Questions 1 to 4**. These are some super close-up images of butterflies. Can you guess what species they are?



1.



2.

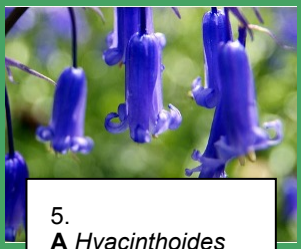


3.



4.

The following are some images of spring nectar plants you might spot some butterflies nectaring on. Can you guess what they are called from the multiple choice below each photo. The catch is, we've only given you scientific names, so you might need to do an internet search!



5.
A *Hyacinthoides non-scripta*
B *Prunus* sp.
C *Hedera helix*



6.
A *Salvia* sp.
B *Myosotis* sp.
C *Geranium* sp.



7.
A *Calluna vulgaris*
B *Thymus vulgaris*
C *Salix caprea*

More questions on the next page

Okay - enough pictures! The next set of questions ask you to fill in the blanks.

8. The UK has _____species of butterfly, 57 of which are residents with the rest being migrant species.
9. Unlike many other animals, butterflies taste with their _____ .
10. _____ helps butterflies and moths with energy, especially after hibernation or long migrations.

How did you find those questions? We'd love to know your scores, so let us know how you did on our Facebook page. Thanks again for playing along. Don't forget the answers are on page 25 - but don't cheat!

Recording

The latest updates from our County Recorders

Butterflies, 2020

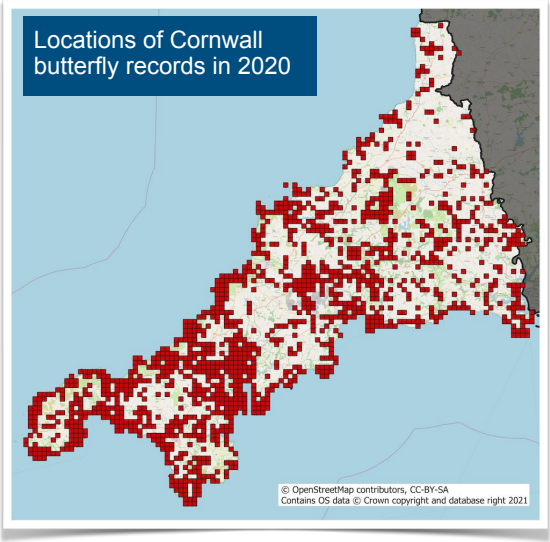
Cerin Poland brings us his first report as County Butterfly Recorder

Hi everyone. I am Cerin Poland, the new County Butterfly Recorder for Cornwall. Firstly, I want to say thank you to Dick Goodere for his hard work and dedication to the role over the last nine years; I feel privileged to have been put forward as his successor. I am also very grateful with how welcoming all the recorders have been: you have certainly kept me busy!

Although 2020 was a rather strange year for all of us, everyone stepped up to the mark and we have already beaten our amazing record total of over 37,000 sightings from 2019.

Records are still coming in and, if you have any from last year that you have not yet sent in, please do, as it is never too late! With restrictions in place, many people looked to nature in 2020; this is evidenced in the butterfly records, with more observations coming from gardens and people's local patch while on their daily exercise.

Due to lockdown restrictions, monitoring during the peak flight period of some of our rarer butterflies, like the Pearl-bordered Fritillary, could not take place. This was unfortunate, but the weather was good and there are no worrying signs from areas where recording took place, so we can only hope proper monitoring can proceed again in 2021. Species such as Meadow Brown, Silver-studded Blue and Silver-washed Fritillary emerged earlier than usual, likely due to the warm weather during spring.



Grayling appeared to have an extremely good year; it was seen in high numbers in many of its usual spots and was also recorded at a number of new locations, partly due to an increase in targeted searches for the species. Marbled White was again seen in west Cornwall during 2020. One visited our garden in Zelah after I had spent the previous year teasing my mother that she had hallucinated her sighting in 2019! It is worth keeping an eye out for this butterfly wherever you are in Cornwall as few sightings are made for the species outside of Penlee Battery each year, so any extra records would be gratefully received. Good numbers of Small Tortoiseshell were reported in many areas, a hopeful sign that this butterfly could be bouncing back after having a period of poor showings.

Rare migrants such as the Large Tortoiseshell made an appearance again in 2020, with three sightings in different parts of the county, all backed up by photographs. During October, records were received for pristine Long-tailed Blues on the Roseland and in Penzance. Due to how fresh they were it is possible they could well have been the progeny of earlier migrants, so keep a lookout for any blue butterflies with tails flitting around the legumes in your gardens!



This pristine Long-tailed Blue flew in to the Roseland last summer

The Big Butterfly Count continues to grow, contributing over 7,400 records to CBC's database in 2020, which is an increase of nearly 50% from the year before. A full breakdown of how our Cornish species fared in 2020 will be included in the Autumn Observer. Coverage of butterfly records across Cornwall is on the whole looking good, but there are some gaps, such as between Mitchell and Fraddon, and also in several places in east Cornwall. See the map (top left) to find out if there are any locations in your area that

would benefit from recording this year!

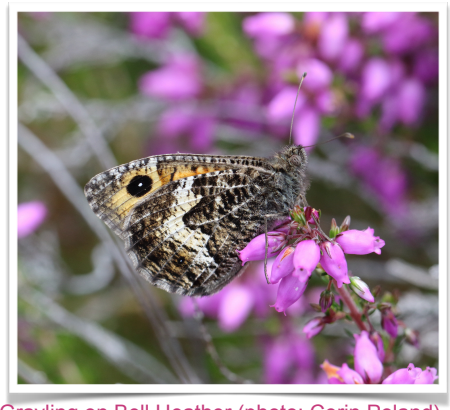
As of writing this, the 2021 season has already kicked off, and species such as Brimstone, Peacock, Red Admiral, Small Tortoiseshell and Speckled Wood have all been reported on the wing on the odd day it has not been raining! I look forward to receiving everyone's sightings this year; full details of how to record can be found on our website http://www.cornwall-butterfly-conservation.org.uk/recording.html. Do not hesitate to get in touch by email: I am always happy to assist with queries or identification records@cornwall-butterfly-conservation.org.uk.

Above all, the safety and wellbeing of recorders and the local community is very important to me, so please do follow local restrictions and only go out to record butterflies when it is appropriate to do so. Thank you to everyone who submitted records in 2020; your data are vitally important in helping us to understand how our butterflies are faring in Cornwall. They are also valuable in contributing to the nationwide picture, feeding into Butterfly Conservation's national database.

Moths, spring 2021

Leon Truscott, County Moth Recorder, brings us the latest moth report

At the time of writing (early February 2021), records of 869 species for the whole of 2020 had been received,



Grayling on Bell Heather (photo: Cerin Poland)

only a little down on the average of about 880 in recent years. The second half of 2020 was enlivened by a series of records of scarce immigrant species, mostly in September and October. The following highlights are mostly from August to December 2020, but also include one or two from earlier.

Tony Wilson recorded *Eriocrania sparrmannella* (three) at Callestick on 24 May (followed by more specimens the following day), the first Cornish records since 2009. The nationally scarce *Phyllonorycter mespilella* was trapped by Mike Spicer (MJS) at St Erth on 29 August, only the third for Cornwall and new to VC1. Rob Davey found mines of *Phyllocnistis citrella* on Spanish Clementine from a St Austell supermarket on 8 February. It is the first Cornish record, but the mines, on an imported plant, were vacated. *Glyphipterix schoenicolella* is nationally scarce and local in Cornwall, most records being confined to the Lizard peninsula. Cerin Poland (CP) found three flying at Tregoss Moor on 29 July, the third

record for VC2. *Batia lunaris* is very local in Cornwall and had only been recorded from two sites until Tom Clark (TC) recorded one at Downderry on 10 July.

Another scarce and local moth is *Cosmopterix orichalcea.* One found by CP at Carn Moor on 21 June is the ninth for Cornwall and only the second for VC1. Adventive species *Tuta absoluta* was recorded by Tom Wilson (TW) at Callestick on 16 September, the fifth Cornish record and the first for mainland VC1. TC also trapped *Coleophora binderella* at Callestick on 23 July, a new species to Cornwall. Frank Johns recorded an adult *Coleophora sternipennella* at Cury on 9 August. It is the second record for Cornwall, the previous record being from 1972. *Eupoecilia ambiguella* (Vine Moth) was recorded by Mick Scott (MAS) from St Mary's, Scilly on 9 August. It is only the second record for Cornwall/Scilly, the previous being from the same site and recorder in 2011.

Epinotia fraternana is nationally scarce. Shaun Poland trapped one at Zelah on 1 June. All four previous Cornish records are from Ladock Wood in the 1980s. *Pammene spiniana* is also nationally scarce and very local in Cornwall. John Nicholls (JCN) recorded singles at Downderry on 6 and 13 August, the first Cornish records since 2008. This was followed by one trapped by TC on 8 September at Penlee Point, the site of the 2008 record. The scarce migrant *Uresiphita gilvata* was trapped by MAS on St Mary's on 14 September. The third Cornish record



Bedstraw Hawk-moth (photo: Jason Chapman)

of *Catoptria verellus* was trapped by MJS on 20 July at St Erth.

On 12 August, Jason Chapman recorded a Bedstraw Hawk-moth *Hyles gallii* at Constantine, the first Cornish record since 2011. Channel Islands Pug *Eupithecia ultimaria* has now been recorded by MAS on St Mary's seven times from 2004, including one on 29 June 2020. However, TC recorded one on 6 August at Downderry, the first for mainland Cornwall. Marsh Pug *Eupithecia pygmaeata* is rare in Cornwall. One found by CP at Goss Moor on 19 June is new to VC2, only the third for Cornwall and the first since 1983. Campanula (Jasione) Pug *Eupithecia denotata* is very local in Cornwall. Barry Henwood found larval feeding signs at Cape Cornwall on 4 August and at two nearby sites on 6 August.

Gypsy Moth *Lymantria dispar* is a rare migrant to Cornwall (although recently resident in parts of England). One was trapped on 13

August at Maenporth by George Davis (GD). The only previous Cornish record was from nearby Mawnan Smith in 1983. Philip Knight took a photograph of a Scarce Vapourer *Orgyia recens* larva at Tregonning Hill on 6 September. It is a rare (RDB2) moth nationally, and the only previous Cornish record is from 1845! It was a good year for the much-loved migrant Crimson Speckled *Utetheisa pulchella.* Nine records were received, mostly photographed and mostly from late October: one on 20 October from St Mary's by Will Wagstaff (WHW), five from the Lizard peninsula area on 21 and 22 October (Nigel Earp, David Collins, Robin Curtis and Tony Blunden), one from Trevescan on 23 October (Louise Jackson), another from St Mary's by MAS on 3 November and one from Fowey on 22 November (Brenda Vincent). A Rosy Underwing C*atocala electa* was trapped at St Germans by Lizzie Stroud with John Nicholls (JCN) on 6 September, only the second Cornish record following one from Church Cove, Lizard in 2013. It was a record year for Slender Burnished Brass *Thysanoplusia orichalcea,* with eight records in August, September and November, from St Mary's on 15 August and 1 September by John Headon and on 30 August, 14 September and 18 November (MAS), from Trenant Park, Looe on 15 August by Andy Harding (AH), from Downderry on 18 August (TC) and St Erth on 15 September (MJS). It was also a record year for another rare migrant, Scar Bank Gem *Ctenoplusia limbirena*, with five records: from St Mary's on 11 and 21 August (MAS), from Trenant







Photos, from top: Marsh Pug (Cerin Poland), Crimson Speckled (Louise Jackson), Rosy Underwing (Leon Truscott)

Park, Looe on 21 August (AH), from Downderry on 26 August (JCN) and from Maenporth on 26 August (GD). A Golden Twin-spot *Chrysodeixis chalcites* trapped at Maenporth on 6 November by GD is only the nineteenth Cornish record. A Dewick's Plusia *Macdunnoughia confusa* trapped on St Mary's on 29 July (MAS) is our first since 2016.

Beautiful Gothic *Leucochlaena oditis* is a nationally rare (RDB3) species and in Cornwall is very local along the south coast. There were two records in 2020: from Maenporth on 20 September (GD) and from Penlee Point on 19 October by Chris Vincent (CV). The Olive *Ipimorpha subtusa* is local in Cornwall and scarce away from its mid-Cornwall heartland. TW recorded it twice at Callestick, on 31 July and 4 August. Sombre Brocade *Dryobotodes tenebrosa* is a rare, but increasing, migrant and thought to be a possible future resident. Singles were trapped at Penlee Point on 8 September (TC) and 19 October, (CV) both close to the spot (near the food plant, Holm Oak) where it had been recorded in 2016. TC also recorded singles at Downderry on 11, 14 and 16 September. Others were trapped at Maenporth on 16 September (GD), on St Mary's on 20 September (MAS), and at Saltash on 22 September (Ian Turner, Doris Turner). MAS recorded a further Splendid Brocade *Lacanobia splendens* on 18 July on St Mary's, adding to his three from June in the previous report. Radford's Flame Shoulder *Ochropleura leucogaster* has become a regular immigrant in recent years. Twenty-two records from September to November were received this year: fourteen from St Mary's (MAS, WHW, Chris Lewis), two from Porthoustock (Paul Gay) and singles from St Erth (MJS), Predannack (Marc Botham), Magy Moor (Mark Hows), Penlee Point from Dave Gibbon (DG), from Maenporth (GD) and from Downderry (TC).

Perhaps the most outstanding record of 2020 was a Dotted Rustic *Rhyacia simulans* recorded by DG at Penlee Point on 8 September. It is new to Cornwall and now nationally a declining resident, mostly in the English midlands. Langmaid's Yellow Underwing *Noctua janthina* is very rare away from southeast England. There are only two Cornish records, both from MAS on St Mary's, the first on 4 July 2006 and now on 6 July 2020.

Quiz answers:

1. **Brimstone** *Gonepteryx rhamni.* Image by Tamás Nestor

2. **Peacock** *Aglais io.* https://butterfly-conservation.org/butterflies/peacock

3. **Large White** *Pieris brassicae*. Image by Dean Morley

4. **Painted Lady** *Vanessa cardui.* Image by Iain H Leach

5. **A.** Bluebell *Hyacinthoides non-scripta*. Image: https://bit.ly/2Ou51Uu

6. **B**. Forget-me-not *Myosotis* (genus). Image: https://bit.ly/3cgnmg3

7. **A**. Heather *Calluna vulgaris*. Image: https://bit.ly/3c5fTQE

8. 59

9. Feet

10. Nectar

Transects

Kelly Uren reports on the 2020 transect season

2020 was a year like no other. Our lives and routines became affected in so many ways; no longer were we able to get out and about freely to enjoy the activities we so love to do. For me, perhaps one of the areas in which I felt this the most was not having the freedom and opportunity to get outside in the great outdoors connecting with nature, and in particular the ability to monitor my transect route. Memories from the previous year of walking through 'my meadow' on lovely warm summery days with skylarks singing high above me, notebook in hand, eagerly waiting for the next beautiful butterfly to drift on past soon became something I greatly missed. No longer was I able to map the seasons of the year according to the butterflies I saw, or by the flowers and plants growing in the hedgerows. I feel that last year I missed so much of the natural world that I truly cannot wait to catch up on things this year.

I was not alone, and many of our wonderful butterfly surveyors were also unable to get out and about recording as they would normally do, and as a result the number of butterflies seen on our transect routes was down compared to 2019. The difference was in the region of about 30%, but this reduction in the number of butterflies seen is completely understandable given the fact that many our transects were not monitored for as many weeks as would normally be the case, and 16 of our transects missed being surveyed.

Good numbers of butterflies were still seen. At the most recent count, **33** transects recorded a total **32,497** butterflies of **31** different species. Three notably absent species from the transect sightings for 2020 were Marsh Fritillary, Purple Hairstreak and Dingy Skipper. These species are rarely recorded in any great numbers, typically just one or two individuals are seen on single transect sites, but all three made an appearance in 2019. See page 27 for a table showing the top 10 butterflies seen on transects in 2020.

Meadow Brown and Gatekeeper were again the two most numerous species seen, both holding **1st** and **2nd** rankings respectively for the last three consecutive transect seasons. Speckled Wood was the most abundant, being recorded on **97%** of transects (being absent from just one route). Meadow Brown, Small White, Large White and Red Admiral were the next most widespread of these 10 species being recorded on 31 of 33 of the transect routes. Silver-studded Blue held onto **5th** place, the same position as last year. This species frequently makes it into our top five. Despite only being recorded on seven transect routes, numbers each year are greatly boosted by the sightings recorded at Upton Towans, near Gwithian; nearly 2,100 were recorded in 2020.

Who knows what this year's transect season will hold? Butterfly transect recording season officially starts on 1st April and runs until 30th September. This year, I am more

eagerly awaiting its arrival than in any other. I have recently seen my first butterfly for this year, a Peacock, and I am looking forward to seeing many more.

If you would like to find out more about how transect recording works, or maybe how to set up your own, please do not hesitate to get in touch. It is really great fun, and a fantastic way to learn more about butterflies. Please contact Kelly Uren at transect@cornwall-butterfly-conservation.org.uk.

Top 10 butterfly species on transects in 2020

Species	Butterflies recorded	Ranking 2020	Ranking 2019	% transects recorded in 2020
Meadow Brown	9,616	**1**	**1**	93.9
Gatekeeper	3,936	**2**	**2**	84.8
Speckled Wood	2,953	**3**	4	**97.0**
Small White	2,881	4	6	93.9
Silver-studded Blue	2,391	**5**	**5**	21.2
Large White	2,206	6	10	93.9
Red Admiral	1,199	7	8	93.9
Ringlet	1,168	8	**3**	84.8
Common Blue	859	9	9	81.8
Small Skipper	821	10	11	72.7

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Background image this page:
Small Heath
(photo: Cerin Poland)