Welcome to our Autumn Newsletter

Contributions to our newsletters are always welcome. Please use the contact details below to get in touch!

If you do not wish to receive our newsletter in the future, simply reply to this message with the word 'unsubscribe' in the title - thank you.

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(Please note our office is currently closed and staff are home-working)
Online Scottish Gathering 2020

Online Scottish Gathering 2020 - (Zoom Webinar)
Saturday, 3rd October
10am – 1pm

You are invited to join us for a digital alternative to our annual get-togethers. We have a full morning programme of talks, as well as reflections on the season and updates on our current and upcoming projects, surveys and research. We are working hard to bring this to you in what we hope will be a relaxed and informal way and are indebted to our speakers who have kindly taken up the challenge. To attend you will need to register via the link below. For queries please contact events@butterfly-conservation.org

Programme (Please note the content and order of presentations may be subject to change)

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<td>Following in the footsteps of Alice Balfour, an Edwardian moth recorder</td>
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Registration

You are invited to a Zoom webinar

Date     October 3rd 2020 at 10:00AM (Virtual room will be live from 9:45)
Event    Online Scottish Gathering 2020

Register in advance for this webinar: https://butterfly-conservation.org/OSGM

This event is FREE however a suggested donation of £5 on registering would be greatly appreciated. After registering, you will receive a confirmation email and a further email will follow later with information on how to join the Webinar.
Staff Updates

BC events in Scotland
Don’t forget to check out our website at www.butterfly-conservation.org/scotland as well as your local Branch website for up-to-date lists of workshops, events etc:

And of course Branch Facebook and Twitter pages too!

Farewell to Paul
After 26 years service Paul has decided to leave BC. He started with BC in 1994, where he took up the role as our first National Conservation Assistant before setting up the first Scotland office in 1996, whilst also covering northern England and Northern Ireland. Paul has been instrumental in building relationships with partners and volunteers to create the close community that is BC Scotland today, working closely with Scottish Natural Heritage to secure their support which has underpinned much of our conservation work since 2002.

Paul has also been at the forefront of developing projects including Munching Caterpillars Scotland, our Bog Squad work and our brilliant urban engagement. His experience and insight helped shape the Scotland Conservation Strategy and at the same time he has supported BC Europe, volunteering in his own time to conservation and recording projects in Romania, as well as completing an MSc on Scotch Argus. We are indebted to Paul for creating a successful team of staff and volunteers and cementing the relationships that leaves BC in a strong position to continue conserving Scotland’s butterflies and moths.

We wish him all the best going forward in the future.

BC Scotland Team
Dear Supporters

We are only just over half way through 2020 but already it has been a year that has seen many changes to how we live our lives and impacted on us individually and collectively as an organisation. As some of you may know, Butterfly Conservation has recently been reviewing its staffing structure as part of our response to the COVID-19 pandemic to ensure we are set up effectively to take our work forward with these ongoing challenges.

Paul Kirkland, our longstanding Scotland Director, took the decision to leave BC after many years of great service and finished his role in early July. We are hugely grateful for all of Paul’s work in leading our Scotland team and building successful partnerships with many of you over the years. We’re indebted to Paul for creating a successful team of staff and volunteers and cementing the relationships that leave BC in a strong position to continue our great record conserving Scotland’s butterflies and moths – Species on the Edge is an exciting next step for us.

Since mid-July I have taken on the responsibility of leading our conservation work in Scotland as part of a new role with BC as Head of Conservation Wales, Scotland & Northern Ireland. I will be managing our staff teams across the three countries, leading our partnership work and overseeing development of landscape-scale projects.

The rest of the BC Scotland team are, thankfully, still here and I for one am extremely grateful for this as I have a very steep (if not vertical!) learning curve over the next 12-18 months.

For those who may be interested here’s a bit of personal background. Since leaving school at the ‘tender’ age of 17 (having grown up on the Gower, S Wales) I’ve always been involved in conservation/wildlife management in one form or another. I’ve joined BC from Natural Resources Wales (previously Forestry Commission Wales) having spent 20 years there in various roles, including head wildlife ranger, conservation manager, local area manager and land management team leader. In many ways the opportunity to join BC came at the right time, as I had been looking to get back into a more conservation/ecology orientated role.

Looking forward, BC has identified priority species, ‘High Priority and Priority landscapes and Priority sites, in Scotland and it is these species, landscapes and sites that will be a main focus of our work going forward. If you would like further information, it can be found here:


Already we are working towards the implementation of delivering for the priority species and wherever possible a joined-up multi-stakeholder approach would work extremely well and deliver our conservation priorities.

BC also has recently established ‘Building Sites for Butterflies’, a national programme encouraging creation and management of grasslands for wildlife in the built environment. The programme is showcasing habitat creation such as achieved along the Weymouth Relief Road in Dorset, where regular recording has shown that over half the butterfly species in the UK have been found on the verges since the road opened to traffic just 10 years ago. I believe this is a fantastic way forward and presents an ideal opportunity for
Staff Updates

BC to become involved in the early planning stages to help conserve the species we represent.

I made an initial ‘aspirations list’ recently which I’ve shared below. This is a list of what I think we would like to be able to achieve by working together with yourselves and other partners. It’s very ambitious, but even from a short time in post, and less than a year with BC, I believe that together, and with partner organisations, we can achieve many of these outcomes over time.

- Recovery and safeguarding of threatened species (for example via the Scottish Species on the Edge project [https://www.nature.scot/nature-fund-tackle-most-risk-and-vulnerable-species](https://www.nature.scot/nature-fund-tackle-most-risk-and-vulnerable-species))
- Monitoring numbers of widespread species
- Integrated networks, ecologically connected with the wider landscape resilient to climate change, and where a dynamic approach to site designation and management enables habitats and species to thrive and expand, providing ecosystem services well beyond the site boundaries
- Inspire people to understand and deliver species conservation and provide increased opportunities for access to nature
- Maintenance and enhancement of biodiversity and the building of ecosystem resilience
- Growing of citizen science activities for local communities, both urban and rural
- Apply science, research and evidence-base to ensure effective action
- Use landscape and site-level approaches to maintain, restore and (re)create habitat
- Develop and promote action plans for conservation
- Advise landowners and land managers

I look forward to meeting you at some point when the current situation allows and will hopefully meet some of you ‘virtually’ during the upcoming Online Scottish Gathering.

Best wishes

Dai
Dai Rees
drees@butterfly-conservation.org

Ps. And as for my favourite species . . . . . . . . . . . . .

Painted Lady - Dai Rees
Buff-tip - Bob Eade
Help us make meadows for butterflies!

The new meadows we started to make in winter 2019 have had a good first year, with wildflowers blooming in parks in Edinburgh, Glasgow, Hamilton, Blantyre and Lennoxtown. This autumn and winter we intend to go back to the meadows and sow more wildflowers and plant wildflower plug plants. This is a great way to get outside in the colder months and meet like-minded people who want to see wildlife thrive in our urban spaces.

Dates are all to be confirmed, but please register your interest by emailing Anthony on amccluskey@butterfly-conservation.org.

Do you know of a great site for butterflies that needs looked after?

We want to help maintain the best sites for butterflies and keep them in great condition. Some good sites are threatened by encroachment of plants like gorse, rhododendron and birch which can overshadow the wildflowers that butterflies need. If you know of a publicly-owned site in central Scotland – especially one that’s in or close to an urban area – let us know! Ideally it would be home to habitat-specialist butterflies of some conservation concern such as Common Blue, Small Copper, Small Heath, fritillaries or Grayling. We may be able to organise a team of volunteers to come out and carry out the work to protect these important sites.

Contact Anthony on amccluskey@butterfly-conservation.org with information about your site.

These volunteer opportunities are part of the Helping Hands for Butterflies Project which is funded by the National Lottery Heritage Fund and NatureScot.
Project Updates

**Saving the Northern Brown Argus in the Scottish Borders**

Nationwide travel restrictions were lifted just in time this summer for volunteers in the Scottish Borders to undertake surveys for Northern Brown Argus. Just as for the previous few Summers, Barry Prater has co-ordinated a tremendous volunteer effort to have all known colonies checked for the continued presence of the butterfly and condition of the flower-rich grassland habitat. The project aims to assess the potential threat to the species from changing grazing practices and the large-scale push for tree-planting in the area.

Since 2016, surveyors have now visited all but 26 of the 156 known colonies in the Scottish Borders counting a remarkable 1030 adult Northern Brown Argus butterflies and at least 1960 eggs along the way. Northern Brown Argus has been confirmed at 72% of surveyed sites. However, over 40% of surveyed sites have been identified as potentially under threat with the most common reasons being encroachment of gorse and bracken, over-grazing and new tree-planting schemes.

Thanks to funding from the National Lottery Heritage Fund we have now developed a spatial database for the butterfly using the information gathered by surveyors which will allow us to liaise better with those planning tree-planting schemes, hopefully ensuring that vital habitat is protected. Data collected has already been put to good use with several tree-planting schemes adjusted after intervention by BC volunteers to successfully exclude Northern Brown Argus habitat from direct planting.

The elusive nature of Northern Brown Argus has been shown as 14 new colonies have been discovered during the last three seasons. Whilst more colonies are undoubtedly awaiting discovery, it is a race against time to find them before any more are lost.

For more information contact David Hill, Species on the Edge Project Development Officer at dhill@butterfly-conservation.org

We are very grateful to The National Lottery Heritage Fund for support for this project.
Species on the Edge

Butterfly Conservation Scotland are excited to be a part of a new, highly ambitious partnership project called *Species on the Edge*. The project will see transformative action to help more than 40 of Scotland’s most vulnerable coastal and island species. Partners will work on a wide range of threatened species such as the Great yellow bumblebee, wading birds such as lapwing and curlew, natterjack toads and Scottish primrose.

Conservation action will be focussed on the Solway, Inner Hebrides and parts of Argyll, the Outer Hebrides, the North coast, Orkney, Shetland and parts of the East coast from Sutherland to Angus.

The partnership led by NatureScot (formerly SNH) also involves Amphibian and Reptile Conservation, The Bat Conservation Trust, Buglife, The Bumblebee Conservation Trust, Plantlife Scotland and RSPB Scotland. Initial development of the project begins this autumn following a National Lottery Heritage Fund award of over £260,000.

The eventual four and a half year long project will see BCS focus efforts on two species of ‘blues’, the Northern Brown Argus and Small Blue, as well as Marsh Fritillary and several species of rare burnet moths. By working with landowners, volunteers, communities, project partners and many others we hope to be able to make a real long-term difference for these species. The hard work starts now!

For more information contact David Hill, Species on the Edge Project Development Officer at dhill@butterfly-conservation.org

Photos by Paul Kirkland, Mark Searle, Jim Asher, Jim Black and Janet and Peter Hall
Project Updates

Munching Caterpillars Scotland

Project Update – March - Sept 2020
Like much of BC’s work from the middle of March onwards, the Munching Caterpillars Scotland (MCS) Project moved online as the Covid-19 pandemic hit. Discussions were had within the MCS team to see how best to support teachers, who were working under very difficult circumstances.

It was originally hoped that we could deliver live webinars to children who were attending the hub schools and possibly at home, but this was quickly knocked on the head when it was discovered that few of the relevant MCS pupils were attending the hubs and that internet access for home schooled children was very hit and miss.

The teachers instead preferred the idea of pre-recorded audio presentations and short films that they could post up on the school website for those children who had the internet to access. So along with others in the wider Munching Caterpillars family, a series of online lesson presentations/films have been created on the BC YouTube channel, which can be viewed here:

https://www.youtube.com/playlist?list=PLLoJK9yKJP42oxCNUTGvjlTAzYIUWghvo

Worksheets and quizzes have also been developed to go along with these lessons, which have been uploaded to the MCS webpage: https://butterfly-conservation.org/our-work/education/munching-caterpillars-scotland

Further support was given to teachers in the form of live webinars entitled ‘Reconnecting your learners with nature, butterflies and moths’, which ran at the end of the summer term. A total of 55 teachers from Fife, Edinburgh, Glasgow and West Lothian councils attended the sessions and they were very well received. Another live webinar is planned for later in September for West Lothian teachers.

Teacher training webinar

It was hoped that later in the season we would be able to attend live community events, but as time progressed it became apparent that an alternative approach would be needed again. So a wildart competition was launched while the schools were still on holidays called the #Caterpillar Creation competition. This encouraged children to go outside and create caterpillar collages from natural objects. There were 2 age categories 5-8 years and 9-12 years. Each winner would win nature observation prizes for themselves and £200 worth of nature resources for their school. The competition ended on 7th Sept. https://butterfly-conservation.org/caterpillarcreation. To view our entries so far go to #CaterpillarCreation on Twitter.
As schools have now gone back, we hope to deliver plants and compost to those schools that missed their planting sessions from March onwards. Whilst we won’t be able to deliver the sessions, we hope teachers will take up the activity with their classes to create a legacy planting from the project. The MCS project is coming to an end soon, but with the 30 schools that have benefitted from the learning sessions and planting in their school grounds, the new learning resources online and the teacher training, we hope that the legacy of encouraging wildlife to school grounds in Central Scotland will continue.

For more information on the project as a whole please visit: https://munchingcaterpillars.org/

Polly Phillpot
Munching Caterpillars Scotland Project Officer

We would like to thank our funders, The National Lottery Heritage Fund Scotland, for their continued support throughout the months of lockdown.
It soon became evident that Covid-19 would scupper plans to hold the usual array of training field trips over the field season focussing on some of our most threatened and scarce Scottish species at magnificent sites in wonderful landscapes.

However, during lockdown the use of video conferencing became the new norm to keep in contact with friends and family, but could we use it for leps – well yes! Two of my colleagues, our very own Anthony McCluskey, and Phil Sterling were already doing this. Anthony was very successfully delivering his introduction to recording butterfly workshops online via Zoom and Phil had started up a weekly Friday morning “Moths from around the UK – Live and Interactive!”, otherwise known as Moth School, also using Zoom.

So I bit the bullet and was dragged kicking and screaming into the modern world of cloud-based video conferencing using Zoom and undertook sessions on the following four species which are all a High Priority in our Scottish Conservation Strategy.

**Mountain Burnet** – This colourful day-flying moth is a Red Data Book species that is only known in the UK from the eastern Cairngorms, near Braemar, Aberdeenshire where it was discovered by Buchanan White in 1871. For many years it only occurred on a pair of linked hills to the north of Braemar. However, in the 1980s, a second site, Morrone, was found to the south of Braemar and then in 1997, a third colony, on Ben Avon to the north. Targeted fieldwork in 2009 increased the number of colonies to six, with two further colonies discovered last year, all in the same general area. However, it could still be under-recorded.

**Eana argentana** - The Silver Shade is a small silvery day-flying moth that is only known in the UK from Glen Tilt, near Blair Atholl. It was first discovered in the glen in 1875 and this remains its sole location in the UK. It was originally thought to be confined to “one small spot” but in 1878 it was said to be “distributed over several miles”. However, there have been very few sightings since 1940. The moth has been found on steep south facing grassy slopes. The caterpillars have never been found in the wild in the UK but are thought to feed on grasses. The adult moths are on the wing from around mid-July through to about mid-August.
**Choreutis diana** - The Affric, or Inverness Twitcher, is a small day-flying moth that is only known in the UK from Glen Affric, since its discovery there in 1919. The moth is associated with birch trees upon which the moth’s caterpillars betray their presence in a characteristic spinning in June and July. The adult moths are on the wing from around the end of July through to about mid-August.

Prior to targeted surveys in the glen last year the moth was only known from a handful of birch trees in and around Forestry and Land Scotland’s top car park, however, these surveys found the moth to be more widespread with the characteristic spinning found over c12km of the glen. It is therefore thought that the moth could be even more widespread occurring elsewhere in the glen and possibly even in adjacent glens.

**Kentish Glory** - A large, beautiful, iconic, spring moth that despite its name is confined in the UK to Scotland, where its distribution is centred on the Cairngorms and Culbin Forest on the Moray coast.

Surveys since 2017, in partnership with the Rare Invertebrates in the Cairngorms Project, using pheromone lures developed by Dr Joe Burman at Canterbury Christchurch University have been very successful at discovering the moth at new sites and confirming its presence at former sites. However, the lures only attract males and it is unclear if these locations are breeding sites, or just stray males. The focus now is determining breeding sites by locating caterpillars or egg batches.

Each event ran on a Thursday morning and was repeated on a Saturday morning and provided a brief history of the species, its identification and ecology with the aim of raising the profile of some of the UK’s rarest and threatened species in the hope that attendees would be sufficiently enthused to look for some of the UK’s rarest species and hopefully discover new colonies.

They soon proved very popular with just over one hundred people signing up to at least one session with several attending more than one, if not all four.

It is not the same experience as meeting face-to-face in the field with the anticipation of seeing the target butterfly/moth in its habitat alongside a host of other species, in a friendly atmosphere together with other like-minded people. However, it has many advantages. It is not weather dependent, it is easier to get across the finer details of the focus species, far higher number of attendees and from across the country, and is of course very much greener.
So I think that online presentations are part of our future, an easy and popular way to invite volunteers, landowners and managers from all over Scotland into one virtual space to learn about some of our most threatened species and encourage surveying. Post Covid when we are allowed to go back out and play and search, record and monitor these species together for real an online workshop would be a great way to provide a virtual introduction to a species prior to leading a field trip.

Results from this year’s surveys on the four targeted species are still being collated and will be reported in the next issue of E-news.

Due to the popularity of these online sessions further virtual workshops are being planned for the autumn and winter months including;

- Welsh Clearwing
- *Coleophora arctostaphyli* and other Bearberry dependent species e.g. Small Dark Yellow Underwing and Netted Mountain Moth
- Barred Tooth-striped

If you wish to find out more please contact Tom.

Email: tprescott@butterfly-conservation.org. Tel: 01540 661469. Mob: 07979 785665

These virtual workshops were kindly part-funded by NatureScot (formerly known as Scottish Natural Heritage).
Conservation News

News from Fife and Clacks

There has been great excitement in recent weeks on three accounts!

First of all there have been several sightings of Wall butterflies in the East Neuk. Last year a Wall was spotted at Seafield near Kirkcaldy - the first record since 1870! Well, that was quite some thing …. then, this summer, at the end of July, Dick Byrne and Cat Hobaiter spotted a Wall in Kenly Den near Boarhills. Since then we have had 7 more records of Walls on the east coast from around Boarhills, and near Caiplie Caves between Anstruther and Crail. The question is - has a colony (or two) of Walls become established in the East Neuk?

The second excitement was a male Small Skipper on the UK Butterfly Monitoring Scheme transect at Lochore Meadows. Geordie Guthrie skilfully netted, potted, examined and photographed it with help from Diane Wilson. This is only the second record for this species in Fife with Diane making the amazing discovery of a female butterfly at Carlingnose Point last summer.

And last but definitely not least, it has been a cracking season for the Northern Brown Argus. This lovely wee butterfly has a restricted distribution in Fife as the larval food plant, Common Rock-rose is quite rare. Monk’s Cave, a headland between Dalgety Bay and Aberdour, has a sizeable colony of Northern Brown Argus discovered by Ali Shuttleworth at the beginning of July. For several years this area has been scoured by experts with no luck - well done Ali!

We are looking forward to receiving your records from Fife and Clacks for the remainder of the butterfly season, and thanks to all recorders for your contributions so far this year.

Elspeth Christie and Gillian Fyfe
Email: fifebutterflies@outlook.com
Mission Mallow

Perhaps my most unexpected moth trap catch of 2019 was a Mallow (*Larentia clavaria*). It is a beautifully understated moth, with layers of rich chocolate browns sparsely dusted with sugar-white specks. Last seen in East Lothian in 1932 and not recorded in Scotland since 1959, the Mallow was considered extinct up here, a conclusion bolstered by an apparent southward-shrinking range elsewhere in the UK. Was my moth part of an established population, or a one-off? Finding one of the nocturnally-active caterpillars could provide the answer.

I did some research. Common Mallow is the most often-reported food plant but is quite patchily distributed in East Lothian. The caterpillars also eat other mallow species as well as Hollyhock, which I discovered grows in a handful of Lothian gardens including at the rather grand “Old Mansion House” near to where my moth was trapped. Scope for some torchlight searches the following June, I thought.

Then the pandemic happened. Although by late May restrictions on travel were starting to ease, it no longer felt appropriate to ask strangers if I could wander around their garden after dark to look for caterpillars. On the other hand, being ‘forced’ to stay local had encouraged me to cycle much more, allowing scrutiny of roadside vegetation at a detail impossible to achieve when zipping along encased in a car. And so it was, returning slowly, uphill, on my bicycle, from a morning’s moth trap at the same local wood and less than 1 km from the site of the previous year’s exciting find, I spotted some Common Mallow! Having survived several rounds of verge mowing, the plant was small, but there were several growing along a 100m stretch of road. At 10pm, in the gathering dusk, I returned on my bike armed with a torch and a bucketful of hope.

Serendipity, fate, skill? I found a Mallow caterpillar! And so began “Mission Mallow” - pedalling the roads East Lothian by day looking for plants, and returning to them after dark to seek out caterpillars by torchlight. Covid-related restrictions confined me to a
5 mile corner of the county but I found plenty more caterpillars. Less productive were my efforts on social media and in the local press, encouraging others to go out and look - plenty of plant records came in, but nocturnal searching was understandably not for everyone and the few photos I received ranged from a moth seen on somebody’s Austrian holiday to a dead slug.

Mallow plants can withstand some cutting, but getting a regular flail doesn’t allow for luxuriant growth and the plants growing in most roadside verges were small. The caterpillars hunker down at the base of vegetation by day which must help save them from the chop, but even so there are probably many casualties. On these bonsaied plants I only found one or two caterpillars. In contrast, on one farm track where Common Mallow is left to grow unhindered and night-time traffic is absent, I enjoyed several restorative nocturnal outings, watching many caterpillars and their invertebrate plant-mates going about their nightly business in the undergrowth.

So, Mallow moths are still alive and well in East Lothian, although they have been doing an excellent job of evading my light traps. However, our modern-day harsher management of road verges and field margins, along with a decreased popularity of Hollyhock in gardens may mean the moth is no longer as abundant as it once was. Many thanks to everybody who went out looking for plants and caterpillars. Hopefully some locations further afield can be searched next June to give us a better idea of how widespread this lovely moth is in Scotland.

Map showing locations of Common Mallow plants. Not all plants or locations could be properly searched this year, but stars indicate where Mallow caterpillars were recorded

Katty Baird
Now is the time to... search for Pimpinel Pug caterpillars!

Scottish records of Pimpinel Pug (*Eupithecia pimpinellata*) are currently confined to just a handful of coastal locations in Berwickshire, East Lothian and Fife, but they may be more widely distributed. Targeted searching for caterpillars last September added several new sites to their Scottish distribution and this seems an effective way to record them. The caterpillars feed on ripening seeds of Burnet Saxifrage (*Pimpinella saxifrage*). They can be greenish or reddish (just like their food plant!) and tend to rest with their heads on the seeds and body stretched down on the narrow stalk below making them hard to spot. Developing seed heads should be carefully examined from various angles and using a plain background (e.g. the sky or a hand) behind the plant you are searching can be helpful in picking them out.

Katty Baird
Turning South Lanarkshire Purple

After his recent discussions with the South Lanarkshire countryside ranger’s department the Glasgow Natural History Society membership secretary mentioned to me at our committee meeting, that it was seemingly the case that Purple Hairstreak butterflies had not been recorded in South Lanarkshire since the 19th century. I, being the recorder for Lanarkshire VC77, checked the database of sightings and was amazed to see that indeed there was a record of the butterfly, and that the date given for the record was 1845 and the location of the sighting had been “Hamilton Parish”. This was a fact not too hard to grasp as the favoured, indeed the only habitat for this particular species of butterfly is a woodland where there are oak trees, and there are not so many habitats like this throughout the county. This butterfly spends the winter stage of its life as an egg that has been laid on the buds of oak trees and the caterpillar does not emerge until the first few leaf buds open in springtime. After munching its way into late spring the caterpillars of this species construct a chrysalis and will not emerge as adult butterflies until mid-July to August.

This particular butterfly is also quite a challenge to find, as it is not one for frequenting flowers, and it feeds off honeydew from aphids spending most of its time in the high canopy of the trees. Another great challenge comes for us in the West of Scotland, in knowing our climate and the notoriously fickle weather in July and August, it is always quite a task to find a space in the clouds never mind a sunny enough day in the right habitat to survey for this species. All of that changed this August though, as the sun began to smile upon us in South Lanarkshire. The first task was to think where there could be a decent stand of oak trees where the butterfly could possibly be. Cathkin Braes Park was my first thought as I had remembered many a day spent there as a teenager birdwatching in and around the woods near the old Blairbeth golf course. I knew from memory that there were plenty of mature trees but wondered if there were any oaks among them? On the 11th August 2020 the clouds broke up from late afternoon and the sun came out and the weather looked ideal to carry out a survey. I headed out and within one hours walking among the oaks, of which there were quite a few mature ones as well as younger trees and saplings, I had found two individual Purple Hairstreaks flying in and out of the leaf canopy. One of these butterflies was within the Glasgow City boundary, but it was great to find that the other was indeed within the bounds of South Lanarkshire environs.

This was not the end of the story as the weather continued to smile upon us in mid-August. In my role as Butterfly Recorder for Glasgow City & Lanarkshire I had noticed that one of our regular butterfly transect walks had not had many walks carried out this
Conservation News

year, and that was at South Haugh in Hamilton, part of the Clyde and Avon Valleys Project. I headed down there on Saturday 15th August 2020 to carry out the walk and to check out the habitat, as it was an area I had not visited before. It was not too long before I noticed a couple of mature oak trees and within a few minutes I could see a single Purple Hairstreak butterfly flying (one of two sightings that day). This butterfly has a distinctive silvery sheen to the underside of the wings, and it was easy to follow until it alighted on the leaves. Once the butterfly had landed, I was able to capture a quick image of it before it set off hurriedly to compete for territory and mating rites with its rivals.

What a delight to find two sites and record this butterfly in South Lanarkshire for the first time in 175 years. This year though has given us a tantalising glimpse of a few individuals and who knows, there are no doubt many other colonies to be found where the oak trees are. Let’s hope summer is not over yet in this challenging year.

Thomas Stewart
Butterfly Recorder for Glasgow City & South Lanarkshire, 17th August 2020

Moths and Ants

*Myrmeozela ochraceella* (or the Wood Ants Clothes Moth), a moth whose name took me a year to learn to spell, and I am still not sure I get it right! I first heard about this moth in 2018 from the Scottish Conservation Strategy and when looking into its life cycle found it had this fascinating association with wood ants, feeding on the detritus of the nest. In 2019 I tried looking for the species near to home on Deeside without any luck, apparently it has become very hard to find in recent years, last being seen in 2007. Unperturbed I tried again in 2020 at a site near Braemar where I see lots of wood ants nests in an open bit of pinewood. Whilst walking at dusk on the 26/7/20 I finally struck lucky and found one moth making short flights and landing on a wood ants nest just as it was getting dark. I was absolutely delighted to find the moth and intrigued by how it obviously has some kind of trick to evade attack by the ants. It looks exactly like a common clothes moth but has a silky appearance and quite a gingery head, a true Scottish moth then! I have subsequently mapped all the ants nests I can find in the area and hope to head back next year and to other sites to try and find out more about the ecology of the species for future research projects.

Patrick Cook
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Conservation News

**Buffs in Berwickshire**

We have six macromoths with ‘buff’ in their name. Two of these, the Buff-tip and Small Dotted Buff, are pretty widespread across much of Scotland and although like many other species they are showing signs of decline in Britain, their status with us appears to be stable, including in my home county of Berwickshire. With the Clouded Buff it’s a different story – yes it seems to be maintaining its position in much of Scotland, but Berwickshire can only boast five records and these all date from 1877-1925 so it could be argued that its current absence here is a form of stability.

The three other ‘buffs’ – Buff Arches, Buff Ermine and Buff Footman - are all in a major state of flux in Berwickshire and recording the changes has become really rewarding.

Buff Arches first appeared in the Borders in 2013 but it was not recorded in Berwickshire until 2017 and it is now known from five 10km squares across the county. This is a species which is very unlikely to be overlooked (I still can’t get my brain to understand the wing markings) and we are no doubt seeing part of the on-going expansion of its distribution. The larval foodplants include bramble and it doesn’t appear to be very fussy about its habitat so it should continue to spread, although its overall abundance in Britain has declined in recent decades.

The Buff Ermine has been quite widespread in the Borders for many years, but apart from a very old 1870 Berwickshire record it was absent from the county until 2015 and has now been found in seven 10km squares. It’s another moth whose distribution is expanding; its larvae feed on a wide range of plants in many different habitats but it is largely absent from eastern Scotland so maybe climatic factors have been a limitation and these are now becoming less obstructive.

The new Moth Atlas emphasises how both the distribution and abundance of the Buff Footman have soared in recent years and we are seeing the result of this in Berwickshire. First recorded in the Borders (Roxburghshire) in 2009, it was not until 2017 that it appeared in Berwickshire and already it’s in nine 10km squares, five of these new in 2020. It can be more numerous than Common Footman at traps. As some readers will know, I sometimes struggle with the identification of this moth and so it’s possible that it is still a bit under-recorded. No doubt the lichen-feeding larvae are benefiting from the country’s improving air quality and this has aided the spread and increase.

I haven’t yet got used to expecting these three attractive moths when inspecting a trap and it’s given me a real lift seeing them this year. I find their rapid spread intriguing and rather enigmatic.

[based on records gratefully received from several recorders, including Iain Cowe, Tom Prescott, David Long, Roddy McGeoch, Richard Jackson, Keith Knight and Barry Prater]

Barry Prater
VC81 Moth Recorder
Moths and mothing activity on Fair Isle

Just as elsewhere, moth trapping has grown in popularity over the years. The first trap arrived on the isle in 1987 and trapping has been continuous since – weather permitting. The first efforts came from the Fair Isle Bird Observatory but since then it has spread across the isle. There are currently five trapping operatives and their families from just 20 households, surely one of the highest densities of activity in the world.

The resident moths are rather low in diversity but high in abundance; and include a number of species which have maintained strong population levels whilst declines have occurred elsewhere. Counting the same dozen or so species morning after morning can at times seem monotonous but the south to easterly winds which bring the rare birds can also provide some real moth surprises. Previous finds include a first record for the British Isles – *Phyllonorycter apparella* – and a number of species which are either rarely recorded in the UK or massively north of their known range, e.g. Scarce Brindle *Apamea lateritia*; Water Ermine *Spilosoma urticae*.

A highlight of August was the finding of two Convolvulus Hawk-moths *Agrius convolvuli* sharing an Actinic trap. These were taken by my neighbour, Pat Thomson (OK, everyone is a neighbour on an island of just 768 hectares). Pat teaches at the Fair Isle primary school and of course moths, along with the wider environment, play a prominent part in the natural history and science curriculum. We have several youngsters who can confidently name all the commonly occurring species.

Pat has been on a roll recently. One of her latest captures is what appears to be a Triangle Plume *Platyptilia gonadactyla*, the third plume species to be recorded on Fair Isle. The two others are resident though one of them, Twin-spot Plume *Stenoptilia bipunctidactyla*, is a recent colonist. We acknowledge the importance of verification and in making data nationally available. All unusual, unexpected or out of range captures are passed through Dr Mark Young for verification; and a complete set of data, going back to 1987, is lodged with Butterfly Conservation. A full list of Fair Isle moths can be found on the Fair Isle Bird Observatory website fairislebirdobs.co.uk

Nick J Riddiford
**Lockdown mothing in Fife**

As with just about everybody my ability to do fieldwork for moths was subject to severe restrictions for an extended period this year. I am fortunate to have a productive garden for moths here in Fife with nearly 500 species recorded in the last three years, and to be able to walk directly out into areas with reasonable habitat. Plus, within a five-mile radius of home, there is a Scottish Wildlife Trust reserve, lowland bog, and some good coastal habitat to name but the highlights. Therefore, from the start of lockdown to mid-July it was a case of adjusting my plans and focussing on what was available, and not that which was tantalisingly out of reach.

The first thing I did was trial running a second light trap in the garden, I have only ever trapped in the back garden which, given that it backs directly on to relatively undisturbed scrub and woodland with no light pollution, was the logical and obvious thing to do. The front garden faces on to a housing estate and is street-lit. Yet to my surprise a trap in the front garden also yielded moths, not as many as the back garden overall but on any given night would boost the species range significantly and often produced some of the best moths of the night. It just goes to show that its worthwhile experimenting with trap positions at any location.

I also spent some time experimenting with various pheromone lures as an additional attraction. It is well known that many of the commercially available lures can be attractive to species other than which they were synthesized for. I typically would leave lures out in specially designed traps overnight, one in the front and one in the back garden trying different lures to see what might be successful. Most of the time I had negative results but the *Grapholita funebrana* lure was particularly successful attracting not just the target species but also *Grapholita tenebrosana* and *Pammene argyrana*, all of which were species previously unrecorded in Fife. *Grapholita funebrana* was previously known in Scotland from just a couple of records in the southwest but my lure attracted four individuals and I suspect that it is much more widespread in Scotland than current records would suggest.

Warm nights in the garden in late May produced some unprecedented high catches and diversity of species for the time of year in the light traps and new species for the garden began to appear with regularity. The highlight among the macro-moths was Figure of Eighty and among the micros *Psychoides filicivora*, *Phyllonorcyter viminiella*, *Mompha lacteella* and *Phalonidia manniana* were all notable but the biggest surprise was *Coleophora frischella*, a species not previously recorded before in Scotland.

By and large above average night-time temperatures persisted through June too and peaked with a bumper catch of 104 species coinciding nicely with my 40th birthday morning, the best present I could probably have wished to unwrap. More exciting micros in the garden during the month included *Argyresthia cupressella*, an adventive species spreading north and new to Fife as well as *Metzneria lappella*, *Scrobipalpa atriplicella* and *Elachista subocellea* all new for the county. But the highlight was *Aethes beatricella* another new species for Scotland with seven individuals recorded across five nights suggesting that a population is well established locally. Such surprises among the macros...
are harder to come by but July Belle, Latticed Heath and Sallow Kitten were all new for the garden during the month and Buff Ermine and Clouded Brindle were good local records.

July may have seen the relaxation of travel restrictions and a shift in focus away from the garden as well as some unseasonably cooler nights at times but it is nonetheless peak mothing season and there were still some busy traps and exciting finds. *Caryocolum viscariella* was another new species for Fife and *Cydia fagiglandana* was a good local record having been recorded new to the county only a few days previously at another site. In terms of macros Barred Red, True Lover’s Knot and Triple-spotted Clay were all new species for the garden. There has been an inevitable drop off in August but at time of writing 400 species have been tallied in the garden this year with 60 of these not previously recorded, something that rather bizarrely would not have happened without the pandemic.

Once travel restrictions relaxed enough to explore locally I spent time searching by day primarily but also leaving light traps out at night. It always surprises me how much in terms of significant finds are still to be found so close to home and this year was no exception. The scarce Butterbur-feeder *Epiblema turbidana* was netted on warm undercliff one fine evening, new to Fife. *Coleophora caespititiella* was also new to Fife at the local SWT reserve and subsequently found at other locations including my garden. And the delightful *Grapholita internana* was found by chance fluttering around gorse on a sunny afternoon, yet another addition to the county list.

The most productive hunting ground proved to be a lowland bog site formerly subjected to coal mining but now slowly naturally restoring. Access isn’t the easiest and as such I’ve never previously explored it much but, particularly by day, it can be full of moths and I found no less than six new species for Fife there this year with the rarest being *Eucosma parvulana* with only one previous Scottish record.

Finding new macros for the county list is not as easy as micros but later in the summer I was in a position to try trapping a coastal reedbed site for the first time and over two visits three macro species were added to the county list in the guise of Plain Pug, Southern Wainscot and Twin-spotted Wainscot, the icing on a rather good local cake this lockdown year. I managed to add 27 species to the Fife list in this period, 21 of which were within five miles of home which goes to show that new and exciting discoveries can be made right on your doorstep. Regardless of what the future may hold I will continue to pay close attention to my local area and hope to find yet more new and interesting species.

Nigel Voaden
VC85 Moth Recorder
Lochwood Moss – some welcome news!

An application to extend the industrial mining of peat at Lochwood Moss near Beattock until 2030 has been withdrawn by the applicant. The news came after it emerged that planning officers at Dumfries and Galloway Council had recommended the application be rejected on climate change related grounds.

Butterfly Conservation had submitted an objection to continued peat extraction at the site along with a host of other NGOs including Buglife, Plantlife and the RSPB. NatureScot (previously known as SNH) and SEPA had also expressed concerns about the application.

Leaving a decent depth of peat remaining after extraction is crucial to restoring a site to a functioning peat bog and extended extraction decisions can really make or break future restoration efforts. At Lochwood, like many other extraction sites, the desire was to leave just 0.5 metres of peat in situ for restoration, an amount that has been shown in scientific studies to be woefully inadequate.

Across Scotland several other similar applications for continued peat extraction for use in horticulture are currently working their way through the planning system. We hope that this recent news regarding Lochwood Moss is a signal of winds of change.

David Hill, Species on the Edge Project Development Officer
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Moth and Marsh Fritillary Monitoring

Monitoring, the subtle art of counting species scientifically!

Data collected from monitoring underpin our conservation interventions on the ground and the producing of novel science. This year has seen some exciting new developments on the monitoring front within Scotland, notably the development of rare moth monitoring and encouraging the expansion of the Marsh Fritillary network.

Within Butterfly Conservation’s science team, one of our current big jobs is to increase the amount of monitoring data we collect on rare species of moth. The reason for this push is to have the data to be able to better support conservation work for these species and to produce a rare moth population indicator, similar to the UK Butterfly Monitoring Scheme. Scotland is the ideal place to get started on monitoring rare moths, with the interesting array of species found on our doorstep. We’ve started small in 2020 focusing on developing monitoring methodologies for Mountain Burnet, Kentish Glory, *Choreutis diana* and *Ancylis tineana* so far. This has involved trialling methodologies to see what does and doesn’t work and has involved counting adults, larval spinning or egg batches. The idea is to find a method that is repeatable, enjoyable and as non-weather dependent as possible, which as you can imagine with Mountain Burnet was a challenge! In 2021 we will be looking to run a series of workshops on the selected species which are suitable for monitoring. The workshops will train interested folks on how to monitor the species and about their ecology too. We will also be gradually expanding the suite of moths we are trialing monitoring for.

Another important area of focus has been reviewing the monitoring of Marsh Fritillary over the summer. Scotland holds the most important population within the UK and one of the most important in Europe. Understanding how the population is faring is therefore one of our top priorities. Marsh Fritillary are monitored by counting the larval webs in August and September as it’s more reliable than counting the adults, with the added bonus of being less sunshine dependent!

The review found that we have a great network of sites set up for monitoring but that we need to ensure sites are walked annually and new sites set up. This will allow us to produce a Scottish population trend for the species, something that isn’t currently possible, and more importantly it will help underpin the delivery of our conservation work. We have therefore set ourselves the ambitious target of achieving monitoring at sites as displayed in the below map during the next few years. We’re aiming to get a number of existing sites that aren’t walked covered and new sites set up for monitoring across the geographic range of the butterfly, especially on the islands.
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In early August we ran two online workshops to discuss with folks on the west coast the ecology of the species and how we go about monitoring the species. There was a great turnout of 16 people from Mull, Islay, Bute, Tiree and mainland Argyll and one positive of online training was being able to speak to everyone at once. With the fantastic help of local volunteers in the area and the start of the Species on the Edge project shortly, we hope to strengthen and expand this network, to really start getting some good data.

If you’re interesting in helping with moth or Marsh Fritillary monitoring or would like more details on any of these please contact Patrick Cook pcook@butterfly-conservation.org

New Butterfly and/or Moth Recorder required for East Sutherland (VC107)

After a number of years of dedicated and excellent service Brigid Primrose is wishing to stand down as the county recorder for VC107 East Sutherland.

Brigid’s role requires the collation and verification of the county’s new butterfly and moth records to ensure the records are accurate and in a standard format. It is not necessary to be an expert and there is a great deal of help and support on hand from other VC butterfly and moth recorders in the Highlands and further afield.

The vice-county has very few resident recorders and similarly few visiting recorders therefore the volume of records is very low.

Although Brigid currently collates both butterfly and moth records for the vice-county the roles can easily be split and/or shared between a wee group.

If you are interested in taking over from Brigid as the butterfly and/or moth recorder or wish to find out more please contact Tom.

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VC 107 map