Butterfly Conservation

Saving butterflies, moths and our environment

HERTFORDSHIRE AND MIDDLESEX BRANCH

NEWSLETTER

ISSUE 65

Spring 2013

TABLE OF CONTENTS

Chairman's Notes - Andrew Wood

In a lot of ways 2012 was a year best forgotten but will 2013 be any better? That is a question we cannot, of course, answer as the weather is one of those unpredictable things that I suspect humans will never master. Experience suggest that March 12th is often the day when Spring in terms of butterfly sightings arrives, but 2013 seems to have got slightly ahead of that and the glorious weather of March 5th brought out many butterflies from hibernation across our area. It was a welcome sight after a winter of snow, hard frost and leaden grey days accompanied by a biting wind. With lengthening daylight hours it is unlikely that they will return from hibernation but will shelter and may be seen on the wing whenever there is some mildness in the air.

As a Branch, one of our strengths is in recording our butterflies and I urge you to send in details of anything you see to the website or to me as the Branch records collator. I'm sometimes asked if it is worth noting the common species and my answer is always yes. You may see something in an area that is not well recorded and what is common now may not be in the future. Just look at how the Wall Brown which was a common garden and countryside species in the early 1990s has virtually disappeared from inland south east England. We don't know why but data on its distribution may help us to find out why when looked at alongside climate and environmental data. What may seem trivial now may be a vital piece of the jigsaw in the future.

Try to get out into the countryside and local parks, gardens, churchyards and open spaces, join us on our walks and those of other wildlife organisations and whatever happens let hope that we can all enjoy our butterflies and moths during the coming year.

2012: A Disaster Year For UK Butterflies

The is the text of a BC press release issued just before Easter which was picked up by national radio and newspapers. Just in case you missed these….

Washout 2012 was the worst year for UK butterflies on record with 52 out of the 56 species monitored suffering declines, a scientific study today revealed.

Some of our rarest species such as the fritillaries bore the brunt of the second wettest year on record and now face the real threat of extinction in some parts of the UK. Last year's relentless rain and cold created disastrous conditions for summer-species in particular as they struggled to find food, shelter and mating opportunities; butterfly abundance plummeted to a record low as a result and 13 species suffered their worst year on record.

The critically endangered High Brown Fritillary fell by 46%, the vulnerable Marsh Fritillary was down 71% and the endangered Heath Fritillary saw its population plummet by 50% in comparison to 2011. Many of our most threatened butterflies were already in a state of long-term decline prior to the 2012 deluge. There are now real fears that these already struggling species could become extinct in some parts of the UK as a result of last year's wet weather.

Hairstreaks did particularly badly last year - the Black Hairstreak, one of the UK's rarest species, saw its population fall by 98%. The Green Hairstreak was down 68%, the White-letter Hairstreak fell by 72% and the Brown Hairstreak, slipped by 34%.

Many common species struggled. The Common Blue plummeted by 60%, the Brown Argus collapsed by 73% and the Large Skipper fell by 55%. The widespread 'Whites' including Green-Veined White and the two 'Cabbage Whites', Large White and Small White saw their populations tumble by more than 50%. The Orange-tip fell by 34%. The alarming slide of garden favourite the Small Tortoiseshell continued with its population slipping 37% from 2011 figures.

Data was gathered by the UK Butterfly Monitoring Scheme (UKBMS) jointly led by Butterfly Conservation and the Centre for Ecology & Hydrology (CEH). Only four species saw their populations increase. The grass-feeding Meadow Brown was up 21% and the Scotch Argus, which thrives in damp conditions, rose by 55%. Dr Tom Brereton, Head of Monitoring at Butterfly Conservation, said: "2012 was a catastrophic year for almost all of our butterflies, halting progress made through our conservation efforts in recent years. "Butterflies have proved before that given favourable conditions and the availability of suitable habitat they can recover, but with numbers in almost three-quarters of UK species at a historically low ebb any tangible recovery

will be more difficult than ever."

UKBMS has run since 1976 and involves thousands of volunteers collecting data every week throughout the summer from more than 1,000 sites across the UK.

CEH butterfly ecologist Dr Marc Botham said: "Despite the horrific weather in 2012 over 1,500 dedicated volunteers still managed to collect data from over a thousand sites across the UK. Their amazing efforts enable us to assess the impacts of wet summers on butterfly diversity."

Branch Members' Day, 16th March 2013

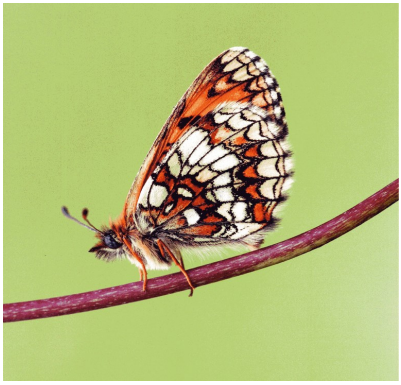
The 2013 members' Day proved to be a successful event. The morning dawned wet and windy and held down the attendance at the Bricketwood Common walk to 5 but, as the rain reduced, over 60 members came to Welwyn Civic Centre for the indoor meeting. Members were greeted at the door by the wonderfully detailed butterfly bedspread made by Jill Fox over 9 years. The two invited speakers gave interesting and contrasting talks, Matthew Oates speaking on 'Why People Love Butterflies' provoked some interesting post talk discussion. Tim Freed speaking on 'Moth and Butterfly surveying in London's Parks and Gardens' showed what a wide variety of interesting and rare lepidoptera can be found in the middle of our capital city.

Jill Fox with her butterfly bedspread

The poor summer of 2012 may well have reduced entries to the photographic competition but 71 photos provided excellent competition and from a selection of excellent and varied images the winners were:

- UK Butterfly - Miles Attenborough for Heath Fritillary, Hockley Wood, Essex.
- UK Moths – Rachel Piper for Poplar hawk-moth
- Behaviour – Ian Small for Green Underside and Adonis Blues mud puddling
- Non UK – Ian Small for Spanish Festoon and Spotted Fritillary equal
- Non Adult - Steve Kiln for Frangipani larva eating another one, St Lucia

Being in the large hall gave us plenty of room to mingle during breaks and enjoy Liz Goodyear's cakes. We are also grateful to Rachel Piper for running a sales stall of her own photos and products whose proceedings she donated to the branch.



Above: Miles Attenborough's winning Heath Fritillary photo.

Right: Steve Kiln's winning Frangipani larvae photo

Above: Rachel Piper's winning Poplar Hawkmoth photo

Below: Ian Small's winning photo of Green-underside and Adonis Blues

Below: Spotted Fritillary (left) and Spanish Festoon (right) - joint winning photos by Ian Small

Butterfly World - Mahlcolm Hull

Butterfly World in Noke Lane, Chiswell Green St Albans re-opened on 25 March, with opening hours each day of 10:00 - 17:00. There is a full programme of events (accessible via the link below) & lots of interest to see.

The Tropical Butterfly House has been having a bit of a makeover. Lots of new plants will provide fresh colour and much needed nectar for the butterflies to feed from. As always the tropical butterflies will be the stars of the show. Hundreds of pupae have been delivered, including new species of butterflies we have not seen at Butterfly World previously.

Throughout the winter months the leafcutter ants have kept the Butterfly World team company, and the colonies are continuing to expand. Due to the shortage of fresh green leaves over the winter, the ants were given lots of seeds, nuts and dried fruit. Butterfly World Lepidopterist Louise Hawkins has been busy redesigning the insect tanks in the Insect Study Centre, providing more attractive displays for insects and visitors alike. A 'Caterpillar Corner', has been introduced, where visitors will be able to see different varieties of caterpillars in tanks, with information and facts to educate us all. Along with others such as cockroaches and stick insects, BWP (Butterfly World Project) are excited to welcome new white footed land snails and three new species of praying mantis. They are also awaiting the arrival of “very exciting beetles called the Goliaths”.

Funding for the construction of the tropical dome continues to be elusive. Although BWP remain committed to the dome as a long term goal, they now say there is no prospect of it being built “for the forseeable future”. Instead their intention is to emphasise the conservation of UK species and new display boards are to be installed around the site. The innovative landscape management and planting regime on the site have now encouraged 24 UK species onto the site. This is above average for the St Albans area and particularly impressive as the whole site was just bare earth four years ago. The transect is walked each week by either Mandy Floyd or myself. Key features from our recent recording there are:-

- Significant increase in long grassland butterflies
- General overall 10% decline in numbers, linked to weather. Compares to average decline over all transects walked in Herts & Middx last year of 40%.
- Big decline in Common Blues in 2012, but still recorded the highest totals in our two counties
- Numbers of Nymphalids were generally up on 2011. Butterfly World is probably doing better than many sites due to abundance of nectar sources, with Red Admirals and Small Tortoiseshell in particular both showing very good numbers. Painted Ladies were well down, but this site recorded the highest totals for transects in out Branch area for the third year running.. The shortage of breeding sites remains an issue, but the team of volunteer gardners plan to address this by planting more nettles in sunny spots.
- Small Blue – Nine seen last year in two broods, with a confirmed sighting of egg laying. The foodplant (Kidney Vetch) is also doing very well. This is the best site for Small Blue in our Branch area and the biggest success story at BWP so far.
- Six-spot Burnet Moth continues to thrive, with total numbers of this one species outnumbering all the butterflies recorded on last years transect.

If you've not yet visited, do make the effort this year. If you've been already, do come back to see how the site has developed. If you'd like a guided tour round, why not join us for the next Branch field trip on Sunday 16 June when the Small Blue should be flying.

Until 1st May 2013 there is a reduced entrance price of £5 for all visitors, Disabled visitors and Carer £4 each

Under 3's free. Prices from 1st May - Adults £7.50; Concessions £6.50 Children 3-16 £5.50

http://www.butterflyworldproject.com/

Butterfly Conservation 2020 Vision - Andrew Wood

This plan for how BC develops in the future was published in 2011 and activity is beginning to ramp up as we look at how we develop in the coming years against a background of increasing threats to butterflies and moths and a decreasing amount of money available from grant-giving bodies. As a Branch we will be actively contributing to development of this vision and we would welcome any comments or ideas you have about how BC can grow and adapt and how that might affect us at our Branch level. Details of how to contact me are on the back cover.

BC 2020 Vision -Strategic aims:

1. Halt and reverse the decline of threatened species of butterflies and moths in the UK.
2. Increase the numbers of butterflies and moths across the wider landscape.
3. Maintain efficient, scientifically robust recording and monitoring schemes making the best use of modern technology and continuing to influence government and wider decision-making on the environment for the benefit of all species.
4. Raise widespread awareness amongst the public and especially young people, about the role of butterflies and moths in contributing to a healthyenvironment and the need to conserve them now and in the future.
5. Play a major role in establishing sustainable resourcing for Butterfly Conservation Europe to fulfil a long-term role of conserving butterflies and moths across Europe.
6. Use our influence to support wider initiatives to conserve a healthy environment and ensure a secure future for both wildlife and people.
7. Significantly expand our member and supporter base to generate sustainable funds and give Butterfly Conservation a stronger voice at national and local levels. Our aspiration: 100,000 members/supporters.

8. Develop our volunteer, Branch and external networks so that they contribute significantly to all the above outcomes as well as addressing local needs.

9. Secure the substantial increase in funding and other resources needed to sustain our work in the long term. Our aspiration: £10 million p.a. matched by Volunteer effort equivalent to £20million p.a

Late for the Count by Steve Dudley

What a terrible summer 2012 was, I am sure it must have been difficult to get a true count of butterflies for the annual butterfly survey, as in my garden in Welwyn Garden City it took a while for any butterflies to appear.

First to appear were Small- and Large White butterflies at the beginning of June followed by 3 Gatekeeper butterflies feeding on Inula hookeri at the beginning of July. In mid-July there were more Small Whites that appeared, and by the end of July the Gatekeepers had disappeared.

I joined Butterfly Conservation in the last week of July, my membership information and butterfly survey form arrived at the beginning of August. I did do the allotted time for the survey, but on the last day of the count, no butterflies were to be seen not even any whites.

At the beginning of August the only butterflies to be seen were whites. The second week of August 3 or 4 Peacock butterflies appeared but had gone by the end of August. From the last week of August right through September 3 Small Tortoiseshells and about 7 or 8 Red Admirals were seen regularly feeding mostly on Buddleja and Verbena bonariensis and Rudbeckia. For a couple of weeks at the beginning of September the odd comma butterfly appeared.

With the weather and butterflies being unpredictable in recent years I wonder whether it would be worth doing the survey over 2 periods – I suggest the first period should run during July and then run the survey again during the period of mid-August to mid-September, so you

would hopefully get the butterflies that did not appear on the first count. I just wondered what other members think and whether you had the same experience this year with the butterflies appearing late?

Not Just House Moths by Andrew Wood

"Invasion of the clothes eaters: As moths wreck Britain's homes like never before, what you can do to stop them" was a headline in the Daily Mail in 2011 and it was just one of many portraying moths as one of the most destructive forces nature can unleash on us. It seems that there may be more of the clothes moths species found in houses than was the case a while back but there are also several species of moth, some welcome some not, that can also be found in our houses probably much more commonly than clothes moths.

Clothes moths are actually several species of case bearing moths whose caterpillars create a protective case of debris from around where they are feeding. Their natural habitat is birds nests where they eat bits of skin and feather and dead chicks. It's thought that they have entered our houses from nests in roofs and moved down pipe work into rooms, particularly bedrooms where dry warm drawers full of natural fibres offer a secure and comfortable breeding area. The adults are not often seen but are small golden brown moths that are happy to run rather than fly, so a drawer is no problem for them. Anecdotal evidence says they are common but as moth recorders trap outside, and dare I say it, rarely have the designer clothes that papers like the Mail highlights, they are not often formally recorded. Added to which someone with an infestation is not likely to want to broadcast the news.

Incidentally, carpet moths have nothing to do with carpets, being named in the 18th century for their supposed resemblance to the carpet patterns, do not live indoors and pose no threat to our well-being. Holes in carpets are most likely to be caused by the "woolly bear" larvae of carpet beetles whose adults can be seen indoors and out looking like small white spotted black ladybirds.

In the early part of the year you may often see a very small (5mm long) rather pointed black moth with white stripes around windows. This is Mompha subbistrigella and they enter the house only to

hibernate, but are often found dead when they woke up but could not escape. Their larvae eat willowherbs.

The Indian Meal Moth, does not eat curry and is not from India but is actually from North America where it feeds on maize flour (i.e. Indian meal). It has become a common pest of stored grain such as pet food and occasionally in the kitchen flour. I worked with someone who one Sunday morning came down to find a couple of dozen of its caterpillars crawling up the kitchen wall and traced their home to a badly sealed pack of flour. The moth can also breed on detritus under floor boards and you may not even know of its presence until work is done in the house that needs them lifting when adults may fly out.

We have two common species of House Moth that can found flying freely outside but are also very happy living indoors. They are the Brown House Moth and the White-shouldered House moth. They can create colonies feeding on dust, crumbs or any small bits of detritus around the home. For instance a while ago we had a bread bin that seemed designed to trap crumbs that were very difficult to clear out and sure enough we got a small colony of the White shouldered House Moth there. A new bread bin sorted that one out. They are both harmless but not really welcome guests.

White-shouldered House moth
Photo © Andrew Wood

Moth Night 2012 at Stanmore Country Park, by John Hollingdale

This is a rather belated report of a moth evening on 11th August 2012.

Several of us gathered around the mercury vapour lamp hung over a white sheet located beside a grove of Aspen trees. This was in the hope that an Aspen specialist might appear; it didn't.

The evening was quite lively and we ended up with 23 macro species

and 19 micros. Of the macros Black Arches, Iron Prominent and Swallowtail were the most interesting. All the others were common moths in Harrow.

Evergestis extimalis
Photo © Jack Levene

The micros included four new records for Stanmore Country Park all of which were identified only by genitalia examination. My thanks must go here to Colin Plant, the examiner, who must have the patience of Job. One of these Evergestis extimalis has very few records in Hertfordshire although it has also appeared in my garden. It appears that it only ventures occasionally out of the North London area.

If anyone would like the full list please contact me.

Winter 2013 Stanmore Country Park by John Hollingdale

I intended to do a regular monthly moth session at the Country Park this year and concentrate more on the micro moths that had before been mainly ignored.

We started on January 4th with a UV bulb over a white sheet. We didn't see anything for the first hour and a half and then one moth appeared: a Spring Usher. The only other insect to arrive was a seven spot ladybird. However the best laid plans etc. etc. and the weather has been in no mood to co-operate and no further sessions have been run so far; very frustrating.

On February 5th at a Harrow Natural History Soc. meeting a member appeared with a moth in a pot. What shall she do with it? It is an Angle Shades and she was advised to put it out under cover until warm weather arrived. I remember seeing this species before in January in the glass walkway over Tower Bridge. Red Admirals have appeared in gardens in Harrow this year but we haven't seen any so far at the Country Park.

We have been working hard this winter to create more opportunities for ground flora to return by removing some invasive birch and joining up a couple of open areas. The vast bulk of the effort has come

from The Conservation Volunteers (BTCV re-branded). The idea is to eventually join up all the open spaces to create flight paths and sunny niches for the resident Lepidoptera. We are hoping to get another grant for this work in coming winters.

Brown Hairstreak – Four Field trips & a Workshop by Malcolm Hull, Brown Hairstreak Species Co-coordinator

In Issue 64, Andrew Wood and I described a number of recent reports of Brown Hairstreak sightings near Stevenage and Welwyn Garden City. Although plausible, none of these was accompanied by a photograph and so could not be accepted as definite records, particularly as his species is generally regarded as locally extinct in our two counties. The most reliable way to identify if it is present is to search for its eggs during the winter months. The bright white eggs are typically laid on Blackthorn and can be easily identified against the dark stems.

To try and confirm if it is present four egg hunts were conducted near to the suspected sightings.

18 November – Blackthorn/Rolls Wood, Welwyn GC – Despite its name, there is no Blackthorn in this wood, although there is a reasonable amount of fair/good quality Blackthorn in surrounding hedges and on the far side of Birchall Lane. Six of us searched for two hours, but we did not find any eggs.

27 January, Norton Green, Stevenage – Again we found good quality Blackthorn, suckering along a woodland ride. Another hedge searched nearby had been heavily flailed, which is likely to have removed any eggs laid on it. Again 6 people searched for nearly 2 hours with no positive results. I examined a poor quality photograph of a hairstreak which had been taken last summer. The butterfly was very worn, had lost many scales and looked brown all over, with no obvious identification marks.

10 February, Cole Green Tip, Birchall Lane, Welwyn GC – This reclaimed landfill site opposite Blackthorn Wood contains some extensive areas of Blackthorn. The site is also lightly grazed allowing it to support colonies of Small Heath, Brown Argus, Common Blue and Small Copper. Unfortunately the horses on site seemed to have a

particular liking for Blackthorn and large areas of the shrub had been heavily chewed. I'm unsure why horses are attracted to prickly wood, but the effect of their heavy grazing would be to deter the butterfly from laying eggs on damaged plants and possibly to remove eggs which had been laid. The cold weather reduced the number of egg hunters to two and despite an hour searching areas of less chewed Blackthorn, no eggs were found.

23 February – Ruishton Village, near Taunton – At last, success, I found five Brown Hairstreak eggs today. However I am in Somerset, attending a national Brown Hairstreak workshop to devise a new standard methodology for recording Brown Hairstreak populations. Like other elusive hairstreaks, normal transects aren't the best way to record this species. So a new system based on timed winter egg counts along a standard egg transect route is being devised. This will help monitor the strength of existing colonies, but wont be much use for Branches like ours who are still trying to find the species. It was good to meet so many other Brown Hairstreak enthusiasts and hear that the species is doing well in most of its known colonies. A new website has been set up to share all types of information about Brown Hairstreaks and anyone with internet access can keep up with the latest news at the Official Brown Hairstreak BlogSpot, http://betulae.blogspot.co.uk.

25 February – Panshanger Airfield, Welwyn GC – This site is about one mile north of Blackthorn Wood and was the location for two Brown Hairstreak reported sightings in 2010. It is a private site, with masses of Blackthorn, a good deal of which is not managed or grazed and of particularly high quality. Eight people searched for two hours and were successful in finding a pair of eggs belonging to a Blue bordered carpet moth, but sadly no Brown Hairstreak. The extent of suitable Blackthorn is so great that we managed to search less than half the area. Access to this private site is by permission only and was arranged courtesy of the North

London Flying Club. It looked to be an interesting unimproved grassland site with rabbit grazing and would be well worth a summer visit. I am now an honorary member of the flying club, so anyone who would like to visit on another occasion, please contact Malcolm Hull (details on back cover). Access is on Mondays only (their non-flying day).

So what have we achieved? Egg hunting is usually a reliable method of identifying a Brown Hairstreak colony. So it seems unlikely that Brown Hairstreak is present at either Welwyn GC or Norton Green. But we cannot be sure. An experienced egg hunter from West Wales who regularly monitors several colonies by egg hunts told me that in some years he finds no eggs at all for one colony or other, but that it is back again a year or two later. So keep your eyes peeled for adult Brown Hairstreaks in late July/August and eggs on Blackthorn next winter. There are large areas of suitable Brown Hairstreak habitat in both Herts & Middx and I believe it is just a matter of time before this butterfly re-establishes itself in our area. Many thanks to all who helped with this years egg hunts, particularly Paul Why, whose enthusiasm kept us going.

Photographing Butterflies, by Ian Small

As many of you will know, I take a lot of pleasure in photographing butterflies. What is less well known is that this originated from a desire to take up photography as a hobby. That coincided with my moving to Cambridge from Scotland and, close to my new home, discovering for the first time in my life that there were such things as blue butterflies, or white ones with orange tips. I had no clue what they were called, or why they occurred where and when I was seeing them, but it instantly struck me that these would be the ideal focus for my new interest in photography.

As with any ‘hunt’ the first challenge is to know your quarry, and so this led me first to guide books, but also to Butterfly Conservation, through which my knowledge of butterflies, their habitats and conservation has continued to grow for the past 30-odd years. But photographing butterflies is always a challenge, even when you have done your research so that you know where and when to find them.

From a photographic perspective, there are particular challenges to photographing butterflies – they are small and they won't keep still for long. Recent advances in the availability and quality of digital cameras have made it much easier for anyone to capture a good butterfly photograph. I began in the days of slide film, which limited the number of photos you could take due to cost, and also meant you had to wait several days after finishing a roll of film to find out if any of your photos had come out or not. Digital cameras give instant feedback and you can try and try again to improve on any image you have just shot.

So what do you need to take a good photograph? The key ingredient is luck – being in the right place at the right time to find a fresh specimen that is happily nectaring, or basking, in a brightly-lit location. Due to the small size of most butterflies, the first thing you need is some magnification, to be able to zoom in on the insect without getting so close that you knock it off its perch. Modern compact digital cameras regularly have substantial magnification available. If you are using a digital SLR, then a lens of at least 100mm or greater would generally be recommended. If you are going to be doing a lot of this, and can afford it, then a dedicated macro lens offers clear advantages. These are designed to allow reproduction at up to life-size on the image sensor of the camera. Even compact digital cameras often have a macro setting which can be used, although in practice these often require the camera to be extremely close to the subject.

The problem with magnification in a camera is that it comes at a price – the higher the magnification, the shallower the 'depth of field' i.e. the amount of the image that is actually in focus at any one time. This can be particularly challenging if you have a butterfly with its wings open and you are looking from one side, which is why you will often see photographs looking straight down on a butterfly with its wings held flat – all the image will be in the same plane, and so even with a shallow depth of field it is possible to get it all in focus.

Photographers will often favour photographing the underwing of a roosting butterfly, as it is sitting with its wings closed and so again is essentially a 'flat' target (apart from the antennae !) so that a clear sharp image is possible, ideally with all the background out of focus, which naturally enhances the view of the butterfly.

Depth of field can be increased, by 'stopping down' a lens, i.e. narrowing the aperture (to a higher f-number). The result is that less light falls on the sensor, so you need bright conditions, or a longer exposure to do this successfully. The longer exposure may not be practical if the butterfly is moving at all or if your hands are not steady. Many cameras and SLR lenses now feature image stabilisation technology, which can be very helpful if conditions are not ideal. Taken to extremes, with very high magnification combined with a broad depth of field, it only becomes possible to get enough light through to the sensor if you add artificial light – a flash – to the scene. While some people do this (myself included), modern digital cameras offer alternate approaches, namely increasing the sensitivity of the sensor. This is done by increasing the ISO setting – the higher the value, the more sensitive the sensor and the less light is actually required to make an image. Some cameras allow you to set an automatic ISO, so that they will automatically adjust the sensitivity based on the other parameters you set (length of exposure and aperture). So, if you manually set the length of exposure to e.g. 1/100th of a second, and the aperture to f8, the ISO will automatically increase in dimmer conditions to allow you to take the photograph. This approach works fine so long as you don't want to make large prints from your photos, as the level of 'noise' in the photograph increases as the ISO increases.

When people first start taking photos of butterflies, they are often disappointed with the saturation, or depth of colour, in the images. Many common butterflies e.g. the Whites and the Blues, are remarkably reflective and so fool your camera with the amount of light they reflect back into the lens. If you camera allows you to adjust the exposure, then try setting it to under-expose the images by 1/3 or 2/3 of a stop. This substantially reduces the brightness reflecting from the butterfly's wings, giving a much more natural, intense colouring. Of course, with digital cameras, you are able to manipulate your images on a computer, so it may be possible to correct over-brightness 'after the event', but this is rarely as successful as capturing it correctly in the first place.

Don't be over-ambitious. When you see the opportunity to photograph a beautiful butterfly in the perfect setting, take an initial photograph

from further away while you can, rather than trying to creep all the way up on it instantly. I have lost count of the times when I didn't follow this advice, tried to get close enough for the perfect photo, only to have the butterfly be disturbed by a potential mate or another insect etc. and fly off before I was ready. Modern digital cameras allow you to zoom in on the computer afterwards, and crop your photo so that it looks as if you were right beside it all along, so don't waste great opportunities – you will learn that they come along remarkably infrequently.

Most people will use the auto-focus feature of their camera to try to capture a butterfly photo. However, unless you are using an expensive SLR which allows you to control this feature, this probably means that the autofocus point is at the centre of the image. That can mean that the middle of your butterfly is in focus, but the most important point – the eyes – remain out of focus. Whenever you are photographing any wildlife subject, it is always the eyes that will have the greatest impact, so having these sharply in focus will pretty much guarantee that your photo is good, even if some of the rest is out of focus. This often means that if you are using a compact digital camera, your best chances of success are where the overall image has a shallow depth of field, as discussed above, e.g. when the butterfly has its wings closed, or you are directly above your subject which is basking with its wings open. Most cameras will allow you to focus manually. This may seem daunting at first, but is well worth trying, not least because it puts you in control, rather than the person who programmed the software your camera runs on. The best technique for manual focus is to preset the focussing distance e.g. on a suitable leaf. Then rather than adjust the camera to get the butterfly in focus, you simply move yourself, slightly forwards or backwards until you have your image perfectly focussed.

One other reason for using manual focus is a stark reminder of the harsh world these insects live in. Many moths and some butterflies react to the ultrasound that digital SLRs use for their autofocus function! The result is that they are usually moving by the time your shutter fires. There must be some frequency overlap with that used by bats when they are hunting.

All of this may sound very complicated if you are new to this sport. All I have tried to do is give some pointers to some things you might

consider if you want to improve your technique. In the end, everybody develops their own preferences, based on a combination of any of the above, the particular camera and lenses you have and the type of photograph you like to take. The advent of digital photography has revolutionised this field, as it is no longer expensive to experiment. Bad photos can simply be deleted, but can help you to understand what actually works for you. And finally, don't be fooled into thinking that anybody takes good butterfly photographs all the time. The really good ones can be a very small percentage of all you attempt. Patience is a virtue in this hobby, but every time you look through a lens at one of these beautiful insects in its fabulous detail will bring a real thrill, and happy memories regardless of the resulting photo. What's more, it makes you more determined than ever that such wonders must be conserved for future generations to share and enjoy.

Butterfly Photography Workshop

Date – Saturday 11 May – 4 – 7pm

Location – Butterfly World, Noke Lane, St Albans

Leader - led by professional photographer, Ayub Amin. See his work at http://www.aminart.co.uk/

Suitable - for all abilities, apart from beginners. It will include photography in the tropical butterfly house followed by an introduction to and hands on digital editing techniques.

Cost - £10 per head. Numbers limited to a maximum of 20.

Cant make the date? - If you would like to go on the wait list for future workshop, let us know.

Beginners – Let us know f you would be interested in us organising a beginners course on butterfly photography.

Contact - Malcolm Hull malcolmhull@hertsmiddx-butterflies.org.uk Tel:01727 857893

Butterfly Conservation is Backing Calls for a Temporary Ban on Neonicotinoid Pesticides, by Malcolm Hull

For some time there has been concern that the widespread use of a certain types of pesticide may be causing health problems for bees and other pollinators such as butterflies and moths. Numbers of bees are declining and so are numbers of common butterflies and moths. In January a report by the European Food Safety Agency (EFSA) recommended that this pesticide should not be used on crops which are accessed by honey bees. Other European countries such as France have already greatly restricted its use and farming ministers are due to vote of EU wide restrictions shortly. Unfortunately the UK minister, Owen Patterson has said there is not enough evidence to support a ban and is more concerned at the harm a ban would cause to large pharmaceutical companies. The vote has already been delayed, increasing the risk of further harm to insect populations this year.

Butterfly Conservation scientists have reviewed the EFSA report & the following policy was adopted by BC on 21 February 2013.

Butterfly Conservation Policy Statement

After reviewing mounting data, Butterfly Conservation now believes the evidence is compelling enough to suggest that there is a serious problem with neonicotinoids and their effect on bees.

Butterfly Conservation is supporting calls for a temporary ban as a precaution until further trials can be conducted on the impact of neonicotinoids on bees and other wildlife, including moths and butterflies, living in and around arable fields.

Neonicotinoids are systemic insecticides entering every part of the target plant including the pollen and nectar harvested by bees.

Butterfly Conservation Chief Executive Dr Martin Warren explains: "The latest research findings show that neonicotinoid pesticides could be having a very serious effect on bees and other pollinators.

“Further studies are needed urgently but a temporary ban is a wise precaution to give us time to identify the risks more clearly.

“There is also a clear need to improve the testing of pesticides so that

the impact on wildlife is assessed fully before use."

What you can do

1. Read more about it at http://www.xerces.org/neonicotinoids-and-bees/
2. Sign the petition along with over 90,000 others at http://www.38degrees.org.uk/page/s/ban-the-pesticides-that-are-harming-our-bees#petition
3. Write to your local MP.

I did and after receiving a brush off the first time I wrote again. This is the latest response .

> Dear Mr Hull,
>
> Thank you for taking the time to reply to my email regarding the impact of neonicotinoids on bees and other wildlife; I am sorry that you were not entirely satisfied with my previous response.
>
> Given the evidence from Butterfly Conservation that you have raised in your email I have now written to the Parliamentary Under Secretary of State at Defra, Richard Benyon MP. I have made him aware of your concerns on this issue and have requested that he provide further information on the governments views on this issue and what considerations have been made for a temporary ban.
>
> Once I receive a response from the minister, I will of course forward a copy of this on to you. In the meantime, please do not hesitate to contact me if I can be of any further assistance.
>
> With best wishes,
>
> Anne Main, Member for St Albans

Spiders, Not Birds, May Drive Evolution of Some Butterflies

Thanks to John Murray for drawing my attention to this article - editor.

In the first behavioral study to directly test the defense mechanism of hairstreak butterflies, University of Florida (UF) lepidopterist Andrei

Sourakov found that the appearance of a false head -- a wing pattern found on hundreds of hairstreak butterflies worldwide -- was 100 percent effective against attacks from a jumping spider. The research published online March 8 in the Journal of Natural History shows small arthropods, rather than large vertebrate predators, may influence butterfly evolution.

"Everything we observe out there has been blamed on birds: aposematic coloration, mimicry and various defensive patterns like eyespots," said study author Andrei Sourakov, a collection coordinator at the Florida Museum of Natural History's McGuire Center for Lepidoptera and Biodiversity on the UF campus. "It's a big step in general and a big leap of faith to realize that a creature as tiny as a jumping spider, whose brain and life span are really small compared to birds, can actually be partially responsible for the great diversity of patterns that evolved out there among Lepidoptera and other insects."

Sourakov's behavioral experiments at the McGuire Center showed the Red-banded Hairstreak butterfly, *Calycopis cecrops*, whose spots and tail imitate a false head, successfully escaped all 16 attacks from the jumping spider, *Phidippus pulcherrimus.* When 11 other butterfly and moth species from seven different families were exposed to the jumping spider, they were unable to escape attack in every case. Sourakov videotaped the experiments and analyzed the results in slow motion. "From the video, you can see the spider is always very precise," Sourakov said. "In one video, the spider sees a moth that looks like a leaf and it walks very carefully around to the head and then jumps at the head region. The spider has an innate or acquired ability to distinguish the head region very well and it always attacks there to deliver its venom to the vital center to instantly paralyze the prey. Most importantly, the spider is very small, so sometimes its prey is 10 times larger."

The species of hairstreak butterfly and jumping spider used in the experiment are both common in the southeastern U.S., with similar relatives spread worldwide. In nature, the spider and hairstreak come into contact when the butterfly lands on leaves or flowers to rest and feed. Female red-banded hairstreak butterflies lay their eggs in leaf litters, which are often crawling with spiders.

David Wagner, a professor of ecology and evolutionary biology at the University of Connecticut who was not involved with the study, said the research shows scientists need to rethink what drives adaptive coloration patterns because the results suggest that "birds are only part of the story."

"I'm just so impressed with Andrei's experimental protocol and the fact that the jumping spider could not catch the hairstreak butterflies," Wagner said. "His empirical study will do much to cause us to rethink the vision and the visual acuity that certain invertebrate predators have when hunting their prey and how this has really molded how some organisms not only look like, but perhaps how they act, as well."

Unlike other butterflies, hairstreaks constantly move the hind wings that carry the false head pattern, a behavior that seems to increase in the presence of the spider, as if the butterfly is attracting attention to itself, Sourakov said. In museum collections, hairstreak specimens are frequently found with the false-head portion of the wings missing. During the experiments, the spider always attacked the butterfly's false head, thereby avoiding its vital organs.

"The false head hypothesis in hairstreaks has been in circulation for a long time because people always speculated that their tails move around in order to fake out the predators, but there was little experimental evidence," Sourakov said.

Sourakov said he hopes the study encourages behavioral ecologists to further test the idea that evolution in butterflies and moths may be driven by small invertebrate predators. "This clearly shows it's possible that many spectacular patterns that we find in smaller insects may be due to spider pressure rather than bird pressure," Sourakov said. "The butterfly escapes from the spider -- it's a fairytale story."

Full text:
http://www.sciencedaily.com/releases/2013/03/130312102547.htm

Journal Reference: Andrei Sourakov. 2013. Two heads are better than one: false head allows *Calycopis cecrops* (Lycaenidae) to escape predation by a Jumping Spider, *Phidippus pulcherrimus* (Salticidae). *Journal of Natural History*, 1 DOI: 10.1080/00222933.2012.759288

Monarch Butterfly Survey Indicates Lowest Numbers in 20 Years

The percentage of forest occupied by monarch butterflies in Mexico, used as an indicator of the number of butterflies that arrive to that country each winter, reached its lowest level in two decades. According to a survey carried out during the 2012-2013 winter season by the WWF -Telcel Alliance, and Mexico's National Commission of Protected Areas (CONAP), the nine hibernating colonies occupy a total area of 2.94 acres of forest—representing a 59% decrease from the 2011-2012 survey of 7.14 acres

The latest decrease in monarch butterflies is likely due to a decrease in the milkweed plant (Asclepias)—a primary food for monarchs—from herbicide use in the butterfly's reproductive and feeding grounds in the US, as well as extreme climate variations during the fall and summer affecting butterfly reproduction.

"Extreme climate fluctuations in the U.S. and Canada affect the survival and reproduction of butterflies," Omar Vidal, director general of WWF-Mexico, said. "The monarch's lifecycle depends on the climatic conditions in the places where they develop. Eggs, larvae and pupae develop more quickly in milder conditions. Temperatures above 95°F can be lethal for larvae, and eggs dry out in hot, arid conditions, causing a drastic decrease in hatch rate."

"The conservation of monarch butterflies is a responsibility shared by Mexico, the US and Canada. By protecting its sanctuaries and practically eliminating large-scale deforestation, Mexico is doing its part. It is necessary that the US and Canada also do their part and protect the habitat of the monarch in their countries," Vidal addedWWF -Telcel Alliance, for the last 10 years has supported conservation and sustainable management of natural resources in Mexico, along with the well-being of the people who depend on those resources. WWF projects include the development of sustainable business—such as tree nurseries, mushroom production modules and art craft production—and support for sustainable tourism.

Want the Latest Local Sightings Straight to Your Mobile Phone?

...then access our mobile-friendly web sightings page at:

http://www.hertsmiddx-butterflies.org.uk/mobile_sightings.html

..**or to keep in touch with the Branch via Facebook:**

http://www.facebook.com/ButterflyConservationHertsMiddlesex

The national society is also on Twitter:

http://twitter.com/savebutterflies

Greenwings Support for Purple Emperor Work

Many of you will be aware of the extensive work that Liz Goodyear and Andrew Middleton from our Branch have done together researching the habits and current distribution of the Purple Emperor. That project is continuing this year in Suffolk, having received support from Greenwings, the wildlife holiday company, who have extensive links with BC's Suffolk Branch, and who donate 10% of their profits to BC. A leaflet providing details of their holidays is included with this newsletter.

Welcome to New Members

The following new members have joined the Branch since last Summer: Mr P Smith, West Drayton; Mr & Mrs H Vora, Perivale; Miss R Lewis, London E3; Mr & Mrs P D McGovern, Watford; Miss F Roat, London NW6; Mr K Stewart, London N4; Miss J M Kelly, Chorleywood; Mr S Dudley, Welwyn Garden City; Mr & Mrs P D Herridge, Watford; Mrs P Knapp, Shepperton; Mrs P McQueen, Royston; Dr Thomson & Mr Dowman, Hertford; Mrs J F Aldren, London W4; Mr & Mrs C J Fleming, Bengeo; Mr M S Hooper, St. Ippolyts; Dr S Jupp, Hackney; Mr Watson & Miss Forrest, Feltham; Mr & Mrs Creswick-Gough, St. Albans; Mr P Feakin, Finchley; Mr J A Goddard, Isleworth; Mr P W Lane, Northolt; Mrs P A Hill, Twickenham; Mrs C Brasenall, Hemel Hempstead; Mr B Dean, Brentford; Mrs J M Magromallis, Stanmore; Mr J Sheeter, Ashwell; Ms A Kypriotis, London N20; Miss A Radley & Mr D Burt, Ware; Mrs J & Miss S Tash, London N3; Mrs M & Mr D

Coath, Hitchin; Mrs J A Jones, Winchmore Hill; Ms E McIntosh & Mr D Medle, Hitchin; Miss R Regan, Feltham.

Neighbouring Branch AGM and Guest Speaker

Our neighbours in Cambs. & Essex Branch are holding their AGM on 8th May at the Six Bells Public House, Fulbourn, Cambs (7.30pm to 9.45pm). Their guest speaker will be Professor Paul Brakefield, Professor of Zoology and Director of the Cambridge University Museum of Zoology, who will talk on 'Eyespots and scents in butterflies and moths: survival and courtship.' The speaker will explore how the wing patterns of butterflies and moths, especially eye-like markings, help them to evade their predators. We also now understand much about how these 'eyespots' are laid down on the wings before the butterfly emerges. More recent work on the diversity of the scents produced from the wings of male butterflies during courtship will be mentioned too.

All welcome. Members free; non-members £3.

Copy Deadline for the Autumn Newsletter will be

10 September 2013

NB it helps the editor if you can submit an electronic copy of your article (but don't worry if you can't). Files can be sent by e-mail to ian-small@virginmedia.com or send an article by post - address on back cover

I look forward to hearing of all your exciting butterfly or moth observations and anecdotes from what we all hope will be an excellent year for all our Lepidoptera and other wildlife.

Committee Members

Chairman and Records Collator: Andrew Wood
93 Bengeo Street, Hertford, Herts. SG14 3EZ..... (01992) 503571
zoothorn@ntlworld.com

Vice-Chairman & Membership Secretary: Margaret Noakes
Old Church Cottage, Chapel Lane, Long Marston, Herts HP23 4QT..... (01296) 660072

Branch Organiser: Liz Goodyear
7 Chestnut Avenue, Ware, Herts., SG12 7JE ..... (01920) 487066
elizabethgoodyear@talk21.com

Treasurer: John Hollingdale
36 Southfield Park, North Harrow, Middx. HA2 6HE..... (020) 8863 2077
hollhu@yahoo.co.uk

Committee Secretary: Margaret Huitson
36 Southfield Park, North Harrow, Middx. HA2 6HE..... (020) 8863 2077
hollhu@yahoo.co.uk

Newsletter Editor: Ian Small
59 Penn Way, Letchworth, Herts. SG6 2SH..... (01462) 677654
ian-small@virginmedia.com

Moth Officer: John Murray
Field End, Marshalls Heath, Wheathampstead, Herts. AL4 8HS..... (01582) 833544
J.B.Murray@open.ac.uk

Malcolm Hull
11 Abbey View Road, St. Albans, Herts. AL3 4QL ..... (01727) 857893
malcolmhull@ntlworld.com

Field Trip Officer: Nigel Agar
34 Oakfield Avenue, Hitchin, Herts. SG4 9JB ..... (01462) 459870
nigel.agar@hertscc.gov.uk

Millhoppers Reserve Manager: Jez Perkins
43 Kingsley Walk, Tring, Herts.HP23 5DR 07967 832627
jez.perkins@woodlandburialparks.co.uk

The magazine is produced by the Hertfordshire and Middlesex branch of Butterfly Conservation (Company limited by guarantee), registered in England (2206468). Registered Office:Manor Yard, East Lulworth, Wareham, Dorset BH20 5QP. Butterfly Conservation is a charity registered in England & Wales (254937) and in Scotland (SCO39268).

Branch website: http://www.hertsmiddx-butterflies.org.uk/