

Re: Pete Eeles

by Pete Eeles, 10-Feb-16 05:26 PM GMT

Thanks all – as you know Brian, since I'll be out of the country, I'll have to postpone my talk for now 😞

Back to Pamber

On a brighter note, I spent Sunday morning showing Matthew Oates the White Admiral larvae I've been monitoring, and I think between Padfield, Bugboy and myself, we're starting to build up quite an interesting picture of this species! Unfortunately, Sunday was (relatively) the "calm after the storm" and it was still fairly breezy, so I didn't manage to get a single photo worth keeping; Matthew did a lot better than me on this front! At peak, I was monitoring 26 larvae. They are now down to 5 since 4 have been lost due to the works going on in the forest which, to be frank, is my own fault since I was told that there would be habitat management in my study area! Having said that, I know that this management is why Pamber is one of the best forests in the country for White Admiral!

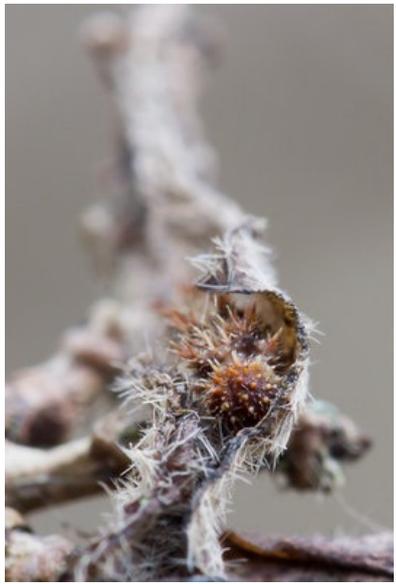
Anyway – I took the decision to return today to get photos of the remaining larvae (below). Despite a good search, by both myself and Matthew, no additional hibernacula (with one possible exception) have been found. In fact, the honeysuckle looks pretty barren when it comes to anything but new shoots; the vast majority of last year's leaves have been blown away.



Larva 5a



Larva 5b - 1



Larva 5b - 1 (with a face that only a mother could love)



Larva 5b - 2 (in silhouette)



Larva 6

Cheers,

- Pete

Re: Pete Eeles

by bugboy, 10-Feb-16 09:31 PM GMT

Nice pictures Pete, its interesting how exposed the often are even when they have somewhere to hide away.

Re: Pete Eeles

by Wurzel, 10-Feb-16 10:46 PM GMT

It all looks so fragile it's a wonder sometimes that any survive 😊 Interesting stuff Pete looking forward to more.

Have a goodun

Wurzel

Re: Pete Eeles

by Pete Eeles, 11-Mar-16 08:12 PM GMT

Thanks chaps!

A Postcard from Mexico

I've been working in Mexico City this week and, thanks to a cancelled meeting, had yesterday free – so decided to take a punt, hire a car, and drive to the Monarch reserves some 140 miles from the hotel. The weather had been extremely stormy and cold from Tuesday night, and I'd been keeping a close eye on the weather reports. Even though the forecast was for cold weather, I still couldn't miss the opportunity to see the spectacle of millions of Monarchs, even if they weren't likely to be flying in any numbers.

Driving in Mexico City isn't for the faint-hearted, but I managed to escape the city (eventually!) and get onto route 15, heading west toward Zitacuaro, from where I'd drive through San Felipe, then Ocampo, then up to El Rosario reserve, which holds the largest populations. The drive along route 15 was interesting to say the least, with more police cars than public, and plenty of guns on show. Fortunately, I didn't come across any banditos 😊 Although I did see a few Mexicans that definitely fitted the stereotype, sombrero and all.

Now – if you think you're having a bad day, then this was mine, and it might make you feel a little better 😊 As I neared more rural areas just outside Zitacuaro, I was met with sleet, snow and hailstorms! Not quite the Mexican weather I was expecting. Around 20 miles from the reserve, just before you get into Zitacuaro, the road was blocked by numerous trees that had been blown down in the storms. Despite several "crews" working with axes and saws, I had only moved 100 feet in 4 hours. With time running out, I had no choice but to turn around and drive back to the city. This was my view the whole time:



Today I received a text from Mark Colvin – pointing me at this article: <http://www.learner.org/jnorth/monarch/spring2016/08/monarch-butterfly-migration031116.html>

Quite depressing reading and, to be frank, I'm somewhat-relieved that I didn't get to see such a potentially-tragic sight. And it certainly put my own disappointment into perspective. I hope the Monarchs are able to recover and make it north.

Anyway, I've vowed to return the next time I end up in this part of the world during our winter!

Cheers,

– Pete

Re: Pete Eeles

by David M, 11-Mar-16 08:47 PM GMT

Depressing stuff, Pete. I admire your fortitude in trying to get to the location and such a shame you weren't rewarded.

The link makes for awful reading. Seeing these beautiful creatures frozen like that makes one wonder how they can survive, but as ever, they DO survive, and all it might take is one particularly benign winter to restore their numbers to a more normal level.

Re: Pete Eeles

by Goldie M, 12-Mar-16 12:21 PM GMT

Oh Pete, so sorry you didn't make it, 😞 I hope that some of the Butterflies did, I'll be watching now for further information about them, so sad. Goldie 😞

Re: Pete Eeles

by Wurzel, 12-Mar-16 10:35 PM GMT

Sorry you didn't get to see the Monarchs Pete 😞 Hopefully they'll bounce back 😊

Have a goodun

Wurzel

Re: Pete Eeles

by Pete Eeles, 20-Mar-16 03:14 PM GMT

Thanks David, Goldie, Wurzel!

Home Doings

Glad to be back home and had an enjoyable Thursday (17th) morning in the company of Andy Bolton, looking for Purple Hairstreak eggs on the south-facing branches of oaks at his uncle's farm in Axmansford. After a slow start, we managed to notch up 11 eggs in total over the course of an hour or so, which have now been tagged and will be monitored through the season. We also found one that had been predated, with a gaping hole next to the micropyle. We also saw half a dozen Brimstone while there, and a Small Tortoiseshell sunning itself at Andy's house. I then popped over to Pamber Forest, where the White Admiral larvae have yet to move from their hibernacula. However, I did see a Comma out and about, bringing my current tally for the year to 3 species - all seen today!



Andy in action!



Predated Purple Hairstreak ovum



Brimstone male soaking up the sun

Cheers,

– Pete

Re: Pete Eeles

by Padfield, 20-Mar-16 06:18 PM GMT

Glad you're finding plenty of purple hairstreak eggs, Pete. These have been increasingly thin on the ground out here in recent years.

Just out of interest, why do you say that hole is predation rather than parasitism? I'm not questioning your judgment 😊 – it just means I've been getting that wrong!

Guy

Re: Pete Eeles

by Pete Eeles, 20-Mar-16 06:29 PM GMT

To be honest, Guy, I would need to research the distinction between predator, parasite and parasitoid (no doubt!). My minimal research seems to suggest that it depends on the number of victims – 1 or many; since I don't know what caused this, it's hard to say! If you come up with any good references, I'd be interested in knowing.

Cheers,

– Pete

Re: Pete Eeles

by Padfield, 20-Mar-16 08:36 PM GMT

I would have said it depends on whether something came out of that hole or went into it! 😊 For some reason, when I've found these in the past I've assumed the egg had been parasitised and something had come out. I found quite a lot in 2010 in particular – the bumper *quercus* year that preceded the more recent decline. Here's one of them – quite similar to yours, except a lousy photo!!



I, too, would be interested to know the truth about these holes.

Guy

Re: Pete Eeles

by bugboy, 20-Mar-16 10:25 PM GMT

I believe the basic difference between a Parasite and a parasitoid is that a parasite doesn't kill its host eg. tapeworms, fleas etc. whereas Parasitoids do ultimately kill the host in order to complete their life cycle.

I'm not 100% sure where 'predator' fits in but my gut feeling is that it is a broader term that could include both the other two terms.

Re: Pete Eeles

by Pete Eeles, 01-Apr-16 07:16 PM GMT

The Dawn of a New Spring

With spring a springing, I checked up on a couple of Large Skipper larvae I'm following through the winter (in captivity), and both are doing absolutely fine. Larva 1 had only just emerged from its hibernaculum, but larva 2 had already emerged, created a new feeding tube, and was avidly feeding away (well, after I sat and waited for it to appear from the tube after ... 3 hours!). As ever, sights I've never seen before, so extremely rewarding.



Larva 1 hibernaculum



Larva 1



Larva 2

Cheers,

- Pete

Re: Pete Eeles

by Wurzel, 03-Apr-16 04:57 PM GMT

Glad you got the reward you were definitely due it after a three hour wait!

Have a goodun

Wurzel

Re: Pete Eeles

by Pete Eeles, 24-Apr-16 09:42 PM GMT

Thanks Wurzel! It's been a while since I posted anything of my own, so thought I'd provide a brief update.

First off, there is a water catchment area about 50 yards from my house (as the crow flies) and every year the council clears it of the grasses that tend to clog up the drainage system. And so, every year, I gather up whatever stems look promising since this tiny area is home to both Small and Essex Skippers (as well as Common Blue, Gatekeeper and Meadow Brown). I've put the few stems containing Small Skipper larval cocoons back where I found them, but was pleased to see that one batch were still eggs - and therefore Essex Skipper, with the larvae ready to hatch out! I would have loved to have reared them on, but am having to restrict what I do this year given the limited time I have available. So here's my parting shot before they, too, were released back.



Essex Skipper ova

I was also in Houston, Texas, last week which was pretty uninteresting, apart from the deluge on Monday 18th when over 14 inches of rain fell in 24 hours, breaking all records. Various parts of Houston were flooded out and several people lost their lives. All very tragic. I took some solace in the butterfly exhibit at the Houston Museum of Natural Sciences - a giant dome with at least 25 species flying, including the Zebra (called the Mosaic there), *Colobura dirce*, which is on the British list!



Zebra



Zebra



Blue Morpho



Great Mormon (female)

And finally, I've been spending a fair amount of time in Scotland, and am back up again this week ... and am taking every opportunity to re-engage with the Chequered Skipper larvae I was following last year. I've been reading Neil Ravenscroft's PhD Thesis on this species, and have decided to refocus on validating some of his findings, illustrated with photographic evidence. All I can say is "watch this space"; a detailed report of my findings is already in the works and will be published after this year's Chequered Skipper flight period 😊

[Edit]And here's my first Holly Blue of the season. Seen in my garden, yesterday – possibly on the ivy on which it fed as a larva!



Cheers,

- Pete

Re: Pete Eeles

by essexbuzzard, 24-Apr-16 10:35 PM GMT

Good luck with the caterpillar searching, Pete! Certainly some great images from Glasdrum last autumn at a time the rest of us never see it- it looks so different. The cats must take some finding, your patience deserves to be rewarded- hopefully with some images!

Re: Pete Eeles

by Goldie M, 25-Apr-16 01:54 PM GMT

The bad weather seems to have followed you from Mexico Pete 😊 Did you ever find out how the Monarch's survived the Snow Storm when you were there, ? I was reading that the logging that goes on there is causing the cold air in Winter to reach them so their not protected like they used to be. Goldie 😊

Re: Pete Eeles

by Pauline, 26-Apr-16 06:40 AM GMT

Really interesting shot of the Essex eggs Pete - it is a pity you don't have the time to rear them but perhaps another time.

Re: Pete Eeles

by Pete Eeles, 01-May-16 06:07 PM GMT

Thanks Mark - everything is going to plan ... it just takes a considerable amount of effort to monitor a species that is 495 miles from home 😊
Thanks Goldie - the news regarding the Monarchs appears mixed - some suggesting that locals are downplaying the impact in case it impacts tourism, for example.
Thanks Pauline - I thought I'd practice what I preach ... the butterflies have to come first.

Aldermaston Gravel Pits

Today was my first chance to visit my local Orange-tip hotspot, and I'm glad I did. 7 males were seen between 2pm and 3pm (with some possible duplicates) together with a single male Green-veined White. Also a single Orange-tip egg, which was really pleasing to see - since it must have been laid a while ago since it was all orange-tipped 😊 It also allowed me to dust off my Canon MP-E macro lens 😊



Orange-tip egg

Cheers,

– Pete

Re: Pete Eeles

by Padfield, 01-May-16 08:40 PM GMT

I love the Essex skipper cats in their eggs, Pete. It's interesting that two are curled anticlockwise and one clockwise. From your previous skipper rearings, do you know if this character is randomly distributed or if there is some pattern?

Guy

Re: Pete Eeles

by Pete Eeles, 01-May-16 08:55 PM GMT

Hi Guy,

I can't really speak for Essex Skipper, since I only have 1 data point, but Small Skipper (based on their cocoons) seem to be randomly distributed:

http://www.ukbutterflies.co.uk/phpBB/gallery/album.php?album_id=801

Or maybe males turn left, and females right 😊

Cheers,

– Pete

Re: Pete Eeles

by Padfield, 01-May-16 09:02 PM GMT

Interesting. You sort of expect it to work like a factory production line, with every unit identical – it's quite striking to see this difference. I did wonder the same thing about my purple emperor eggs but didn't see enough just before emergence to draw any conclusions.

Guy

Re: Pete Eeles

by Pete Eeles, 01-May-16 09:08 PM GMT

I couldn't agree more, Guy! Whatever it is I'm looking at, I probably have more questions than answers. For example, with skittle-shaped eggs (e.g. Orange-tip), the micropyle is at the narrowest point, but with lozenge-shaped eggs (e.g. Essex Skipper) it is at the widest point. I think that Essex and Small Skipper may be the exceptions to the rule, in this case.

Cheers,

– Pete

Re: Pete Eeles

by Pete Eeles, 04-May-16 04:51 PM GMT

With spring a springing, I've taken every opportunity the last couple of days to get out in my local area – so here's an update.

First off, the best Orange-tip site near me is Aldermaston Gravel Pits which I revisited early yesterday morning to get some Orange-tip shots – as we all know, once the males get going they never stop! The male shown below is, I thought, aberrant – identified as *ab. costaenigrata* + *ab. crassipuncta* (with Mark Colvin's help). Certain experts on a butterfly aberrations Facebook group believe that it's within the bounds of normal variation but, given their explanation, the whole topic of "is it / isn't it" is just sooooo subjective. We all agreed that it was a beautiful butterfly, whatever it is!



Orange-tip (ab.?)



Mrs. Orange-tip

Moving to Pamber Forest, I am down to a single White Admiral larva. Given that I was monitoring 28 at peak, this is quite shocking. Deer seem to have wiped out 3 of the remaining 5, and one has gone AWOL. I consider 2015/2016 to be a "practice run" with the White Admiral monitoring and can't wait for this season when I'll be much better informed on what to expect. Brimstone were also ovipositing wherever I saw them – typically on unfurled leaves of Alder Buckthorn and it amazes me that females are able to "sniff out" the buds, especially since there are no leaves present.



White Admiral larva, post-hibernation



Brimstone egg

And, back at home, one of the Large Skipper larvae is now in his final instar. I gently prised apart his abode to see that he'd only just changed skin. He's now put his home back together and is munching away happily.



Large Skipper – final instar larva

Cheers,

– Pete

Re: Pete Eeles

by William, 04-May-16 08:57 PM GMT

Great stuff Pete – the 65mm is proving a deadly weapon in your hands, look forward to seeing more!

BWs,

William

Re: Pete Eeles

by bugboy, 04-May-16 09:38 PM GMT

That is a particularly good looking OT and in my humble opinion i'd call it an ab. but like you say when does normal variation cross the line into aberration?

Re: Pete Eeles

by David M, 04-May-16 10:20 PM GMT

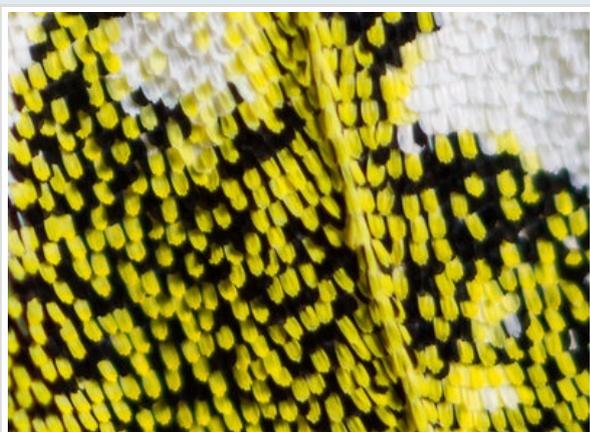
Really unusual male Orange Tip there, Pete. I don't think I've ever seen one with such pronounced forewing spots.

Re: Pete Eeles

by Pete Eeles, 05-May-16 03:03 PM GMT

Thanks William, Paul, David!

More poncing around with my MP-E 65mm macro lens 😊



Orange-tip wing scales – any "green" is an illusion created using only white, black and yellow scales



Orange-tip egg 1 hour before hatching



Orange-tip larva 1 hour after hatching - 2mm long, with partially-eaten eggshell. Mustard oils already starting to appear

Cheers,

- Pete

Re: Pete Eeles

by Pete Eeles, 11-May-16 09:18 PM GMT

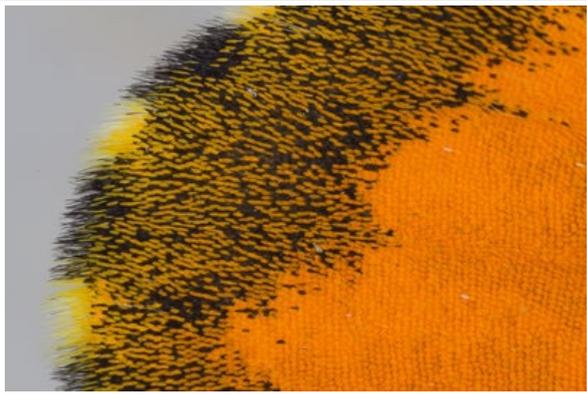
First off, a few shots from my local patches at Greenham Common (Dingy Skipper) and Aldermaston Gravel Puts (Orange-tip closeups).



Dingy Skipper mating pair



Orange-tip



Orange-tip



Orange-tip hindwing upperside

Croatia

I've been in Croatia this week (just back), specifically, Zadar, on the Mediterranean coast. Flying into Zagreb on Sunday, I drove the 190 miles or so to Zadar, passing probably the most unspoiled and beautiful countryside I've ever seen while travelling via a couple of national parks. At one point, I could see for (I believe) around 20 miles into the distance, with nothing but meadows and green lush fields before me, which eventually climbed up into the mountains in the distance. Not a single house or human in sight! Unfortunately, I didn't have a camera that would do the landscape justice; this will have to wait for another time. Some of the bridges over the equivalent of our motorways were covered in shrubs and had signs indicating that they were in place to support the free movement of bears and wolves. With a population of only 4.2m, it's not surprising that the overwhelming feeling is one of "space".

I had intended to stop at the national parks, but the weather against me, with heavy rain and thunderstorms popping up at times. However, as I got to the outskirts of Zadar, the weather improved dramatically (no doubt because it is on the coast) and so I stopped one of many woods that lay on the outskirts.

It really was like walking into a dream with an overwhelming array of species found, just by stopping at the side of the road! They were (I think the IDs are correct!):

Berger's Clouded Yellow, Brown Argus, Clouded Yellow, Common Blue, Glanville Fritillary, Green Hairstreak, Green-underside Blue, Grizzled Skipper, Large White, Marsh Fritillary, Orange-tip, Small Copper, Small Heath, Swallowtail and Wall. Not forgetting the Nine-spotted moth, several metre-long large snakes and a single tortoise! Some photos below, and one of the best work trips I've been on for sure!



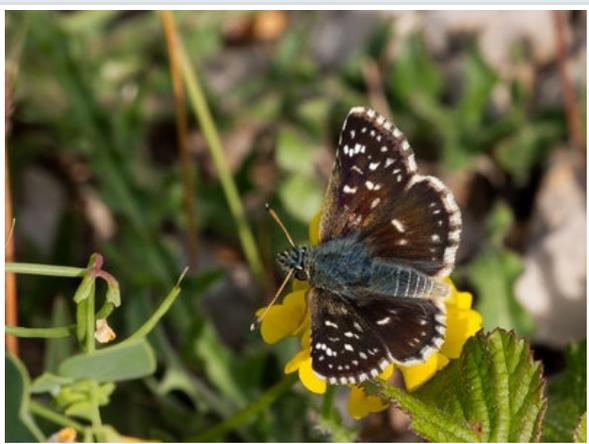
Glanville Fritillary



Glanville Fritillary



Green-underside Blue



Grizzled Skipper



Marsh Fritillary



Marsh Fritillary



Swallowtail



Swallowtail



Nine-spotted moth

Cheers,

- Pete

Re: Pete Eeles

by Padfield, 11-May-16 09:28 PM GMT

Superb pictures - what a great work trip! And amazing close-ups.

Can I be the first to point out your grizzled skipper is *Spialia* - either *sertorius* or *orbifera* depending on which you get in that part of Croatia? 😊

Guy

EDIT - checking in Kudrna, it looks as if both fly around Zadar ...

Re: Pete Eeles

by Pete Eeles, 11-May-16 10:06 PM GMT

Padfield wrote:

Superb pictures - what a great work trip! And amazing close-ups.

Can I be the first to point out your grizzled skipper is *Spialia* - either *sertorius* or *orbifera* depending on which you get in that part of Croatia? 😊

Guy

EDIT - checking in Kudrna, it looks as if both fly around Zadar ...

Thanks Guy - much appreciated. It certainly looked different. Unfortunately, I didn't get a shot of the underside. I was being "lazy" by thinking that the submarginal spots on the hindwing = Grizzled!

Cheers,

- Pete

Re: Pete Eeles

by Pete Eeles, 17-May-16 07:56 PM GMT

A brief update from south of the border ... I've spent quite a lot of time in Scotland of late 😊

Greenham Common

Dingy Skipper, Grizzled Skipper and Green Hairstreak have all emerged in fair numbers at Greenham Common, although it's early days for this site. However, I did get a chance to photograph both Dingy Skipper and Green Hairstreak eggs:



Green Hairstreak egg



Dingy Skipper egg

In the garden

Back at home, the Orange-tips continue to pass through, with quite a few eggs laid. The earliest has resulted (already) in a final instar larva ... the one below having just changed into its final instar. What is most amazing, however, is that the Alder Buckthorn in my garden hasn't had a single Brimstone egg on it (that I've seen) in the last 5 years (when I first bought it from Mike Mullis). This year, I counted 32 😊



Orange-tip larva – final instar (just!)

Heyshott Escarpment

And finally ... my first visit to Heyshott, where Mark Colvin showed me around (2 days after he had led a walk there) ... thanks Mark! This really is a superb site (as I'm sure everyone on UKB knows!), in terms of both flora and fauna. I can certainly see why Duke of Burgundy is flourishing here. I can't wait to go back when the northerly wind has departed! A couple of shots below.



Grizzled Skipper



Duke of Burgundy - male

Cheers,

- Pete

Re: Pete Eeles

by peterc, 18-May-16 07:50 AM GMT

Hi Pete,

Those close-up pictures of the Brimstone and Dingy Skipper, for example, are stunning. Well done.

You say you counted 32 Brimstone eggs on your Alder Buckthorn this year. Do you think they were all laid within 2-3 days? Most text books state that eggs are laid singly so I do wonder how many female Brimstones might have attended your plant and laid eggs on it.

ATB

Peter

Re: Pete Eeles

by Pete Eeles, 18-May-16 07:59 AM GMT

Thanks Peter!

Around 20 eggs are (were) all the same colour and so it is possible that a Brimstone had an egg-laying fest, while laying each egg singly. However, other eggs were different shades, suggesting different females.

Cheers,

– Pete

Re: Pete Eeles

by peterc, 18-May-16 10:40 AM GMT

Hi Pete,

I have (had) a similar experience in that 20–30 Brimstone eggs were laid on my buckthorn this year (none last year) with the vast majority showing the same shades of colour. I can't imagine more than 20 females laying on the one plant so I suspect maybe, like you say, a few. Did I read somewhere that generally once a Brimstone egg has been laid on a buckthorn plant no new females will attempt to oviposit on that plant? I just hope that the 6–10 larvae which are on my buckthorn don't turn cannibalistic – probably not 😊

ATB

Peter

Re: Pete Eeles

by Pete Eeles, 18-May-16 10:43 AM GMT

Hi Peter – the larvae are not cannibalistic to the best of my knowledge. Unlike Orange-tip, whose conspicuous orange eggs are supposedly this colour to deter females from laying on the same plant. Dingy Skipper eggs also turn orange, but their larvae are not cannibalistic, so I wonder what they're so conspicuously coloured!

Cheers,

– Pete

Re: Pete Eeles

by peterc, 18-May-16 04:16 PM GMT

Hi Pete.

It may be something to do with the quantity and/or quality of the larval foodplant itself. For Brimstones and Dingy Skippers, for example, there might be enough 'good' food from the plant to continue their development.

ATB

Peter

Re: Pete Eeles

by Jack Harrison, 18-May-16 04:53 PM GMT

Orange Tip cannibalism is in my [limited] experience of breeding them, purely opportunistic. I have never seen larvae actively attacking one another, but if a larger larva happens upon a smaller one that is where it is eating, then the poor little fellow is simply eaten along with the developing seed pod. It doesn't seem to be a deliberate act. My ten penn'orth.

Jack

Re: Pete Eeles

by Pete Eeles, 24-May-16 09:45 AM GMT

Glasdrum Wood

An early start saw me at the wood at around 0700 when I was able to check up on the Chequered Skipper pupae that I've been monitoring (since they were eggs and larvae) and it looks like all of the adults have emerged, although I was unable to relocate one pupa after a thorough search, so I assume it has been predated. It was a pleasure to show the remnant pupal cases to the few people I met (Dave and Steve Williams from West Midlands BC, "Chris" and another David). A full report of this study will be posted in due course!

Glasdrum looks it best at this time of year, and the new shoots of Purple Moor-grass (the larval foodplant of the Chequered Skipper and Scotch Argus) are starting to appear.



Anyway, it was perfect weather to see Chequered Skipper – not too hot and a good amount of cloud – so they weren't buzzing around like mad things and settled frequently for photos! I estimate that I saw between 30 and 40 adults in total (yes, you read that correctly) – it would seem that the delayed emergence we're seeing in other sites doesn't apply at Glasdrum! Of that number, 3 were female, suggesting that the population here is yet to reach peak, although it can't be far off, given these numbers.



Chequered Skipper – male



Chequered Skipper - male



Chequered Skipper - male



Chequered Skipper - male



Chequered Skipper - female

I also came across a single aberration that seemed to have a good amount of markings on the forewings.



Chequered Skipper - male aberration



Chequered Skipper - male aberration

As well as the skippers, there was also a single female Pearl-bordered Fritillary and several Small Pearl-bordered Fritillary (all male), the latter seemingly just starting to emerge given their condition. Several Green-veined White ssp. thomsoni were also seen, along with several White-spotted Sable moths. The diversity at this site is just incredible!



Pearl-bordered Fritillary - female



Small Pearl-bordered Fritillary - male

A word of warning for anyone planning to visit. Firstly, this is midge central and I was bitten pretty badly at times – so badly that I had to move away from my camera to clear the midges from around my eyes. I also had to wear a long-sleeved top all of the time (which was uncomfortable whenever the sun came out, as I heated up!). So do take insect repellent! Secondly, the ground is very very wet in place and I always wear wellington boots myself at this site, even though I have a good pair of walking boots.

Cheers,

– Pete

Re: Pete Eeles

by Pauline, 24-May-16 11:19 AM GMT

Lovely images of the Chequered Skipper Pete tho I don't envy you the midges!

Re: Pete Eeles

by Pete Eeles, 24-May-16 02:47 PM GMT

Thanks Pauline!

Chequered Skipper Study

Now that the Chequered Skipper that I've been monitoring have emerged, I can now share some sample photos – much more to come! The reason for the "secrecy" is that I didn't want to broadcast my study area since I had placed markers down and anyone visiting the area, including unscrupulous individuals, could have found my precious horde! As I've said several times, there will be full report written with lots of photos but, for now, I thought I'd share these 😊

The first is of a post-hibernation larva. The larva overwinters in a hibernaculum that is made up of a number of Purple Moor-grass leaves that are silked together. Within this, the larva constructs what I would call a "cocoon"; a casing tightly bound in silk. The amazing thing is that the pre-hibernation larvae are green (matching the green leaves of the foodplant) whereas the post-hibernation larvae are brown, perfectly matching the colour of the dead leaves of the foodplant.



Post-hibernation larva

After 2 or 3 weeks without feeding further, the larva silks a few dead leaves together and gets ready to pupate on a grass stem, attached by a silken girdle and a pad that attaches to the cremaster. The pupa is one of the most beautiful of all of our British species, in my opinion and a rare sight indeed; it only took me 3 years before finding one!



Chequered Skipper pupa

And finally – a pupa that is fully coloured-up. Unfortunately, I didn't see this particular critter emerge, but would like to think we saw each other when I was at Glasdrum yesterday 😊



Chequered Skipper pupa

Cheers,

– Pete

Re: Pete Eeles

by Vince Massimo, 24-May-16 03:30 PM GMT

Brilliant stuff, Pete 😊

It's worth all the effort when it finally pays off like that. I look forward to the detailed report.

Vince

Re: Pete Eeles

by Padfield, 24-May-16 05:14 PM GMT

Amazing work, Pete. I monitor caterpillars in my local woods. Somehow, you manage to monitor them at the other end of the British Isles, with even more impressive results!

That last pupa is distinctly sinister. It looks like the Dark Avenger from the planet Thworg, lying in suspended animation against the leaf, about to come alive and wreak doom on the world at any moment ...

Guy

Re: Pete Eeles

by Pete Eeles, 24-May-16 05:23 PM GMT

Thanks Vince, Guy – I have to say, the effort is outweighed by the pleasure I've had!

Padfield wrote:

The Dark Avenger from the planet Thworg, lying in suspended animation against the leaf, about to come alive and wreak doom on the world at any moment ...

I think that should be the formal description of the pupa, personally 😊

Cheers,

– Pete

Re: Pete Eeles

by William, 24-May-16 09:35 PM GMT

Epic, awe-inspiring stuff Pete – the effort and skill...extraordinary! 😊

BWs,

Will

Re: Pete Eeles

by MikeOxon, 25-May-16 09:41 PM GMT

Just echoing the others – splendid work on a none-too easy site. I remember the midges and the boggyness only too well! Other CS sites in the area are a much pleasanter experience but Glasdrum does seem to be a very reliable colony.

Mike

Re: Pete Eeles

by Wurzel, 25-May-16 10:04 PM GMT

Wow that pupa is a stunner, so subtle yet so beautiful 😊 I think your opinion is bang on the money Pete 😊

Have a goodun

Wurzel

Re: Pete Eeles

by Neil Freeman, 27-May-16 09:06 PM GMT

Hi Pete,

Superb reports and photos from Glasdrum 😊

I am heading up to that part of the world at the end of next week for a few days stopping at Fort William and am planning to check out a few sites around the area. I have yet to see Chequered Skipper and your reports have really got me looking forward to my trip.

Cheers,

Neil.

Re: Pete Eeles

by Pete Eeles, 31-May-16 12:05 AM GMT

Thanks Will, Mike, Richard, Neil! I have to admit to being besotted with the Chequered Skipper!

Local Doings

The bank holiday weekend has been a welcome respite from both work and an insane amount of travelling. With most of my family around this weekend, I took great pleasure in showing my 2-year old grandson the sites within the garden, which includes Brimstone larvae on the Alder Buckthorn, Orange-tip larvae on the Garlic Mustard and, as of yesterday, around a dozen Red Admiral eggs! Not forgetting the snails of course, which my grandson seems quite expert at handling! The whole family watched as a female Red Admiral flew around our BBQ meal before heading into the Stinging Nettle patches where she laid on practically every young leaf available. I didn't realise that they could lay at quite this rate but, when you think that Red Admiral is closely related to both Small Tortoiseshell and Peacock, which lay a couple of hundred eggs in batches over the course of an hour or so, perhaps it's not so surprising. With Robins, Wood Pigeons, Collared Doves and Blue Tits already fledged, we are now monitoring our Great Tits' nest daily in their nest box (which has a built in camera) – they are relatively-late (but may be producing their second brood) with the 4th of their eggs laid today. Quite amazing for such a small garden!



Red Admiral egg

In terms of captive-rearing, a Large Skipper larva has pupated. The shot below is the result of me peeling back one of the leaves that forms part of its pupal chamber (which is now back and safely intact with a piece of cotton). I do need to look this up, but the pupal chamber seems to also contain a powdery substance – I've seen this in some other species too. Does anyone know what this is? I could immediately see why the Large and Silver-spotted Skipper are considered to be so closely-related, taxonomically (aside from the appearance of the adults); despite the pupa being almost jet black from the outset, the casing of the two parts of the proboscis is reminiscent of those of the Silver-spotted Skipper, extending well beyond the pupal wing cases.



Large Skipper pupa

Cheers,

- Pete

Re: Pete Eeles

by Pete Eeles, 31-May-16 12:27 AM GMT

peterc wrote:

Hi Pete.

It may be something to do with the quantity and/or quality of the larval foodplant itself. For Brimstones and Dingy Skippers, for example, there might be enough 'good' food from the plant to continue their development.

ATB

Peter

Hi Peter - apologies for not acknowledging this; I like your thinking 😊

Cheers,

- Pete

Re: Pete Eeles

by Pete Eeles, 31-May-16 12:35 AM GMT

Jack Harrison wrote:

Orange Tip cannibalism is in my [limited] experience of breeding them, purely opportunistic. I have never seen larvae actively attacking one another, but if a larger larva happens upon a smaller one that is where it is eating, then the poor little fellow is simply eaten along with the developing seed pod. It doesn't seem to be a deliberate act. My ten penn'orth.

Jack

A belated thanks, Jack, and an observation that I wholeheartedly agree with! When I get to updating the species description, I'll make sure that this is noted!

Cheers,

- Pete

Re: Pete Eeles

by peterc, 31-May-16 09:50 AM GMT

Pete Eeles wrote:

peterc wrote:

Hi Pete.

It may be something to do with the quantity and/or quality of the larval foodplant itself. For Brimstones and Dingy Skippers, for example, there might be enough 'good' food from the plant to continue their development.

ATB

Peter

Hi Peter – apologies for not acknowledging this; I like your thinking 😊

Cheers,

– Pete

No problems at all, Pete. Still so many unanswered questions in the butterfly world 😊

Well done on your Chequered Skipper finds – fantastic!

ATB

Peter

Re: Pete Eeles

by Pete Eeles, 20-Jun-16 02:18 PM GMT

I haven't posted for quite a while, so thought I'd provide the briefest of updates!

First off, I've had a few trips to Scotland, but the highlight was a week spent in the company of Mark Colvin visiting various Chequered Skipper sites, with a view to providing a rounded picture when it comes to the habitat requirements of this species. We visited Allt Mhuic, Ariundel, Glasdrum Wood, Glen Loy, Glen Nevis, Spean Bridge and Loch Etive, finding Chequered Skipper at every site apart from Glen Nevis (although it was late in the season, given that this year is "early" for this species by all accounts). Details will be included in the promised Chequered Skipper article which may need to wait until the autumn since I have so many things going on at the moment, lots of images to process and lots of things to say! One conclusion is that Glasdrum Wood, my study site, is not typical Chequered Skipper habitat since the requirements of adults and larvae can be found in a relatively-small area, and this does not translate to other sites. So knowing what the requirements of adults (nectaring, territories, egg-laying etc.) and larvae (nitrogen-rich Purple-moor Grass) was a huge benefit when trying to find the adults at other sites.

Mark and I became quite familiar with fending off ever-present midges that were especially prominent in early morning – ridiculously so at some sites. And it was a pleasure to bump into Neil Freeman during our travels, who gave us a tip: use Avon's "Skin so Soft" that, apparently, was tested by the Marines and is their preferred product (although, I think, in spray form), according to the landlady of the hotel we stayed at. I'm not sure what any "enemy" would make of such aromatic and soft-skinned hard men 😊

The highlight (although there were many!) was finding Chequered Skipper ova once again – many thanks to the kind trio at Glasdrum who pointed us to the exact plant on which a female had laid! Although we didn't find that egg, we did find 3 others in the vicinity, as well as several others laid by female Chequered Skipper that we kept an eye on (as best we could) at other sites. I thought it would be a good idea to invest in an inspection mirror (a mirror on the end of a stick, used to inspect the underside of cars etc.) when looking for eggs, which are usually laid on the underside of a leaf of Purple Moor-grass. I can confirm that this was a complete waste of money and time (!) since it's almost impossible to get the contrast needed when looking for a white egg when the backdrop is the sky! The better technique, by far, is to gently fold back a side of a tussock and just take a gander!

A bunch of photos below; any Chequered Skipper-related items are being held over for the article. Many thanks to Neil Freeman for helping us find the right spots to look at when at Glen Loy (which was derived from fellow UKBer Lee Slaughter, I believe).



A typical landscape near Fort William



Northern Eggar at Allt Mhuic



Small Pearl-bordered Fritillary at Ariundle



Small Pearl-bordered Fritillary at Ariundle



Puss Moth larva at Spean Bridge



Large Heath ssp. scotica (male) at Glen Loy

And, finally, I popped into a Somerset Large Blue site last week specifically to look for the eggs. A couple of photos below. The eggs in the pair are different colours, indicating that they were laid by different females. Almost every Thyme flowerhead I looked at had at least one egg on it, which is promising regarding this particular site. Both images are stacked, and taken in the field.



Large Blue ovum



Large Blue ova

Cheers,

– Pete

Re: Pete Eeles

by Gary.N, 20-Jun-16 08:44 PM GMT

Stunning photos of the Large Blue Oval. Good to see someone else get great shoots of the MP-E 65mm len. 😄😄😄

Gary

Re: Pete Eeles

by Wurzel, 20-Jun-16 10:51 PM GMT

Cracking set of images as usual Pete 😄 Is the Puss Moth larva within the normal range of variation as the only one I've ever seen was mainly green with purple and cream strips down the side – is this a Northern variant? 😄

Have a goodun

Wurzel

Re: Pete Eeles

by Neil Freeman, 22-Jun-16 08:03 PM GMT

Great report and images Pete, they are bringing the memories flooding back. That *scotica* is a cracker and those Large Blue ova images are astounding 😄

Pete Eeles wrote:

...Mark and I became quite familiar with fending off ever-present midges that were especially prominent in early morning – ridiculously so at some sites. And it was a pleasure to bump into Neil Freeman during our travels, who gave us a tip: use Avon's "Skin so Soft" that, apparently, was tested by the Marines and is their preferred product (although, I think, in spray form), according to the landlady of the hotel we stayed at. I'm not sure what any "enemy" would make of such aromatic and soft-skinned hard men 😄...

Thanks for the kind words...and yes, I have since found out that apparently the body spray is the more effective midge repellent, although the lotion that we had seemed to do a good job of keeping them at bay. There are some ex-army guys at work and they have owned up to using it as well 😄

I had read Lee Slaughters original article which is what prompted me to go to Glen Loy in the first place but I must also credit Phil and Rosalyn for showing me the right place which I may not have found if left to my own devices.

Cheers,

Neil.

Re: Pete Eeles

by Pete Eeles, 23-Jun-16 10:16 PM GMT

Gary.N wrote:

Stunning photos of the Large Blue Oval. Good to see someone else get great shoots of the MP-E 65mm len. 😄😄😄

Gary

Thanks Gary!

Re: Pete Eeles

by Pete Eeles, 23-Jun-16 10:17 PM GMT

Wurzel wrote:

Cracking set of images as usual Pete 😊 Is the Puss Moth larva within the normal range of variation as the only one I've ever seen was mainly green with purple and cream strips down the side – is this a Northern variant? 😊

Have a goodun

Wurzel

Thanks Wurzel,

The Puss Moth larva is penultimate instar – the first and last instars are very different from those in-between! I think your description is of a final-instar larva.

Cheers,

– Pete

Re: Pete Eeles

by Pete Eeles, 23-Jun-16 10:18 PM GMT

Neil Freeman wrote:

Great report and images Pete, they are bringing the memories flooding back. That *scotica* is a cracker and those Large Blue ova images are astounding 😊

Thanks Neil!

Cheers,

– Pete

Re: Pete Eeles

by Wurzel, 23-Jun-16 10:39 PM GMT

Cheers for the info Pete, I was just being lazy and making a supposition as up that way they seem to have their own version of everything 😊

Have a goodun

Wurzel

Re: Pete Eeles

by Pete Eeles, 24-Jun-16 08:14 PM GMT

Great Orme

I haven't visited the Great Orme for a few years, and it's been calling me back ever since. It is a unique place; a massive limestone headland that rises up as you drive into Llandudno. Of course, I was here for the endemic subspecies; the Silver-studded Blue (ssp. *caernensis*) that is characterised by the amount of blue in the females, and the Grayling (ssp. *thyone*) which flies much earlier than other subspecies and which is characterised by its small size. Given the weather forecast (sunny and hot), I was on site by 0645 and adults were already opening their wings to the sun in "Happy Valley" where there is a massive concentration of Silver-studded Blues. The amount of Rock-rose, which I assume is the larval foodplant here, is something to behold, with its yellow flowers just about everywhere.



Happy Valley

The Silver-studded Blue are in huge numbers and have been for a while, given reports I've read on Twitter. Having said that, I found 3 adults emerging (all male, with no ants in attendance), so many fresh individuals were still to be found. Lots of mating pairs were also found. Some photos below where I deliberately concentrated on the variability found in the female - the amount of blue really kick-starting my interest in variation and, ultimately, evolution, genetics and the like!



Silver-studded Blue ssp. caernensis - male



Silver-studded Blue ssp. caernensis - male



Silver-studded Blue ssp. caernensis – female



Silver-studded Blue ssp. caernensis – female



Silver-studded Blue ssp. caernensis – female



Silver-studded Blue ssp. caernensis – female



Silver-studded Blue ssp. caernensis – mating pair



Silver-studded Blue ssp. caernensis – mating pair



Silver-studded Blue ssp. caernensis – male (newly emerged)



Grayling ssp. thyone

Having spent a good amount of time with the Silver-studded Blue and Grayling, I decided that I wanted to really get to know the Orme and, rather than taking the tram or cable car, decided to walk – notching up a much-needed 9 miles in the process. Fortunately, there is a café (and pub!) at the summit. It really is a beautiful place and highly recommended. I also managed to spend some time on the south-west corner of the Orme where, again, I managed to find good numbers of Silver-studded Blue, and Grayling were present just about wherever I went. I also notched up ovipositing Painted Lady's, Red Admiral, Meadow Brown and Small Heath and some firsts for my year – Dark Green Fritillary, Ringlet, Large Skipper and Small Skipper.



On top of the Orme – but not quite the summit!



South-west corner of the Orme



South-west corner of the Orme

Later in the day, the sun reduced and the wind picked up, but I revisited Happy Valley before departing. It was around 2pm and, with the cooler conditions, the Silver-studded Blue were gathering in collective roosts – something I've never really seen in any numbers, and it was amazing. There are at least 15 SSBs in the photo below. Great times!



Roosting Silver-studded Blue ssp. caernensis

Cheers,

– Pete

Re: Pete Eeles

by Neil Freeman, 24-Jun-16 09:06 PM GMT

Hi Pete, fantastic report and superb images of the Silver-studded Blues *ssp. caernensis*...and very timely for me, I am heading there on Sunday for a couple of Days 😊

Cheers,

Neil.

Re: Pete Eeles

by Pete Eeles, 24-Jun-16 09:10 PM GMT

Excellent – you'll have an amazing time for several reasons, if you've not been there before:

1. SSBs are still emerging 😊
2. It's a great place. Below Happy Valley is a lovely garden, if you or your wife just want to relax, and there is both a cable car and tram to get you to the top. The views are stunning.
3. Most importantly, there are no midges 😊

Look forward to reading your report!

Cheers,

– Pete

Re: Pete Eeles

by essexbuzzard, 24-Jun-16 10:06 PM GMT

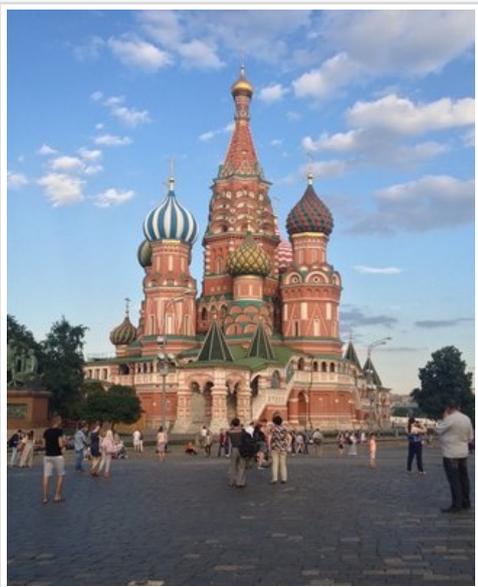
Those are great images, Pete, of the females in particular. I've always wanted to visit the Orme, ever since reading about the SSB there in the original Jeremy Thomas and Richard Lewington butterflies books, but never had the chance. I saw quite a blue female in Cornwall a couple of weeks ago, but yours are something else. A bit jealous if I'm honest, but thanks for sharing !

Re: Pete Eeles

by Pete Eeles, 11-Jul-16 11:02 PM GMT

Thanks Neil / Mark!

Sometimes I need to sit down and figure out which day of the week it is; there's just so much going on, especially if a) you're into immature stages and b) travel as much as I do, which is my excuse for not posting of late 😊 Anyway, first off, an image of Saint Basil's Cathedral in Red Square (makes a change from Scotland!). Just trying to qualify item b) ... 😊



Saint Basil's Cathedral, Red Square, Moscow

Next off, some egg images taken at a relatively-local patch (Silchester Common / Pamber Forest). Getting a photo of a White Admiral egg, with the Canon MP-E lens, has been at the top of my list for 7 long months ... I hope it was worth the wait 😊 Taken today!



Silver-studded Blue egg, Silchester Common



White Admiral egg, Pamber Forest

And finally, I spent a day at the Hampton Court Palace Flower Show, with the sole objective of gaining as many brownie points as possible 😊 Of course, what I'd forgotten, is that we'd been asked a while ago to provide photos for their butterfly dome and so, here I am, pointing out Vince's contribution of a wonderful series of shots showing an Orange-tip adult emerging from its pupa case. But we did steal the show, in my opinion! In case you're reading this, and are unaware, UKB provides all images in its stock library free of charge to charities (e.g. the RHS) and academia and here is living proof of the impact that each of us can make by making our images freely available. I'll ask for free tickets next time ;-)



Hampton Court display



Hampton Court display

Cheers,

- Pete

Re: Pete Eeles

by Pete Eeles, 11-Jul-16 11:07 PM GMT

[Edit] And a 3rd instar Chequered Skipper larva – a rather unique image (even if I say so myself!) showing a) the larva, b) typical feeding damage on the Purple-moor Grass and c) the protective tube where it rests.



Cheers,

– Pete

Re: Pete Eeles

by Pete Eeles, 21-Jul-16 05:21 PM GMT

White Admiral at Pamber Forest

The briefest of reports! I've had several outings of late, and several were to Pamber Forest where I've started tagging White Admiral ova and 1st instar larvae as part of an ongoing survey. Various shots below. Today I managed to locate 2 eggs and 5 first instar larvae – not bad for an hour of searching!



White Admiral egg – 2 hours before hatching



The occupant!



1st instar larva covered in frass

Cheers,

- Pete

Re: Pete Eeles

by Padfield, 21-Jul-16 08:21 PM GMT

Amazing shots of the little scatophiles, Pete!

I have yet to find an egg in my woods - and don't expect to yet. Yours definitely got a good headstart on mine.

Guy

Re: Pete Eeles

by bugboy, 21-Jul-16 08:48 PM GMT

Fantastic shots there. I had a look for some eggs at Bookham yesterday but didn't find any. White Admirals do seem to be a bit thin on the ground this year, like so many other species!

Re: Pete Eeles

by Jack Harrison, 21-Jul-16 08:52 PM GMT

Amazing photos Pete.

Jack

Re: Pete Eeles

by Pete Eeles, 22-Jul-16 07:07 PM GMT

Thanks Guy, Paul, Jack!

Stockbridge Down

A wonderful butterfly-filled couple of hours spent at Stockbridge Down in Hampshire. Chalk Hill Blue numbers are building up nicely (I saw, literally, hundreds). I found several groups of males tucking into a cow pat, and it was wonderful when the sun went behind a cloud and their wings gently opened up. Just stunning!



Chalk Hill Blues on a cow pat :)



Chalk Hill Blues on a cow pat :)

Essex Skipper is now out in full force, with many females seen ovipositing. Other species included good numbers of Gatekeeper, Ringlet, Meadow Brown and Small Skipper, with the occasional Silver-washed Fritillary Small White, Green-veined White, Large White, Brimstone and Red Admiral thrown in. Marbled White and Dark Green Fritillary are definitely coming to the end of their flight period. A single Small Copper was a nice bonus! Lots and lots of Silver-Y too! Some shots below. The disproportionate number of female Essex Skipper shots was my attempt to help resolve a discussion on a Facebook Group!



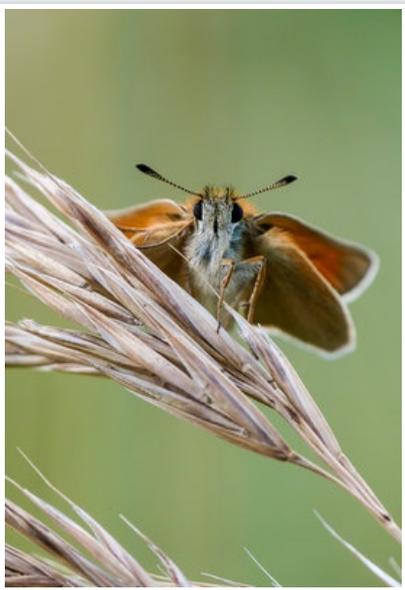
Essex Skipper (female)



Essex Skipper (female)



Essex Skipper (female)



Essex Skipper (female)



Essex Skipper (female)

Cheers,

– Pete

Re: Pete Eeles

by Jack Harrison, 22-Jul-16 07:18 PM GMT

Maybe I need some cowpats for my wild garden 😊

Jack

Re: Pete Eeles

by Pete Eeles, 26-Jul-16 11:18 PM GMT

The Golden Skippers – part 2 😊

Despite the apparent paucity of certain species of butterfly this year (Common Blue has definitely been hit hard if my own experiences are anything to go by), I have to say that my year has been jam-packed, simply because I've had a detailed plan (the first for several years) that has typically involved getting to see the immature stages of several species.

Over the last week or so, I've been concentrating on the golden *Thymelicus* skippers – specifically, Small, Essex and Lulworth. The latter has taken me on a number of trips to one of the most beautiful parts of the British Isles, around Lulworth Cove. The cove itself is just stunning, but the climb up to Binden Hill, above the cove and a hotspot for the Lulworth Skipper, is well worth the reward. The protracted flight period of this species means that, whenever you visit, you're guaranteed to see a good number of pristine adults.



Lulworth Cove – from below



Famous for the Lulworth Skipper!



Lulworth Cove – from above

However, I wasn't here for the adults, per-se, but for a sight of their eggs! My most recent trip was with Mark Colvin, who was first to find a female *acteon* ovipositing. We were somewhat-surprised to find it laying 8 eggs in the sheath of a dead blade of Tor-grass (the larval foodplant) rather than anything more green – a pattern that I saw repeated later in the day, where eggs were also laid in the sheath of a dead blade. Despite several grass blades being "considered" they were all rejected for some reason.



Tor-grass "rising" out of the chalk downland



The "shiny" leaves of Tor-grass are quite distinctive



Female Lulworth Skipper (record shot)



Male Lulworth Skipper (record shot)



Female Lulworth Skipper ovipositing



Lulworth Skipper ova



Lulworth Skipper ova

Several Small Skipper were also seen ovipositing, and I always find it an amazing sight, watching the female land on a grass sheath, and then spiral down, constantly probing the sheath for the right level of "tightness" before either flying off, or laying with her antennae pointing purposefully forward. Pentax Papilio binoculars are a massive help in following this behaviour.



Small Skipper ova

I've also come across quite a few other notable sightings that I wasn't really looking for - including an Adonis Blue larva, good numbers of Dark Green Fritillary, a strong colony of Wall and the ubiquitous Red Admiral that seems to be popping up at just about every site I visit right now, as we see new migrants coming in and the offspring from an earlier influx taking flight.



Male Wall

Some other shots thrown in, taken in the garden!



Large White ova on Nasturtium



Small White ovum on Nasturtium

Cheers,

- Pete

Re: Pete Eeles

by essexbuzzard, 27-Jul-16 10:05 PM GMT

Love the Golden Skipper egg shots,Pete! I have had the pleasure of watching Lulworths egg laying myself. I don't have the capabilities of taking such great images as yours,but to see it taking place is a enjoyable experience anyway.

Re: Pete Eeles

by Jack Harrison, 28-Jul-16 07:19 AM GMT

Incredible ultra-macro shots Pete. You might already explained how you achieve these pictures but please give us a resume of your techniques.

Jack

Re: Pete Eeles

by Pete Eeles, 28-Jul-16 09:02 AM GMT

Thanks Mark!

Jack – the setup and process is typically as follows:

Canon 7D Mk.1.

Canon MP-E 65mm macro.

Tripod.

Remote release cable.

Subject held solidly in place using a Wimberley Plamp.

A sheltered subject (not always easy in the field).

Several shots taken in RAW at different focus points, usually at around f4 (to keep the shutter speed high).

Images imported into Lightroom.

Images exported out of Lightroom as unmodified TIFFs (required by Zerene Stacker, which doesn't work with RAW files). Each file is around 120MB.

TIFFs imported into Zerene Stacker and stacked – the output file is around 50MB.

Resulting image is imported into Lightroom and adjusted accordingly (cropped, sharpened etc.).

Cheers,

– Pete

Re: Pete Eeles

by Jack Harrison, 28-Jul-16 12:25 PM GMT

Eh yes! A little beyond my capabilities.

If you don't mind Pete, I'll leave you to take the pictures and just enjoy the results.

A thought. A modern publication of butterfly early stages (photos) is long overdue. You wouldn't make any money out of it but future generations of butterfly enthusiasts might simply refer to "Eeeles" in the same way that we talk about "South" or "Ford". I have no doubt "Hulme" will join that exalted company in due course.

Jack

Re: Pete Eeles

by MikeOxon, 28-Jul-16 02:32 PM GMT

Pete Eeles wrote:

the setup and process is typically as follows:

Pete (and others), if you've not done so already, I suggest visiting the 'Microsculptures' exhibition at the Oxford Museum of Natural History. This shows amazing micro-photography of various colourful insects (set specimens, unfortunately), using very sophisticated techniques. There is a video describing the process at <http://microsculpture.net/> or see the <http://www.oum.ox.ac.uk/about/Microsculpture%20Levon%20Biss.pdf> website for more information about the exhibition (on until 30th October 2016).

Mike

Re: Pete Eeles

by Padfield, 28-Jul-16 05:17 PM GMT

Pete, if the subject is Wimberly Plamped and the camera on a tripod, and if you have time one day, could you try taking two sets of pictures, moving the camera slightly laterally between sets (but still centred on the egg, so turning the camera slightly)? If you send me two finished shots of the same egg, from slightly different angles, I can process them into a single 3D shot of the egg, viewable either as an anaglyph or through any suitable two-lens stereo viewer (I use one sold some years ago and designed by Brian May, of Queen – a personal hero of mine!).

The distance moved laterally should represent the degree of arc between two eyes, imagining the object to be the size it will appear to be. In the case of an egg, this would be eye separation if the camera is about metre from the egg but proportionately less if the camera is closer. If the camera is, say, 10cm away from the egg, a movement of about 1cm would be perfect.

Only if you have time, one rainy day. I think it would be wonderful to see these beautiful structures in 3D.

Guy

Re: Pete Eeles

by Pete Eeles, 28-Jul-16 05:37 PM GMT

Jack Harrison wrote:

A thought. A modern publication of butterfly early stages (photos) is long overdue. You wouldn't make any money out of it but future generations of butterfly enthusiasts might simply refer to "Eeeles" in the same way that we talk about "South" or "Ford". I have no doubt "Hulme" will join that exalted company in due course.

Thanks Jack - I'm very flattered! Whatever the medium (website, book, article, etc.), my intention is always to share my passion and hopefully generate enough interest for others to join our wonderful hobby and help conserve the creatures that we get so much pleasure from! A photographic equivalent of Frohawk would be a magnificent addition to the available literature, although I'm not sure that any individual could achieve that in this day and age. However, I think the UKB community as a whole would be the natural source of images and experience! I'll have a mull over this.

Thanks Mike, for the suggestion. I'll be visiting the OUMNH quite soon (I think!) and will look further into the techniques they're using (I had some insight into the origins of the Microsculptures exhibit last year when I spent some time behind the scenes at the museum).

Padfield wrote:

... if you have time one day, could you try taking two sets of pictures, moving the camera slightly laterally between sets ...

Sure - no problem. I'll need to set up a macro rail for the movement (it will have to be relatively-fine) but that's no issue. I found 5 White Admiral ova today, but won't get another chance to visit them until Wednesday next week, when I suspect they will have emerged. I might start with something in the garden (Large White, Small White, Holly Blue ... once they've laid!). I'll be in touch!

Cheers,

- Pete

Re: Pete Eeles

by David M, 29-Jul-16 09:37 PM GMT

Stunning stuff, Pete, and I look forward to Guy's 3D transformation with great interest.

Re: Pete Eeles

by Pete Eeles, 04-Aug-16 08:30 PM GMT

Thanks David!

White Admiral larval instars

As part of my White Admiral studies, I've deliberately placed a focus on answering an outstanding question posed on these forums from last year - does the White Admiral have 4 or 5 larval instars? I can confirm, based on my own observations, that I agree with most literature in that there are, indeed, 5 instars in total. My summary of the analysis is in the table below (with the figures on length and duration taken from Frohawk).

	1st instar	2nd instar	3rd instar	4th instar	5th instar
Initial length (mm)	2.12	6	5	10.5	27 (avg.)
Final length (mm)	3.2	6	7.6		
Predominant head capsule colour	Black	Black	Brown	Black	Black
Predominant body colour	Brown	Brown	Brown	Brown/Green	Green
Stage length (days)	9	7	9	12	

The main point of discussion is the transition from the post-hibernation 3rd instar larva to 4th instar. While the body colour could change based on the ingestion of green matter, I felt that the head capsule would be diagnostic, and so it is; 3rd instar has a brown head capsule, and 4th instar black. There is also a significant difference in size. Although not shown in the table above, my anecdotal measurement of a fully-grown 4th instar larva would be around 15mm, which is significantly larger than any fully-grown 3rd instar larva.

Of course, I've tried to capture the evidence as shown in the images below, and look forward to any further discussion! I must admit, I've really enjoyed playing detective on this one 😊



1st instar



1st instar



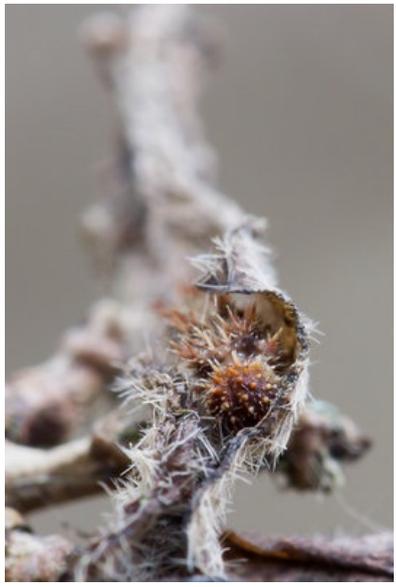
2nd instar



2nd instar



3rd instar



3rd instar



4th instar



4th instar



5th instar



5th instar

And, finally, I came across this beauty at my study site (Pamber Forest in Hampshire):



Silver-washed Fritillary f. valesina

Cheers,

– Pete

Re: Pete Eeles

by Padfield, 04-Aug-16 08:45 PM GMT

Brilliant observations, Pete, and just mind-blowing pictures. Those head-on views are extraordinary.

I've mentioned this before, I know, but I'm sure these caterpillars were the inspiration for Brachen demons!



Guy

Re: Pete Eeles

by bugboy, 04-Aug-16 08:53 PM GMT

Fascinating stuff Pete 😊 and yes fantastic pictures to underline your findings.

All the best sci-fi/horror is inspired by nature I find Guy

Re: Pete Eeles

by Wurzel, 04-Aug-16 10:49 PM GMT

Fantastic weird wee beasties Pete and topped off with a sublime Greenish 🍷🍷

Have a goodun

Wurzel

Re: Pete Eeles

by Pete Eeles, 26-Aug-16 06:16 PM GMT

Thanks Guy, Paul, Wurzel – and apologies for taking so long to get around to thanking you! Things have been very hectic behind the scenes, and I'm not just talking UKB enhancements, but whole new projects, one of which ("Project Frohawk") will be announced soon, where I'm hoping that this community can replicate what Frohawk is best known for – but in pictures. Watch this space!

Up Against the Wall

I've spent a good amount of time at Calstone Coombes (Wiltshire) this past week, which is probably my nearest reliable site for Wall, my target species. I saw quite a few (among the Adonis Blue, Common Blue, Meadow Brown and Clouded Yellow) and was specifically focused on ovipositing Wall and their eggs, having been inspired by Badgerbob's (Bob Eade) fantastic summaries. I saw at least 7 females, with most "oviposturing" (as Guy would say): "Going through the apparent motions of ovipositing without actually laying any eggs". As a child, Wall were so numerous that I didn't take a second glance. Now I have to travel over 30 miles to see them. How sad is that? But now that I've finally caught up with them again, I am absolutely stunned by the behaviour of the female when ovipositing. Anyway ... best described in some photos!

First off, Calstone Coombes is an NT-owned SSSI just south of Cherhill. It's a magical place with the most breathtaking rolling chalk downland you're ever likely to see. It comes with the obligatory White Horse that is found in this part of the world, as well as the Lansdowne Monument (an obelisk that can give you your bearings, wherever you are on the downs). I focused at the south-west end of the downs, where there is plenty of bare ground for the Wall to inhabit. The presence of cattle here is, I believe, absolutely instrumental to the success of the Wall, since they're responsible for creating the very bare ground / scrapes that the female Wall like to lay in (on exposed grass roots and dangling grass blades).



I found my first egg within 2 minutes. The second took another 90 minutes; not a great hit rate!



Egg number 1



Egg number 1



Egg number 1

Egg number 2. The biggest pain was that I'd forgotten to take my super-closeup lens with me, so had to go all the way up the downs and back into Cherhill to get it. Hey ho! Still, it was nice to spend a good chunk of time watching the Adonis Blue flying, mating, laying etc. I don't think I'll ever tire of seeing a male Adonis Blue with open wings; stunning! And at least a dozen Clouded Yellow to keep me company.





It was fascinating to watch the female Wall crawl among the dangling roots when looking to oviposit, something I've unsuccessfully tried to capture in the 2nd shot below. I must try video next time!



Mother!



Female Wall crawling behind the dangling grass blades and roots

All in all, absolutely fascinating, and I definitely feel like I've gotten to know the Wall a little better 😊

Cheers,

– Pete

Re: Pete Eeles

by Pete Eeles, 31-Aug-16 02:36 PM GMT

White Admiral doings

Last year's studies into the White Admiral resulted in the identification of 3 types of hibernacula, which I phrased as "Cut and seal" (which is the "classic" and commonest type), "Seal and let wither" (which is very uncommon; I've only ever come across this twice) and "Fold" (see <http://www.ukbutterflies.co.uk/phpBB/viewtopic.php?f=29&t=3977&start=840#p104586>). Some examples of 2 of these types from today:



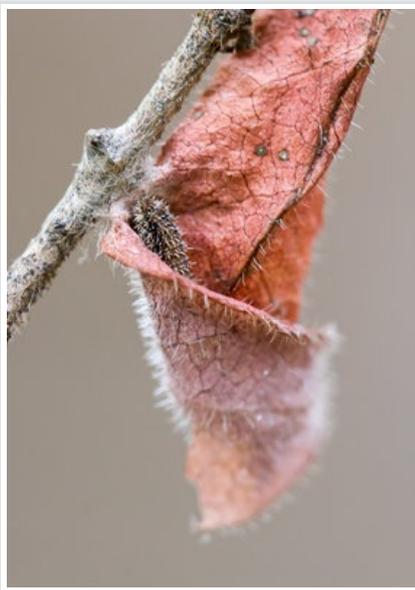
Cut and seal (yet to be sealed!)



Fold



3rd instar larva out in the open



And confirming her "Fold" type of hibernaculum

Of the 19 larvae I've been monitoring, only 11 remain (but the others may have moved; I'll have a more in-depth look when I have time) and all of these have now created hibernacula, which is slightly ahead of last year. I've spent at least twice the number of hours searching this year, with about half the tally of last year. Even Graham Dennis, the warden at Pamber Forest (my study site), has said that numbers are way down based on the transect he walks. So it doesn't look like this has been a good year for White Admiral, in line with most other species.

Anyway ... I have to report a 4th type of hibernaculum, potentially, which seemed to be quite prevalent today, which I'll name "Half a Job" in that it is the start of the "Cut and Seal" type, but only half of the leaf is cut, and this half is then folded over. 4 examples are shown below. Now it could well be that the larvae will finish the job and I'll report back accordingly! However, the example on the superb pyrgus.de website (http://www.pyrgus.de/Limenitis_camilla_en.html) shows that the leaf is fully cut and only then is the hibernaculum constructed. Watch this space!



Half a job



Half a job



Half a job



Half a job

Of course, if "half a job" is a valid type of hibernaculum, then I am not assuming that all of the occupants will be male, should anyone ask 😊

Cheers,

- Pete

Re: Pete Eeles

by David M, 01-Sep-16 10:39 PM GMT

Wow! You're really coming up with the goods with these early stage images, Pete. I guess having seen the adults regularly you are now concentrating on

the less frequently observed parts of these butterflies' life-cycles?

Is this how we'll all gravitate when we've filled our boots with the imagos?

Re: Pete Eeles

by bugboy, 01-Sep-16 10:50 PM GMT

My own observations concur with what You've found with White Admirals this year. I hardly saw any adults this year at Bookham and I have only managed to fine 5 larvae despite a fair few hours searching. All of which have now vanished, most likely ending up in a small birds tummy!

Re: Pete Eeles

by Pete Eeles, 02-Sep-16 07:32 AM GMT

David M wrote:

Wow! You're really coming up with the goods with these early stage images, Pete. I guess having seen the adults regularly you are now concentrating on the less frequently observed parts of these butterflies' life-cycles?

Is this how we'll all gravitate when we've filled our boots with the imagos?

Thanks David! I think there are all sorts of directions you can go in; I just stumbled on studying species ecology and love it and, for example, I get as much excitement from seeing new behaviour (to me) as I did seeing a species for the first time. The rabbit hole just gets deeper and deeper 😊

Cheers,

- Pete

Re: Pete Eeles

by Pete Eeles, 02-Sep-16 07:33 AM GMT

bugboy wrote:

My own observations concur with what You've found with White Admirals this year. I hardly saw any adults this year at Bookham and I have only managed to fine 5 larvae despite a fair few hours searching. All of which have now vanished, most likely ending up in a small birds tummy!

Thanks Paul - yes, I think that White Admiral has suffered like many other species this year.

Cheers,

- Pete