

Re: PhilBWright

by PhilBJohnson, 12-Feb-19 02:03 PM GMT

Hello,

Green-veined White

Egg Laying Females (Green-veined Whites) specifically, the science involved in leaf species choice, with reference to how a butterfly larva has evolved to eat only specific leaves (and not other juicy leaves of different species (or similar non native hybrids).

<https://youtu.be/wETF6KFFN30> (linked to my youtube account) Youtube search: Philip Byerley Johnson

Cabbage white Diaries



12th July 2018 13:21pm A Female large Cabbage White takes a nectar break on Red Valerian between Nasturtium leaves



13th July 2018 Large Cabbage White Eggs & Larva in different growth stages on underside of Nasturtiums.
The larva faeces are black, can you spot singularly laid Small White eggs as well as the Large White yellow egg Clusters?



Saving Young Nasturtiums from infestation by growing them inside a 80 -100 litre clear recycling bag. Watering can be saved a bit like this also, if the bottom of the bag is tucked inside the pot to catch condensation drips.

Once the larva reached a certain size, local Sparrows found a food source.



28th July 2018 A "Large, camouflaged" Small White Larva of, Song Bird feeding size, that might not have survived so long on a variegated (not green) leaf.

Kind Regards.

Re: PhilBWright

by David M, 14-Feb-19 07:59 AM GMT

PhilBJohnson wrote:

...can you spot singularly laid Small White eggs as well as the Large White yellow egg Clusters?

I presume they are the white objects in the lower half of the image, Phil?

Re: PhilBWright

by PhilBJohnson, 21-Feb-19 01:19 PM GMT

"Pip"

An over-wintered Large white Pupa (indoors, on the inside of our window frame).

20th February 2018, see it wiggle with water mist:

<https://youtu.be/ule4GLaGUzA>

Any adult Large White sightings yet, which might have escaped (or been disturbed) from a warming green house, "warm, cold frame" or garden plant centre?

I have assumed migrants might not have a strength to fly that distance yet, to reach Lincolnshire.

#ClimateChange

Re: PhilBWright

by PhilBJohnson, 13-Mar-19 09:27 AM GMT

2019 was relatively, seasonally early in February, in Lincolnshire.

2017 was relatively, seasonally early in Spring in Lincolnshire:

<https://youtu.be/Ol1KnVJJ1wU>

These videos have been reproduced, explained better, with seasonal relevance:

https://youtu.be/zL_4MCRiYT4

April soon, here is a video from 2017, that I have just been given time to complete (reproduced):

<https://youtu.be/k3FGLxbTyTk>

Re: PhilBWright

by David M, 16-Mar-19 03:00 PM GMT

I love these videos of butterflies in slow motion, Phil, and particularly when Orange Tips are the subject.

This unpleasant spell of weather is set to come to an end tomorrow, so let's hope this year's OT's are a mere couple of weeks away,

Re: PhilBWright

by PhilBJohnson, 19-Mar-19 12:14 AM GMT

Our native Common Dog Violet was once so numerous, that it's leaves we're the primary food source for the larva of many of our native Fritillary Species now much less common also.

Violet flowers are small but are more easily identifiable when they flower in that "small Springtime window" (March or April).



Specifically unidentified (by me) Violets in our local Orchard 16th March 2019
What variety of violets are these, please?

Spring Butterflies

<https://youtu.be/vxnK-XzLnAA>

Re: PhilBWright

by Allan.W., 19-Mar-19 06:59 PM GMT

Sweet Violet (*Viola odorata*) I reckon, generally the first (but not always) to flower, also found fairly often in white!
Regards .Allan.W.

Re: PhilBWright

by PhilBJohnson, 31-Mar-19 09:19 AM GMT

Thank you, Allen.
Happy Mother's Day.



11th October 2018 (Pupation Day)

On the 23rd March 2019, I saw my first "Cabbage White Adults" flying over an allotment near ours.



31st March 2019 "Pip" is still a pupa

This Large Cabbage White pupa "Pip" is still developing on the inside of our window frame, (where it is warmer than outside), leaving me with a conclusion that the "allotment "Cabbage whites" seen on 23rd March near Lincoln, Lincolnshire, possibly pupated earlier (as broods overlap) and quite possibly "under glass" (Warmer) where Brassica was grown with a Cabbage White escape route!

Kind Regards.

Re: PhilBWright

by PhilBJohnson, 20-Apr-19 06:03 PM GMT

19th & 20th April 2019

Warm days again in Lincolnshire. The Brimstone butterflies have been laying eggs, in the last couple of days, as the Buckthorn has just started to leaf. Here was an Easter Egg, near to the end of the twig:



19th April 2019. (Good Friday). A Brimstone Egg

New Video Link:

<https://youtu.be/Rl4QetCXgTg>

Kind Regards,

Re: PhilBWright

by PhilBJohnson, 05-May-19 11:08 PM GMT

In 2018 on July 4th I started some "Cabbage White Diaries"

This part follows (not too closely) "Pip", a male Large White butterfly. Their Life cycle is truly awesome with the species being more than six months as a pupa. What a way to over-winter!

<https://youtu.be/ZmlRMYN4Qfs>

The male Large White butterflies travelled long distances in the Spring looking for females. Some migrate. It was thought that a Large White butterfly seen in April in Lincolnshire, was far more likely to be male than female.

Kind Regards,

Re: PhilBWright

by David M, 06-May-19 10:24 PM GMT

Nice composition, Phil (although the spider segment was a bit gruesome). Most interesting was the footage of the pupa twitching as it was being sprayed.

Re: PhilBWright

by PhilBJohnson, 20-May-19 01:14 PM GMT

DB Scabious Check

I observed a Marsh Fritillary at Lincolnshire Butterfly Conservation's Snake Holme Pit Reserve today. I was not sure if one had been publicly recorded there before. I had noticed the small amount of Devil's Bit Scabious (DB Scabious). For that reason of there not being significantly large quantities of the larval food plant, I suspected the Marsh Fritillary, to be, an unnatural distribution (although I was not sure about surrounding land, including the Forestry Commission wood (opposite side of road), without Public Access.



Marsh Fritillary

Kind Regards



DB Scabious Check

Re: PhilBWright

by PhilBJohnson, 24-May-19 06:04 AM GMT

May 23rd 2019

My Wife and I were very pleased to have visited Shropshire, meet other members of Butterfly Conservation and learn about the Wood White:



15.19pm May 23rd 2019 Bury Ditches (Forestry Commission).

I will share more here, later.

Other observed behaviour included courtship rituals and egg laying.

Re: PhilBWright

by PhilBJohnson, 10-Aug-19 02:49 AM GMT

The Importance of Devil's-bit scabious (DB Scabious) as a Nectar Source

Buddleia

"The generic name bestowed by Linnaeus posthumously honoured the Reverend Adam Buddle (1662–1715), an English botanist and rector, at the suggestion of Dr. William Houstoun. Houstoun sent the first plants to become known to science as buddleja (*B. americana*) to England from the Caribbean about 15 years after Buddle's death."

Reference: Wikipedia August 10th 2019

<https://en.wikipedia.org/wiki/Buddleja>

Before 1730 in the United Kingdom (when there was no buddleia), and few imported non-native species, it was thought that DB Scabious played an important evolved role in woodlands and on field edges as an energy nectar store for butterflies about to enter hibernation.

Traditionally, because DB Scabious was late summer flowering, it might not have seeded before a single annual flower meadow cut was implemented as part of a landscape management plan, which in turn might not have helped this perennial spread to new areas.

All pictures taken on August 9th 2019, Southrey Wood, Lincolnshire:



6 Butterflies (3 peacocks on DB Scabious).



Peacock Nectaring on DB Scabious



Peacock Nectaring on DB Scabious to store up energy before hibernation & Spring breeding



Silver-washed Fritillary (male)



Painted Lady butterfly on DB Scabious (possibly before migration).



Meadow Brown on DB Scabious



Peacocks and Ringlet on DB Scabious



Buddleia sometimes, wasn't often used by this butterfly.



Comma on DB Scabious

Kind Regards

Re: PhilBwright

by PhilBJohnson, 12-Aug-19 07:57 AM GMT

Little Scrubs Meadow(Was SSSI status) Lincolnshire and Devil's-bit Scabious (DB Scabious)

The importance of DB Scabious, not as a Nectar Source

As one might know, it was another good year for the Marsh Fritillary adult butterflies on the wing in May, at Chambers Farm Wood. The Primary food source for the Marsh fritillary caterpillars was DBS.

As there was a fear of butterfly population collapse a following year, one theory was, to high grass cut before DB Scabious flowered, so that the DB Scabious plants would put their energy into leaf clump forming, rather than seeding.

The plant is a perennial, so could come back year after year without caterpillar "devastation".



20th May 2019, Little Scrubs Meadow using an iPhone with monopod and bluetooth camera remote to avoid habitat trample on SSSI (we kept to the paths).
Kind Regards.

Re: PhilBWright

by PhilBJohnson, 30-Aug-19 10:15 AM GMT

Royal Mail Presentation Pack July 2013 – Information provided about the Marsh Fritillary Species and Devil's-bit scabious (DB Scabious).

"Groups of Marsh Fritillary caterpillars hibernate in silken tents built around the scabious which may be submerged in water for several weeks without harm."

My thoughts were that the scabious (DB Scabious) wasn't harmed by temporary flooding, but a study of the caterpillars underwater was not done (or widely done) because of 1981 species protection laws. Probably, a field was surveyed after flooding, to find the caterpillars still there and alive. The DBS image (not shown for copyright reasons) next to the text suggested that a caterpillar moved higher up the tall perennial (DB Scabious), while the plant was still in flower.

There might be a science reward for someone to show first pictures or video of the Marsh Fritillary caterpillars hibernating under-water during temporary flood and surviving.

In my opinion, it was a misnomer, that a Marsh Fritillary Species needed a Marsh, but the DB Scabious was found to thrive in damp meadows, where the plant was less grazed by large mammals (including livestock).

Arable Farmers could help bring back more of this native plant (DB Scabious) by planting it in less intensively drained, wide field margins (or hedgerows).

Native Wild Flower Gardeners, will also help.

Re: PhilBWright

by PhilBJohnson, 20-Sep-19 06:42 PM GMT

Devil's-bit Scabious (DB Scabious).

Here is a link where DB Scabious can be invested in, describing DB Scabious as the best butterfly plant:

<https://www.naturescape.co.uk/product/devilsbit-scabious-9cm-pots/>

I would like to see DB Scabious more again in Wildlife Gardens and on highway verges. To me DB Scabious was obviously one of our native plants, that was far more numerous in the past in our English Landscape. Some insects had evolved to be very attracted to small round mauve "flowers on sticks". Alliums, chives and verbena might have benefited from an evolved aesthetic attraction or plant association.

According to the above website on 20th September 2019, with reference to scabies:

"The short black root was in folk tales bitten off by the devil, angry at the plant's ability to cure these ailments"

I certainly know of a little black "critter" or Marsh Fritillary caterpillar that might bite something off a DB Scabious plant!

Kind Regards.

Re: PhilBWright

by PhilBJohnson, 01-Oct-19 11:02 PM GMT

Cabbage White Diaries –Large White, 25th September 2019



One pupation walk failed and caterpillar ended up hanging from spiders thread (26th September 2019).



Pupation successful start, butterfly might not emerge now until May 2020 (26th September 2019 if left undisturbed).

This short video clip showed, what I thought was the third instar "knee-jerk" group reaction:

<https://youtu.be/l6mLcY3v-i4>

(26th September 2019)

With low temperatures in October and November, these caterpillars were not thought to make it to 5th instar pupation in time for hibernation.

"the larvae exhibit aposematic colouring, signalling that they are not palatable to birds"

Reference - LIFE CYCLES OF BRITISH AND IRISH BUTTERFLIES, page 90, Large White Larvae

"When disturbed, a group of larvae will jerk their bodies from side to side in unison, which must be a formidable site to any predator"

Reference - LIFE CYCLES OF BRITISH AND IRISH BUTTERFLIES, page 257, Small Tortoiseshell, fourth instar.

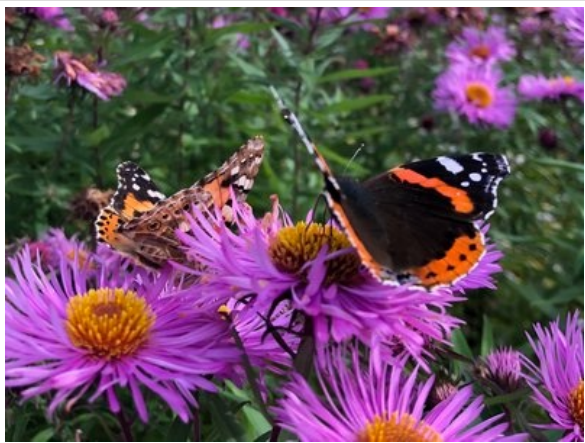
I thought that the was interesting as the superficially similar yellow stripes on the Small Tortoiseshell larvae, were also, not thought to be for camouflage.

Re: PhilBWright

by PhilBJohnson, 10-Oct-19 09:29 AM GMT

Painted Lady Species, the late United Kingdom non migratory individuals.

8th October 2019



8th October, Butterfly Garden, Chambers Farm Wood. Late flowering Michaelmas Daisies.

My thought was that this fresh looking Painted Lady in the butterfly garden at Chambers Farm Wood, Lincolnshire, was not a migrant (now temperatures too cool for long distance flight), but a home grown "imergee" from a previous generation that either migrated here or was home grown (UK resident).

9th October 2019



9th October, Lincoln, Lincolnshire. 4th Instar Painted Lady larva on thistle

Using Pete Eeles' superb reference book, this looked to me like a fourth instar stage of the Painted Lady Larva. It was not expected (by me) at this time of year, for it to make it to adulthood.

"No I was not taking it indoors!" 😊😊

"In under a week, the larva moults for the last time into a fifth instar"

P245 Life Cycles of British and Irish Butterflies – Pete Eeles

I would like to see, more scientific studies as to how temperature cooling in autumn (what temperature?), slows down a butterfly's life cycle (larva or caterpillar), in a similar way that fisherman's maggots are slowed down when refrigerated before a next fishing session. I thought that the "in under a week" related to a specific temperature (or normal summer temperatures), rather than just "day length"

Re: PhilBWright

by PhilBJohnson, 13-Oct-19 04:34 PM GMT

Cabbage White Diaries

October 13th 2019 A race to grow and pupate (to hibernate) in decreasing daytime temperatures



*I thought this was a young, 4th Instar Large White species on Nasturtium



*I thought these were 5th Instar Small White species. on Aubretia



**Small White species, 5th Instar, "Edwardo" that had enough warmth energy for it's "pupation walk to make it under a bay window"*

An amazing thing about the Cabbage White species, is the habitat humans provide for them. Person-built structures often provide shelter for a caterpillar looking to pupate (a pupation walk, remote from larval plant food source).

*Local Village, General Temperatures as given by the updated BBC Weather App (not necessarily micro-climatic temperature).

Re: PhilBWright

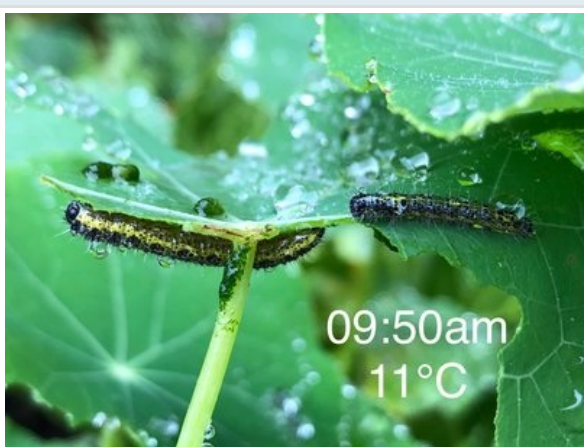
by PhilBJohnson, 16-Oct-19 07:11 AM GMT

15th October 2019



A Large White species pupa in hibernation, that pupated on 26th September 2019, Lincolnshire

*



Large White larva from two different Instars on Nasturtium (not thought to be able to make it, to pupation hibernation).



Small White larva "Edwardo" under bay window, possibly with enough warmth energy to transition to hibernation pupa.

*Local Village, General Temperatures as given by the updated BBC Weather App (not necessarily micro-climatic temperature).

Re: PhilBWright

by PhilBJohnson, 17-Oct-19 09:34 AM GMT

17th October 2019



At least 5 Small White larvae on aubretia (not thought to get enough warmth energy for a significant pupation walk).



**I thought that this caterpillar might be waiting for enough warmth energy to finish pupation transition.*

*Local Village, General Temperatures as given by the updated BBC Weather App (not necessarily micro-climatic temperature).

Re: PhilBWright

by PhilBJohnson, 19-Oct-19 12:09 PM GMT

19th October 2019



Caterpillar pupated after a day of autumn sunshine on 18th October (15°C high, local village temperature). The Small White caterpillar had fixed it's position since 13th October 2019 (see previous diary entries).



19th October (One that did not make it), I thought it might have been a wasp.



A Small White species caterpillar 19th October 2019

*

Re: PhilBWright

by David M, 20-Oct-19 02:24 PM GMT

Some excellent observations there, Phil. It'll be interesting to see how they get on.

Re: PhilBWright

by PhilBJohnson, 02-Dec-19 12:13 AM GMT

Happy Advent!

I have uploaded a Holly Blue video to help some people better understand it's connected Life Cycles:

<https://youtu.be/AI6yoPG7XIY>

I apologise for the oversight of not putting UK Butterflies in the credits (which I shall now do, if using this platform in a future).

This (I thought) was a last Small White larva on "evergreen" aubretia (with the caterpillar's life cycle significantly slowed) from females that were recorded laying eggs On september 8th 2019



28th November 2019 Aubretia, Lincolnshire.

Re: PhilBWright

by PhilBJohnson, 06-Dec-19 12:34 AM GMT

Small White Butterfly on Aubretia Video

Slowed down life cycles with cooler temperatures, generally decreasing as winter approaches.

Why no Large White Caterpillars on this plant?

Are more recent hybrids producing more flowers that are less nectar rich, than plants native to southern Europe and Central Asia?

Unnatural Human Selection (hybridisers plants that are nursery grown en masse) can be without something that might be passed on by natural selection (pollination by insects).

Evergreen, clump forming perenial, might mean aubretia can "house" caterpillars well into a "climate change UK winter".

Video Link:

<https://youtu.be/DREenK817VA>

Kind Regards

Re: PhilBWright

by PhilBJohnson, 23-Dec-19 02:08 PM GMT

December 21st 2019 "PEE-err-iss RAY-pee" (Pieris rapae)

"Small White Larva (cool temperature, slowed down Life Cycle) on evergreen Brassica (Aubretia). I thought that this was the last one left, on this patch (but found out later that it might not have been).

Noted

A caterpillar that pupated October 13th -19th 2019

Wednesday 8th April (warmest day of year so far). Weather App 20°C Lincolnshire.

This pupa was a darker than white colour, so might have been parasitised.



"Parasitised"? Small White Pupa, December – June

Re: PhilBWright

by PhilBJohnson, 28-Dec-19 09:37 AM GMT

Swedish Fritillaries for a better future

In 2017 I visited Sweden, just for 18 days (including flight days) and was surprised to be looking at Fritillary species in one location, that were then, less common in the United Kingdom.

2017 in Värmland, Sweden, snow melt was in May, followed by much warmer temperatures, speeded up butterfly life cycles, to a point where flight times of Fritillary species from the Small Pearl-bordered Fritillary to the Silver-washed Fritillary, overlapped in July.

Shown in this video were four English species, found in Sweden. Silver-washed Fritillary, Dark Green Fritillary, Pearl-bordered Fritillary, Small Pearl-bordered Fritillary. I was surprised to find all of these species plus another in just one location, outside the house where we stayed. I had not seen all of these species in the UK in my adulthood!

It was said to have profoundly touched and inspired me, as well as needing help with my species ID 😊😊

A beautiful thing about where we stayed in Sweden in 2017, was the connected Fritillary habitats that were still intact.

Please have a look at this video, recently updated, where we expressed some thoughts:

<https://youtu.be/253j3yvntY>

We are still looking forward to further Swedish butterfly study, with a knowledge and reference to UK species,

Kind regards