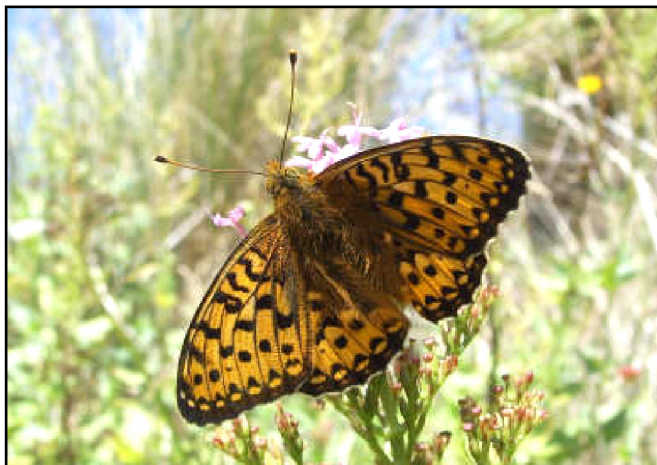


The Butterfly Observer

Cornwall Butterfly Conservation Newsletter No. 41



Dark Green Fritillary ♀ Upton Towans, 19th July 2008.

Photo © M. Edyvean.



Autumn 2008

Editorial

The theme of several reports in this issue continues with the dismal summer we have had, however there are some brighter spots amongst the articles submitted namely, Barry Ofield's on page 17 and Paul Browning's on pages 4 & 8.

Two articles emphasise the spread of various species, the **Firethorn Leaf Miner** and the **Comma** and may be found on pages 15 and 17.

The difference between a 'mother' and a butterfly enthusiast is tackled on page 15. Suggesting circadian rhythms as the answer, the same topic is covered in an article about **Monarchs** on page 17.

I have had only two conservation dates so far for the winter period - see page 19. However, BTCV days can be found at this link:

http://www.btcv.org.uk/cgi-bin/office_opps_ind.cgi?ref=116;region=sw

Excellent news regarding Roger Lane's sighting of the **Argent and Sable**, one of our Cornish BAP species, can be found on page 5 - well done Roger!

Tim and Sandy Dingle had another successful Garden Open Day. All proceeds to Cornwall Butterfly Conservation. A report can be found on page 9.

Barry Ofield comments on his experiences with the BBC on page 11 and my usual input as your Moth Officer can be found in articles on pages 6, 10, 15 and 18.

Finally, I would like to remind members of our AGM which again will be held at Cornwall Wildlife Trust's headquarters at Allet - details opposite. ~ Ed.

Chairman's Report, Summer 2008.

Yo! Well that was the summer that was. It started with a bit of a drought in March followed by April and May, which were indifferent and then June, July, August and September, which turned into the worst weather for a summer period I think we've ever seen. Butterflies and moths were again way down on last year's numbers, which weren't good to start with.

2008, it just never really got going for most species and we all struggled at times to find anything flying in numbers at all. **Pearl-bordered Fritillaries** did not do very well at the Monkey Sanctuary, Bunny's Hill or Boscastle, however; Fellover Brake and De Lank were quite good. **Dingy Skippers** and **Grizzled** also fared well at Goss Moor and Perranporth.

Marsh Fritillaries flew in poor weather and people who were out looking, reported low numbers. This autumn, Melanie Brown, who's doing her Ph.D. on **Marsh Fritillaries**, visited a number of sites with little luck and low counts in places like Breney etc.

On a happier note, Sally Foster organised a search on a farm in the upper Fowey valley at Carkeet. Wendy, the owner, along with Sally, Steve Hoskin, Paul Browning and I went there only yesterday. (See article page 8. ~ Ed.). After a hard day's searching in showery conditions and, in the middle of the day, having to repair a puncture, we finally arrived at a count of 48 webs - so it's not all bad news. A week later over 50 more webs were counted making a grand total for this site of over 100 - surely a prime site nationally. Since it has never been surveyed before,

we were all wondering what populations were there before these two poor years!

As far as I know at this moment, **Heath Fritillary** numbers were down but I am not sure by how many.

This year is the 40th anniversary of Butterfly Conservation so I am off tomorrow at 5 o'clock to travel up to Dorset to a chairman's meeting where I hope to meet everybody and celebrate this achievement. As announced in our national magazine, 12,000 members can't be a bad thing, especially when it comes to influencing government with regard to protecting moths and butterflies in the countryside. The only thing we can't change is this eternal wet weather!

~ Phil Harris, September 2008.

Cornwall Butterfly Conservation AGM.

Venue: Cornwall Wildlife Trust Headquarters, Allet near Truro.

Date & Time: Saturday 17th January 2009. 2.00 - 3.30pm.

Our guest speaker will be **Paul Browning** whose talk will be entitled:

'Through the Year with Cornish Butterflies'

Grand Raffle and Book Auction - all must go! Titles include:

The Butterflies of the British Isles - R. South, 1941 edition.

The Caterpillars of the British Isles - compiled by W. J. Stokoe, Warne, 1944

Collins Field Guide - Caterpillars of Britain & Europe - D. J. Carter and B. Hargreaves 1986. Over 500 species illustrated.

The Moths of the British Isles - R. South, series 1 & 2, 1939 Edition. (All editions sought after).

Britain's Butterflies - David Tomlinson & Rob Still - WILDGuides 2002.

A Colour Guide to Familiar Butterflies Caterpillars and Chrysalids - Josef Moucha. Consultant Dr. Ivo Novak, nearly 300 illustrations - Octopus Books 1987.

The Mitchell Beazley Pocket Guide to Butterflies - Paul Whalley & Richard Lewington.

Butterfly Watching - Paul Whalley (A general study. Illustrated).

Devon Butterflies - C. R. Bristow, S. H. Mitchell & D. E. Bolton, Devon Books 1993. Excellent book but somewhat dated.

Butterflies and Moths in Britain - Vere Temple.

A Field Guide in Colour to Insects - Jiri Zahradnik & Frantisek Severa. A Czech publication reprinted by Silverdale Books 2000. Over 800 illustrations.

Collins Field Guide - Insects of Britain & Northern Europe - Michael Chinery - 3rd Edition, 1993. Excellent condition.

The New Naturalist- Insect Natural History - A .D. Imms M.A., D.Sc., F. R. S. 1947 - Illustrated - 2 copies, one poor condition.

Other titles include: **Wild Flowers of Britain & Northern Europe** - Collins Pocket Guide 4th edition - Fitter & Blamey. **Wild flowers of the Mediterranean**

- David Burnie. **Field Guide to Birds of N. America** - National Geographic Society 2nd edition, 1994. **Birds of Europe** - Lars Jonsson, 1992. **Field Guide to the Birds of Britain and Europe** - R. Peterson, Guy Mountford & P. A. D. Hollom.

The Oxford Book of Birds (Pocket Edition). **Field Guide to the Birds of Britain** - Reader's Digest, 1997. **Bird Spotting** - John Holland. **Mysteries of Animal Migration** - Insects, Birds & Fishes - Matthieu Ricard, 1969.

Report on the Field Trip to Upton Towans - July 19th 2008.

In what has generally been a very poor summer for butterflies we were fortunate to be blessed with fine weather during our field trip to Upton Towans. Whilst the wind made photographing a little difficult, the butterflies at least, were out in force. A count of just over 90 Dark Green Fritillaries was made and over a hundred Silver-studded Blues were seen, many of them still looking good. Small Skippers were also abundant, though easily over-looked.

We were a little early for the **Common Blue** and no **Brown Arguses** were seen. This year the **Common Blue** had been very scarce here in its first brood, and for the first year since 1991 I'd not seen any **Brown Arguses** here at all!

As well as the three most numerous butterflies, many **Ringlets** were seen, though these had been on the wing for some time and were not looking their best; the high numbers seen at the Towans this year was unusual. **Meadow Browns** were present, though usually outnumbered by the **Ringlets**. **Gatekeepers** were just starting to emerge and a couple of **Speckled**



Seen at a distance are six of the eight people who came along to enjoy the trip. From left to right: Dell Netherton, Maggie Goodere, Jim Barker, John Cook, Marilyn Edyvean and Sally Foster. Out of the picture were Dick Goodere and myself. What a pity more didn't turn up for what turned out to be such a splendid day!



Dark Green Fritillary ♀ as pictured by Marilyn Edyvean. This female was most compliant as it was nectaring on Valerian - they are usually very active and won't sit still for long!

Woods were seen, as well as 5 or 6 **Small Heaths**. A **Small Copper** greeted us soon after our arrival, but no more were recorded. As well as the well established residents a few vagrant **Large Whites**, **Small Whites** and **Red Admirals** appeared, as well as a single **Green-veined White**, a **Holly Blue** and a **Small Tortoiseshell**.

Although the species list was not particularly high, the sheer numbers of butterflies on the wing was a delight. Fresh male **Dark Green Fritillaries** were seen at virtually every

patch of Valerian; others were scouring the dune system for newly emerging females. At a particularly large patch of Valerian we saw a magnificent dark female which Marilyn Edyvean managed to successfully photograph despite the breeze. Having looked at the numerous plants of Ragwort in search of caterpillars of the **Cinnabar moth**, we were finally rewarded with a few groups of them just as we were about to leave the site, having passed them unnoticed on our way in.

~ Paul Browning, July 2008.

A Day with the Mini-Moths (both Micros, which may be taken for Macros!)

By Roger Lane.

On the 23rd June 2008, I at last found Cabilla Woods! I set off along the southern path looking for butterflies, and was quickly rewarded with 5, rather late **Brimstones**. Otherwise there were not a lot of species, apart from some sizeable 'brown-jobs' e.g. 20+ **Speckled Woods**, 25+ **Meadow Browns** and 15+ **Ringlets** - all along the southern path only. Of some interest were 2 **Large Skippers**, 1 **Small White** (double-checked) and 3+ **Green-veined Whites**. The best and last butterfly was a 'year-old' **Comma** (i.e. over-wintered). Otherwise, on the macro level the only other item of interest was the herd of Red Deer, new to me in Cornwall.

However, onto the mini-moths, the first was, to me, more like a micro – well, I needed my glasses on to see the markings! The colour was so unusual, a foxglove mauve, with yellow spotting. Fortunately it stayed around, and nearly disappeared when perched on a Foxglove flower! I had no idea what it was but made some basic drawings. When I got home I looked in Waring et al, and there on p.13 was 'my' moth (top right) - ***Pyrausta purpuralis***! At least, things are never that simple, and it turns out that there is also a ***Pyrausta aurata***! However, Leon Truscott sent me photos of both species, and to me, it seemed more like ***Pyrausta purpuralis***. Leon visited the locality the next day, and was successful in finding a specimen (24th June 2008), which he agreed was more likely to be '***purpuralis***'. Incidentally, I again saw one there on 30th June 2008. Cute!

The species is unusual, apparently, (normally one record per year?) The second micro-moth was MUCH more unusual and, when I first saw it, only twenty feet away from the '***purpuralis***'! Feeding on thistle tops, I saw a strikingly marked black and white moth, which I 'jumped to the conclusion', was my first **Magpie Moth** of the year. Looking more closely, I saw it was in fact much smaller, clearly marked and lacking any colour (e.g. yellow in Magpie Moth). Thinking I had found a dwarf, aberrant **Magpie Moth**, I went merrily on my way! There was no sign of either moth on the way back, so I returned home with an 'unknown' and a dwarf Magpie Moth!

Only at home did I have reference to both moths. Although I identified the small purple moth to the genus '***pyrausta* sp.**', it was only with Leon's help over the 'net', that we eventually came to the conclusion that it was ***Pyrausta purpularis***, as related above. However, the other moth was a different 'kettle of fish'. I had skipped through Waring et al. and found I could eliminate both **Magpie Moth** and even **Small Magpie Moth** (the latter also on p.13) and there on page 139, was the moth I **had**

over.....

seen, a pristine **ARGENT & SABLE!** I have gathered since that this moth is almost 'mythical' - in Cornwall at least. Can anyone let me know of any other records within say, the last 10 years?

Ref: Field Guide to the Moths of Great Britain and Ireland by P.Waring & M.Townsend.

R. Lane, 25, Warwick Dr., Buckler Village, ST.AUSTELL, Cornwall. PL25 3JJ

Editor's note:

Roger was fortunate to find ***Pyrausta purpuralis*** on page 13 of the Field Guide to the Moths of Great Britain and Ireland by Waring and Townsend because it is considered a micro moth belonging to the PYRALIDAE family as is the **Small Magpie** which was also, fortuitously illustrated on page 13 of this publication. Waring and Townsend only deal with the macro moths of the British Isles. A comprehensive look at the Pyralid moths of Great Britain, can be found in Barry Goater's excellent treatise, *British Pyralid Moths - A Guide to their Identification*, published by Harley Books (ISBN 0 946589 08 9), but it maybe out of print now. Roger's observation of the **Argent & Sable** is an excellent record for Cornwall. The moth is on the Cornish BAP plan (vol.3). It is an inhabitant of young Birch woods in open situations where clearing and re-growth have occurred. It is also found in newly established conifer plantations. In the far northwest of Scotland its main food-plant is Bog Myrtle where a smaller form known as ***nigrescens*** is found. Last recorded, I believe, by Dave Gibbon at Pensilva on the 26th May 1987.

Field Trip to Breney Common, 7th June 2008 - Marsh Fritillary.

Unlike much of this summer, the day turned out to be sunny and reasonably warm. I had indicated that we should all meet within the reserve, but upon arrival I saw that most of us had parked outside, on the road. My apologies to those who had already arrived and had parked within the reserve and wondered where the rest of us were. I'm glad to say we did all meet up eventually! This



Photographed here at Breney Common Reserve are from left to right: Del Netherton, John Gregory, Bernard Hocking, Sally Haseman, Donna Whitlock, Rick Connolly, a couple on holiday (sorry I couldn't remember your names), Joyce Gregory & John Cook.

particular field trip is always well attended (upwards of 14 of us) with this year being no exception - well attended that is except for the Marsh Fritillary!

As mentioned in the following article from Roger Lane, there appears to be

a population crash at this site and in particular, the western edge where our field trip concentrated, although all parts of the reserve yielded very poor numbers compared with previous years. Phil Harris informs me that this is more or less the norm across the county - so bad news indeed!

Having arrived, we marched down the track leading to the parking area/pond and turned right, across the western part of the reserve. I soon noticed that instead of a few **Marsh Fritillaries** greeting us, there were none. Indeed, I was so concerned that turning to one of our party, I began to comment on their observation of a **Marsh Fritillary** at the site two weeks ago and said that they must all be over by now - a ridiculous thought since it had been cool and wet and this was right in the middle of the site's peak emergence!

On a more optimistic note, we did encounter approximately 15 **Small Pearl-bordered Fritillaries** but this was small consolation for what is considered a prime Marsh Fritillary site in the South West.



Micropterix calthella, on Buttercup, Breney Common, 7th June 2008. Photo © P. H. Boggis.



Blood Vein, Breney Common, 7th June 2008. A regular sight each year. Photo © P. H. Boggis.

which the larva feed, *Chrysoteuchia culmella* (a grass-moth), *Glyphipterix thraussonella* - very common around *Juncus*, *Hedya pruniana* (Plum Tortrix), *Ypsolopha dentella* (Honeysuckle Moth), *Elachista argentella*, *Bactra lancealana* - larvae also found on *Juncus*, *Ypsolopha parenthesella* (larva), *Celypha rivulana* (larva) and finally, *Micropterix calthella* - a very small moth found, sometimes in numbers on the pollen of herbaceous plants especially the heads of buttercups (see photograph above).

Other species seen included **Common Blue**, **Green-veined White**, **Green Hairstreak**, **Small Copper**, **Red Admiral**, **Speckled Wood**, **Large White** and **Orange Tip** (male). Amongst the moths seen were: the **Brimstone**, **Green Carpet**, **Devon Carpet** - a good record, **Small Phoenix**, **Common Carpet**, **Brown Silver-line**, **Blood Vein**, **Common Wave**, **Silver-ground Carpet**, **Silver Hook**. Micro moths seen were: *Anthophila fabriciana* - a small moth found around nettles upon

~ Phil Boggis, June 2008.

Regarding the apparent population crash at Breney Common, Roger Lane sent me the following letter:

~ Ed.

Marsh Fritillary Population Crash at Breney Common.

There has indeed been a HUGE population crash. My records are as follows (after treble figures in some years since 1986, when I was CWT warden there), for 2008 then:

First: 1, 18th May 2008

Peak: 20+, 3rd June 2008

Last? 9+, 8th June 2008

You will notice the 'last' record is from the day after your Cornwall Butterfly Conservation meeting. I went there completely by chance (not knowing there had been a field meeting, after leading last year's!), but had only been there for 2 minutes when I picked up your tracks! Picked my way through hordes of **Small Pearl-bordered Fritillaries**, then set about finding a **Marsh Fritillary**. In the whole of the western reserve site (normally prolific) I found just ONE **Marsh Fritillary** (whereas you had three). I went to the north of the reserve - ZERO, then in the east (toward Helman Tor) where there has always been a strong colony, I found another EIGHT only. This date (and yours) should have been the PEAK for the year! The ONE I saw in the west (presumably where you saw 'yours' was 'acting strangely' (flew around and around me, then crash landed in long 'grass'. Do adults get parasitised?

Meanwhile, the **Marsh Fritillaries** at Menadue Moor appeared to start off well (with 6+ on 23rd May, my only visit). How they fared in June, I don't know - so YES, a significant and terrible 'crash' at Breney Common at least.

Best Wishes,
Roger.



Subsequent to Roger's observations, and seen from another perspective, Paul Browning writes this encouraging article:

~Ed.

Good News for Cornwall.

After the poor summer of 2007 the last thing we wanted was a repeat performance this year. Well, wanted or not it's what we got, and there is no doubt that many butterfly colonies suffered a fall in their numbers as a result of the weather, but it was not all doom and gloom, in fact, far from it.

This year, Upton Towans near Hayle, had the largest number of **Dark Green Fritillaries** recorded for at least the last decade and probably longer, and the same can be said for the **Ringlet**, both at this site and elsewhere. **Silver-studded Blues** also had a good year at the Towans, with thousands flying at peak time.

Marsh Fritillary colonies rise and fall in numbers due largely to predation by parasitic wasps and it is difficult to assess the effect of the weather on these colonies. The population at Breney Common was very low this year and a

colony at Church Hay on Bodmin Moor appears to have become extinct, but other colonies are doing well. A small colony on the Natural England reserve on the Lizard has been steadily growing in numbers for the last five years or so, and this year the colony was at least as strong as it was last year.

In September of this year, some of our members were invited to a farm in the upper Fowey Valley to count larval webs of the **Marsh Fritillary**. The farm was not being managed for the butterfly, and the only grazing on site was by a small number of cattle that were allowed to wander down to the wet area when they chose, and a few horses, which were allowed to graze in another compartment for part of the year. There were also signs of deer activity on the site.



The Marsh Fritillary, pictured here by Paul Browning, has had its ups and downs over the past few years. Always given to fluctuations in population density on any given site, Paul explains some of the reasons why. Photo © P. Browning, 2008.

The result of this patchy grazing does not, initially, look promising; the grasses look much longer than what is normally thought to be ideal for **Marsh Fritillary** colonies on wet grassland, but during the survey the recorders found that the habitat had a very good structure. In fact the site turned out to be so good that it now holds the largest known colony of the **Marsh Fritillary** in Cornwall and one of the largest in the whole of the country, with over 100 larval webs counted this year. The site owners are very pleased to have this protected species thriving on their land, and want to keep them thriving. Furthermore a neighbouring farm has an area of similar habitat with good numbers of **Marsh Fritillary**, and the owners of that site are also keen to keep the habitat suitable for the butterfly - all very good news indeed.

~ Paul Browning, September 2008.



Garden Open Day at Penhalt Barn House.

Another successful 'Garden Open' was enjoyed by some 30 people who attended this year. A total of £166.80 was raised from the sale of plants and cream teas etc. On behalf of the committee and members, I would once again like to thank Tim and Sandy Dingle for all their efforts in making this an enjoyable and successful day and for their kind donation to Cornwall Butterfly Conservation.

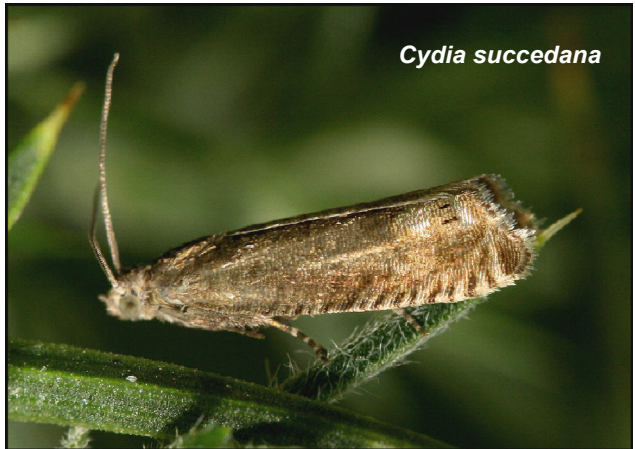
The weather kept reasonably warm and dry for the occasion which enabled me to do some exploring down at the bottom of Tim and Sandy's field, amongst the sheltered trees and gorse at their woodland edge. An opportunity to photograph a
over.....



common moth was seized upon when I noticed a number of ***Cydia succedana*** which is a small, and on first impressions, rather plain looking moth but, as can be seen from the photograph below, proves an interesting moth close up! It is often seen flitting

A young family enjoying a 'cuppa' after exploring the gardens at Penhalt Barn House.

about amongst mature gorse bushes on which the larvae feed and some years is so common that one does not think to seize the opportunity to photograph it and hence it tends to get forgotten! Another interesting moth observed was ***Epiblema scutulana*** which can so easily be mistaken for a bird-dropping! It takes fright easily and it took a number of stealthy



Cydia succedana



Epiblema scutulana

attempts to even get a view from behind as illustrated on the left. The moth flies actively about its habitat at dusk. The larvae feed on Lesser Burdock, Knapweed and various thistles. Finally, down in a shady hollow, I noticed a **Drinker** caterpillar which is illustrated on page 11. It was resting on an upturned leaf and quite conspicuous. The moth is named after the caterpillar's habit of drinking

drops of dew from plants.



This striking looking specimen of the Drinker caterpillar was unusual in that the body colour was a rich slate grey rather than greyish-black as in most specimens.

All photographs in this article are copyright the author.

~ Phil Boggis, June 2008.

Born to be Wild.

Barry Ofield writes:

No, I don't think I was born to be wild! But that was the title of a series of six BBC programmes which were shown in July 2008 on BBC 4 about naturalists who devote a lot of their time for the preservation of many aspects of nature i.e., birds, reptiles, sea creatures, bugs, butterflies and moths.



Barry seen here inside his greenhouse alongside his Heath Fritillary breeding cages.

My involvement began in early 2007 when Butterfly Conservation Headquarters asked if I would take part in a programme, which would include my efforts in breeding for release, the **Heath Fritillary (*Melicta athalia*)**. Previously, Tom Sleep and myself had released in excess of 1500 imagines into Greenscoombe Wood, Cornwall where it had become extinct due to habitat deteriora-

tion over the previous 20 years. (This has all been well documented in previous issues of the Butterfly Observer). My part in 2006/7 was to breed more adults for another release at Greenscoombe and one at Blanchdown Wood, which is on the Devon side of the Tamar River.

Filming started on the 8th May 2007 and took two days to complete, including the release at Blanchdown. The filming and interviews took place at my home at Pendoggett, North Cornwall where the weather on the first day was fine

over.....

and warm. I have to say that the BBC crew worked very hard and took an enormous amount of footage and asked many questions. The problem was that one had no idea which part of the filming and sound would be edited out. It was also impossible to know, at the time, if the whole thing would be factual in relation to the work of breeding the butterflies for release.

On day two of filming the weather broke and it poured with rain; not the ideal conditions for releasing butterflies. There were three problems:

- 1) Long-range weather forecasts indicated a long spell of poor weather with continuous wind and rain.
- 2) The BBC team had no additional time to film.
- 3) My **Heath Fritillaries** were emerging in large numbers and my food-plant stocks were getting low so it was essential to release as many as possible before they started laying eggs in the cages.

Dr. Caroline Bulman from Butterfly Conservation National met us at Blanchdown Wood where the weather was, to say the least, awful. We did however, manage to carry out the release, finishing up looking like drowned rats. Anyone seeing the final programme would see the dreadful conditions we were working in.

The BBC seemed to hone in on the fact that I nearly fell down the slope where we were standing, as this was shown twice in the main programme,

whilst in the final part, Caroline was portrayed smiling at the disastrous conditions we were working under. On reflection however, the overall content did report the time and effort that myself and other participants of the programmes had spent in pursuit of our interests in the conservation of a wide range of animals and insects.

Obviously there were many parts of the programme that did not please me but these are of a personal nature and did not affect the overall theme of the series, which if ever repeated, I would recommend as excellent viewing for anyone interested in all aspects of nature. The programmes, in the future, may well arouse considerable interest for people to take a more active part in the preservation of our natural environment.

I am pleased to report that some **Heath Fritillaries** were seen at Blanchdown Wood in 2008 but only time will tell if the introduction has been a success.

~ Barry Ofield, September 2008.



Barry, alongside Dr. Caroline Bulman, Senior Species Ecologist from headquarters, are seen here releasing the butterflies at Blanchdown Wood, Tamar Valley, Devon, filmed by a BBC camera crew. As Barry says, it was a very wet day, and slippery too!

Whilst on our field trip in June, to Greenscoombe Wood (note the spelling is with a double 'o'), Barry Ofield spotted this extreme aberration of a Heath Fritillary. Many at Deer Park were similarly observed over the years by Lee Slaughter. An interesting report regarding the conservation management of this butterfly, both on the Devon and Cornwall border and nationally can be found at the following link which can be downloaded as a PDF (Portable Document Format):



www.vlinderstichting.nl/pdf/fb/10-2_Bulman.pdf

For those who missed the programme, *Born to be Wild* and would like a copy, I'm in negotiation with the BBC for copyright distribution. I will let you all know the outcome in the next edition. ~ Ed.

Delabole Quarry - Further Information.

A species not referred to in previous articles is the **Dingy Skipper**, which occurs in small colonies/subcolonies across the site. There are large areas of the food-plant, Bird's-foot Trefoil, but much is on exposed north easterly facing slopes of the quarry waste tip, around which the wind whips. Delabole being relatively on higher ground than the surrounding area, almost has its own microclimate, quite often being in mist when lower down it is clear. Conversely, when the sea mist covers the coastline, Delabole can be in bright sunshine! The **Dingy Skipper** can be found, in small numbers, in sheltered hollows and dips even where there is some protection provided by taller vegetation. Frustratingly there are many areas that would appear suitable yet hold none. The adjacent former railway line has produced small numbers, but is now rather overgrown. I obtained permission to look at a smaller, much more sheltered disused quarry, on a nearby farm and this produces better numbers. On a fine day individuals can be found in adjoining rough grassland.

The woods below the main Quarry have held **Silver-washed Fritillary** and **Purple Hairstreak**, but again are becoming very overgrown. The Quarry and the surrounding area were recorded for many years by the late John Holden, who was GP for Delabole and district from the late 1940s. A good number of his records appear in Smith's *Moths and Butterflies of Cornwall and the Isles of Scilly*.

~ John Oates, Mounters Farm, Chawton, Alton Hants, GU34 1RZ.

We much appreciate John's added comments about this site, especially the extra background information regarding the late John Holden. John made these observations whilst visiting Cornwall back in August. ~ Ed.

A Damp Afternoon at Pehale Sands - 21st June 2008.

All morning I was fretting about the weather, which is usually good for our annual field trip to Penhale Sands, but on this occasion it wasn't to be. The Atlantic front and its associated rain was poised to strike right in the middle of the afternoon. To his credit, Lee Slaughter, who usually assists me in this



endeavour, phoned in the morning to say he was optimistic that a brief drier interlude, forecast at 2.30pm, would mean we would have, before the rain finally set in, a brief glimpse of the Silver-studded Blues that we have come to expect to see in their thousands at this site.

Seen here inspecting the dunes for any Silver-studded Blues nestling in the grass sheltering from the rain are from left to right, Mary Cockerill, John Cook, Joyce Gregory, Lee Slaughter, John Gregory and John Ruppersbery.

I was particularly looking forward to guiding some of our newer members to the

butterflies' breeding grounds and experiencing the exhilaration of seeing so many! Lee persuaded me not to cancel the trip and right he was too! We all tramped rather quickly across the dunes to beat the impending weather that was threatening any minute, to close in. We were not disappointed in seeing quite a few butterflies also. A few close-up photographs of the underside wings revealing the silver studs were carefully explained to our newcomers before the weather did indeed turn very wet as we beat a hasty retreat back to our cars.

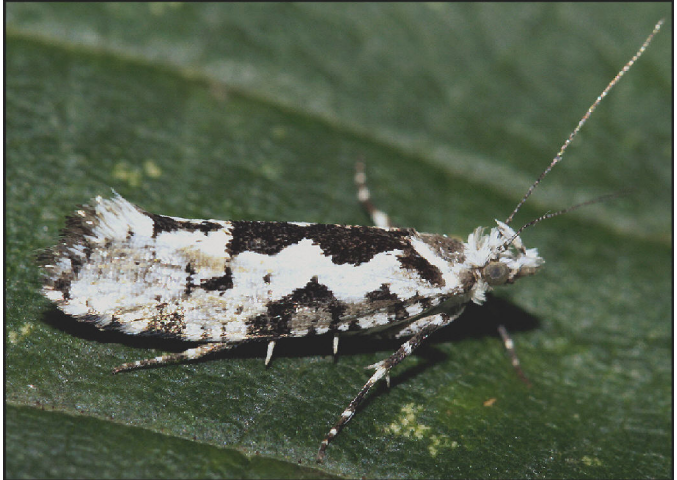


Sporting a really clear set of 'studs', this specimen proved very obliging indeed to having its photograph taken. The weather helped, but after being coaxed onto a flower it took off, blown by the wind, into the grass.

~ Phil Boggis, June 2008.

Moths versus Butterflies.

Perhaps the question should not be asked and am I opening a Pandora's box? However, I often find myself asking this question, are we lepidopterists who major on butterflies or lepidopterists who major on moths, or are we, as I think we should be, both? Is it a question of being a 'lark' as opposed to an 'owl' so to speak? I readily confess to being an 'owl' hence I have no difficulty staying up to the small wee hours of the morning studying the latest find in my moth trap or going out on a 'Heath Fest' expedition to the middle of Red Moor on a cold autumn evening. I suggest it may be something to do with my 'circadian rhythm' and not getting enough direct sunlight at the right time (see article on page 17 - Monarch's Biological Clock Discovered). Anyway, I hazard a guess that many who appreciate butterflies love beautiful things but those 'small brown jobbies' just do not quite excite us in the same way and galvanise us into further study. Perhaps I'm being unfair as we all have limited time and resources at our disposal, and for some of us 'old-uns', less energy to spend on both; I'm sure these are the main reasons.



Ypsolopha sequella, Winster, Cumbria, 6th September 2008. Photo © P. H. Boggis

I'm now going to introduce you to the world of some of our lesser known species, the so called micro moths. Whilst on holiday in the Lake District recently, I came across a beautiful black and white moth that is not, as far as I'm aware, found in Cornwall but has been reported from south Devon and also Somerset and many other counties in England and Wales up to the Scottish border. Several of these moths fluttered down from a tall Field Maple overshadowing my moth light set up next to our holiday cottage. The species, *Ypsolopha sequella* (Clerck, 1759), is featured on the front cover of *The Moths and Butterflies of Great Britain and Ireland*, vol.3. It is a local species, having one generation a year, and can be seen in August and September. The food-plant is indeed Field Maple and occasionally, Sycamore. The moth rests on tree trunks by day and is attracted to light. A photo of one of the specimens at my light is shown above.

Another interesting moth, the **Firethorn Leaf Miner - *Phyllonorycter leucographella*** (Zeller 1850), was first seen in this country in Wickford, south Essex, back in 1989 and was at the time, and in ensuing years, the subject of research into its spread in the UK. It has therefore taken approximately 20 years to reach Cornwall and it was with quite some excitement that John Gregory informed over....

me that he had found the leaf mines of this moth on Firethorn (*Pyracantha*) on the 12th September 2008 at Boldelva (SX0455). This was the first record for Cornwall



***Phyllonorycter leucographella*. Ex mine on Firethorn (*Pyracantha*), Par Moor, 21st September 2008.**

Photo © P. H. Boggis.

tunnels along the midrib of the leaf leaving a whitish blotch in the centre with a thin membrane through which the larva can be seen. Mature mines, due to the

contraction of the silk spun by the caterpillar, pull the leaf edges towards each other forming a 'pod' as can be seen in the photograph on the right. Indeed, in the Cornwall Moth Group's 2004 Newsletter, issue 4, John encouraged members to be on the lookout for this moth's leaf mines. (The article is found near the bottom of the newsletter under the heading 'Leaf mines to watch out for'). He has now had the pleasure of finding them himself although it has



Leaf mine of *Phyllonorycter leucographella*. Note how the leaf is pulled upwards by the mature mine to form a 'pod' (the mine on the right in the photo) © P. H. Boggis.

taken some 4 years to do so! Cornwall Moth Group's Newsletter can be found at:

www.cornwallmothgroup.org.uk/download/cmgnl4.doc

I'm indebted to John Gregory for providing an adult for photography along with a specimen of the moth's leaf mine.

~ Phil Boggis, September 2008.

A Fleeting Glimpse of Summer.

After one of the worst summers I can remember with days and days of rain in August and with very few sightings of both resident and migrant butterflies for most of the month there appeared to be a complete dearth of insects in my garden in the North Cornwall area where I live. Where were all those resident butterflies and the migrant **Painted Ladies**, **Clouded Yellows**, **Silver Y** moths, and **Humming-bird Hawk-moths** (I only saw one this summer), which over the past few years have frequented our gardens in such good numbers?

In lepidoptera terms this has been a year of total depression, so imagine my excitement when on the 21st August the sun came out and it was very warm. I went to the area of my garden where we have several Buddleia bushes together with a lot of Privet in flower and there was a sight for any entomologist to behold! **Red Admirals** all over the flowers, 2 **Peacocks**, **Small Tortoiseshell's** (many more than I had seen over the past few years), several **Wall Browns**, **Large and Small Whites**, **Green-veined Whites**, **Hedge Browns**, **Meadow Browns**, two **Silver Y's**, Honeybees and Bumblebees on every flower. It was a real treat observing all these insects enjoying their fill of nectar as though they were starving and celebrating this rare occasion when the sun shone. They dispelled my fears that the whole population would have suffered a dramatic decline due to the weather.

It is obvious that the normal breeding cycle had continued despite the conditions and that they are tougher than we think, hiding away and waiting for the warmth to arrive. Needless to say on the 22nd August after a similar display in the morning with very warm conditions, the weather closed in again with more rain and all the insects disappeared to await another spell of sunshine.

~ Barry Ofield, September 2008.

Happy Tonics' Mary Ellen Ryall (see Butterfly Observer issues 34, p.5 and issue 37, p.2.), has very kindly published an abstraction from Malcolm Lee's article from the last issue of The Butterfly Observer. The article found in Happy Tonics' *Butterflies & Gardens* Spring Issue 2008, mentions the spread of the **Comma** during the 1930s after a persistent decline which reached its lowest ebb in 1910. It states that no **Commas** were found in Cornwall in 1906. A rapid expansion then ensued. The article confirms the general spread of this species northward probably due to global warming. The article states that the **Comma** has expanded some 50 miles per decade. An excellent treatise of its decline and expansion can be found in *The Millennium Atlas of Butterflies in Britain and Ireland* - page 210 where it is mentioned that the sightings in Scotland have been the first for 130 years.

The following article may be of interest to many readers who are now on the lookout for Atlantic storms to bring a few of those cherished sightings of the **Monarch** to our shores. It is reprinted here by kind permission, and is taken from the Spring Issue 2008 of *Butterflies & Gardens*, published by Happy Tonics:

Monarch Butterfly's Biological Clock Discovered.

Massachusetts, USA.

Professor and Chair of Neurobiology **Steven M. Reppert**, MD, and his colleagues at the University of Massachusetts Medical School have unlocked the amazing over....

biological clock workings of the **Monarch** butterfly.

The big question has always been, how does the **Monarch** know to fly to Mexico each fall? According to Reppert, the butterfly has two genes that make up an internal biological clock, called cryptochrome 1 and cryptochrome 2 (CRY1 and CRY2).

Humans and other mammals have CRY2. This is the source of circadian rhythms. Dr. Reppert points out that the world's most-studied insect, the fruit fly, has only CRY1. It was thought to be the standard insect clock.

CRY1 and CRY2 genes have the ability to make protein molecules that act as gears of a clock. According to Reppert, the proteins are created and destroyed on a regular basis. Every 24 hours the sun strikes some light-sensitive cells at the right intensity, and the clock resets to zero. CRY1 gene proteins respond directly to the blue wavelength of light. CRY2 utilises other light-sensing cells, usually located in the eye. The **Monarch** also has a sun compass.



Nectaring Monarch on Milkweed © Cindy Dyer.

~ Reprinted by kind permission © Happy Tonics 2008.



On the lookout for the Scarce Merveille du Jour, from left to right (going clockwise) are: Phil Boggis, John Nicholls, Leon Truscott and Tony Aston.

regard to seeing the moth but nevertheless an enjoyable evening was had by all. It was good to see both the **Scarce** and the **Green Silver-lines** at the moth light. (See photograph right). ~ Phil Boggis, June 2008.

Seen here on the left are some of us who have a 'circadian rhythm' that apparently keeps us awake at night! The occasion was an attempt to pin-point where the **Scarce Merveille du Jour** moth occurs at Lower Kilminorth Woods. Later, we were joined by Donna Whitlock who took the accompanying photograph. It turned out to be a fruitless night with



Scarce Silver-lines, Lower Kilminorth Woods, 28th June 2008.
Photo © P. H. Boggis

Conservation Days.

Thursday 20th November 2008.

11.00 am start. De Lank Quarry carrying out scrub clearance. Contact: Sally Foster on 01736 753259. Please notify if coming as the Quarry Manager requires attendance numbers.

Saturday 24th January 2009.

Clearance work either at Deer Park for the **Heath Fritillary** or at Bunny's Hill for the **Pearl-bordered Fritillary**. Please contact Lee Slaughter on 01726 817505 or Email at lee@derekslaughterinsurance.com to register your interest and details will be given nearer the date.

Butterfly Corner

Paintings of butterflies in their natural surroundings by Julie Horner.



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or phone Julie Horner 01829-250939 for colour brochure & prices.

A donation will be given to the local Branch of Butterfly Conservation.

Please quote BC01 in any communication.

Jayne Herbert, our web-mistress, is offering her Web Design and Hosting facilities.
We thank her for all she does for our website. ~ Ed.

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Cornwall Butterfly Conservation's Web Manager

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Contact Jayne for more information.

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Telephone: 01736 363167

The opinions expressed in the articles of this newsletter are not necessarily those of the Cornwall Branch, or Butterfly Conservation.

Cornwall Butterfly Conservation Committee and Contacts

Chairman: Phil Harris

59 Carnarthen Street, Camborne. TR14 8UP 07845 984 426 (mobile)
phil.harris@duchy.ac.uk

Secretary: Maggie Goodere

3 Churchtown Road, Gwithian, Hayle. TR27 5BX (01736) 753077
gooderes@talktalk.net

Treasurer & Membership Secretary: Paul Browning

Penhale Jakes Farm, Ashton, Helston. TR13 9SD (01736) 763677

Newsletter & Moth Officer: Phil Boggis

6 Tremena Gardens, St. Austell. PL25 5QH (01726) 66124
phil.boggis@btinternet.com

Field Trip Organiser: Lee Slaughter

2 Trinity Street, St. Austell. PL25 5LY (01726) 817505 (ex dir)
lee@derekslaughterinsurance.com

Conservation Officer: Steve Hoskin

25 Coulthard Drive, Breage, Helston. TR13 9PF (01326) 563462
sdhoskin@hotmail.com

Carly Hoskin

25 Coulthard Drive, Breage, Helston. TR13 9PF (01326) 563462
cmhoskin@hotmail.co.uk

Adrian Spalding

Tremayne Farm Cottage, Praze-an-Beeble, Camborne. TR14 9PH (01209) 831517

Steve Bassett

36 Rectory Road, St. Stephen, St. Austell. PL26 7RJ (01726) 824161
steve.bassett36@btinternet.com

Jess Tatton-Brown

4 Eliot Road, Truro. TR1 3TQ (01872) 241903
Jess@lettuceandlovage.com

Contacts:

Transect Co-ordinator: Jim Barker

'An Arth', Alexandra Road, St. Ives. TR26 1BX (01736) 794134
jimfrances@talktalk.net

Barry Ofield (Heath Fritillary Breeding Program)

Oakland Cottage, Pendoggett, St. Kew, Bodmin. PL30 3HQ (01208) 880616
Bofie@homecall.co.uk

Recorder: John Worth

20 St. Clare Flats, Penzance. TR18 2PR (01736) 362438
jowan@tiscali.co.uk

Butterfly Migration Information: Roger Lane

25 Warwick Drive, Buckler's Village, Holmbush, St. Austell. PL25 3JJ (01726) 67944
RogerLane65@aol.com

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

Cornwall Butterfly Conservation Yahoo! Groups:

<http://uk.groups.yahoo.com/group/cornwall-butterfly-conservation>

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