



# Borders Newsletter



Speckled Wood

## Issue 3

Welcome to the latest issue of the local Butterfly Conservation newsletter for people living in the Scottish Borders. It goes out freely to all members of Butterfly Conservation in the region as well as to other groups, agencies and individuals with an interest in butterflies, moths and their conservation. Please pass it on to others and let us know of people who you think should be added to the circulation.

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[All photos are by the authors (except where otherwise noted) but not necessarily in their own articles]

Please write in with your articles and views. The next issue will go out in the spring. Email to me at the above address or by post to: 12 Barefoots Crescent Eyemouth, Berwickshire TD14 5BA

## Autumn 2009

### Butterfly & Moth Conservation in the Borders

What a difference a year makes! During summer 2009 we have had really good numbers of butterflies on the wing - not just the garden species, but also our habitat specialists such as Small Blue and Northern Brown Argus; and the Green Hairstreak has been confirmed at Avenel Hill, where it was thought to be lost. The huge influx of Painted Lady butterflies in the early summer has delighted not just us, but has also brought butterflies to the attention of the wider public. The spread of new species from the south has also continued, with Large Skipper, Small Skipper, Speckled Wood and Wall all now having firm, if limited, footholds in the southern or coastal regions of the Borders.

We worry when few flying butterflies are seen, but it's the whole life cycle which should be looked at. The fortunes of a species depend on successful mating and the conditions experienced by egg, larva and pupa. Mating and egg-laying only require a brief period of reasonable weather and then the adults have completed their role; what happens next may be the determining factor in how many next generation adults we see later. The natural variations in weather, parasites, etc. will create huge year-to-year fluctuations and so the focus must be on habitats - if we lose these then there will be a permanent impact on species.



Wall



Alder Moth (photo: Malcolm Lindsay)

There is a positive story for moths too. The Alder Moth was recorded for the first time in Berwickshire in June, and the Blackneck was seen after a gap of over 50 years in the same month. Similarly, a larva of the Chamomile Shark was found on the coast at a site where it was last recorded in 1973. Other species which may be moving north to our region because of climate change are the Least Yellow Underwing and Figure of Eighty.

Hopefully you have managed to get out and do some butterfly recording to help fill the gaps in data for the next update of the butterfly atlas. Now is the time to send in your records for 2009. For butterflies these should go to Duncan Davidson, 140 Pitcorthie Drive, Dunfermline, KY11 1HG [duncan@dwwd.freeserve.co.uk](mailto:duncan@dwwd.freeserve.co.uk) Tel: 01383 730446. For moths, the Borders is split up into the four old counties, each with its own Recorder, and if you're not sure who to send them to, contact me ([barry@prater.myzen.co.uk](mailto:barry@prater.myzen.co.uk)) or Malcolm Lindsay ([malcandles@tiscali.co.uk](mailto:malcandles@tiscali.co.uk) Tel: 01896 753425).

More details on submitting records can be found on the branch website <http://www.eastscotland-butterflies.org.uk/index.html>, together with downloadable recording forms.

Barry Prater

## Field trip to Piper's Knowe Quarry - Sunday 19 July

Barry Prater, Eyemouth

After a day of atrocious driving rain on the Friday and consequent fears about the success of the outing, Sunday started with the promise of some sunshine and we were not let down. In all five of us made it to this disused sand and gravel quarry lying 3km north of Chirnside (NT883593) and were given a good welcome by the farmer on whose land it is. Much of the area has poor soil and as such supports a good range of wild grasses and nectar sources, although scrub development will, in time, change this.

The main target species was the Small Skipper, which has only recently extended its range across the border and we saw several, possibly as many as seven, scattered across the site, suggesting that it is now well established there. The most abundant butterfly was the Meadow Brown, closely followed by the Common Blue (of which there were some beautifully marked females) and the Ringlet. Six other butterfly species were recorded, including a tatty Painted Lady, presumably one of the last survivors of the many spring migrants we saw this year.



Small Skipper

Day-flying moths were not to be outdone though, with Shaded Broad-bars being put up at nearly every step and good numbers of both Six-spot and Narrow-bordered Five-spot Burnets feeding on Greater Knapweed heads. One Latticed Heath with its jazzy wing pattern gave good views and an adult Tiger Moth was nestling in the grass. In the evening an actinic light was put out to investigate the moths further and in all 19 species were recorded (day + night) including Small Rivulet and Common Footman.



Small Rivulet



Garden Tiger

Other wildlife noted included Common Blue Damselfly, Blue-tailed Damselfly and Common Darter; Green Sandpiper and Crossbill; the remains of many predated Signal Crayfish; Greater Twayblade and Shoreweed (*Littorella uniflora*); and the moss *Racomitrium lanuginosum*, which is very much out-of-habitat here as it is usually associated with upland wet areas.

So, a very pleasing outcome, which was helped enormously by the sharing of knowledge and expertise by those who were there. Thanks must also go to Rob Cowe who owns the site for his interest and encouragement.

Two takes on helping out with our survey work:

## 1. Wider Countryside Butterfly Survey

Susan McKenzie, Edinburgh

Being a working mum, I don't have a great deal of free time, but very much wanted to contribute in some small way to the work of Butterfly Conservation. The WCBS transects are a great way to get involved as you only have to visit the square twice a year - once in July and once in August. A great excuse for a day out in the countryside.

It was a bit daunting at the outset - map coordinates and survey instructions. Finding coordinates and following instructions aren't exactly my fortes, but it ended up being fairly straightforward. Our 1km square is at Ecclaw, just in the Scottish Borders, but very close to the East Lothian boundary. There is lots of farmland, mainly put to pasture but also crops. A stream runs through the land, and there is bog as well as woodland.

This was something the children were able to get involved in too - they delight in spotting butterflies and moths. They even wrote down how many ladybirds and beetles they found and mapped exactly where they were found. The kids have a different perspective on the world (being shorter and closer to the ground!) and are really good at and enthusiastic about all kinds of wildlife.

For me personally, it was interesting in two ways. The first was noting the trends of where Lepidoptera were found. Not so much in the exposed farmland, but lots in the rough overgrown sections of the transect where there was a greater variety of habitat (adjacent to woodland and also close to water).



Small Tortoiseshell

The second revelation for me was discovering the apparent differences in flight of Lepidoptera. There were faster moving butterflies, much harder to identify when they are flying quickly away from you, compared with the more laid back moths which, even when disturbed, quickly settle down again close by - giving you the opportunity to observe them more closely.

Our sightings included lots of Large White butterflies, but also Small Tortoiseshell and Ringlet. Moths spotted included a Snout, some carpets and two micros, the grass moth *Agriphila tristella* and *Udea lutealis*.



Snout



*Udea lutealis*

All in all, a very rewarding experience for us. Now all I have to do is get round to formally documenting and submitting our survey results ....another thing I'm not so good at!

## 2. The Butterfly Square

Della McKenzie (Age 10), Edinburgh

The butterfly square is a piece of land that me and my family walk on to find butterflies and other creatures. We go once a month on sunny days and we never go when it is windy because there will be creatures but not than many butterflies. We try not to go September - April for the same reason we don't go when it is windy.

On our last few visits we have found wildlife in hundreds. Once we found a bird of prey swooping overhead. We have seen moths and butterflies. I think the butterfly we have seen the most is the large white. We have seen moths and the most interesting moth was a type of micro moth we could not identify.

We start in a cow field then we went over a stream then went through a couple of fields, then it was marshy and we went over it seeing the usual ladybirds. We soon got onto the field in which we saw the bird of prey; we went down that field then along a bumpy road in the field. We got onto a road that was in use and had grass on each side. There was a garden with lots of plants - that was where we saw the large whites. We went along the road then we saw the micro moth none of us could recognise. Then we saw some swifts and after a while we saw our car and went back home.



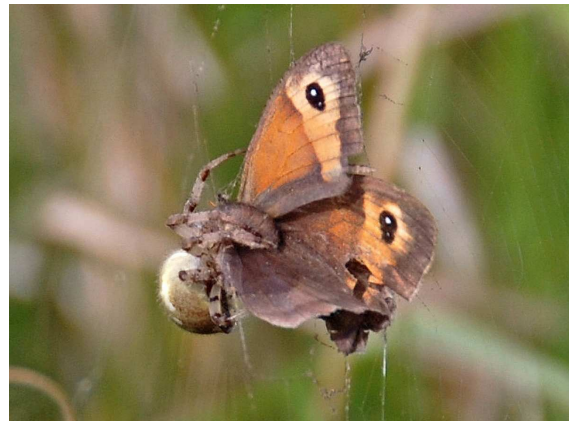
Large White

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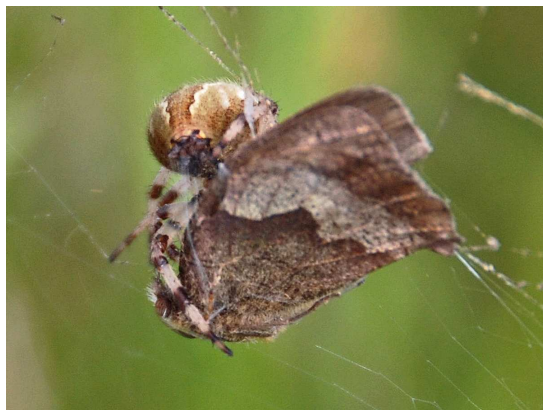
## Murder Maist Foul

Eddie & Morag Paterson, Coldstream

This sad event happened as we followed a courting couple of Meadow Browns. They went out of sight for about 5 seconds and when they came into view one was disappearing over the horizon and the other was in this predicament.



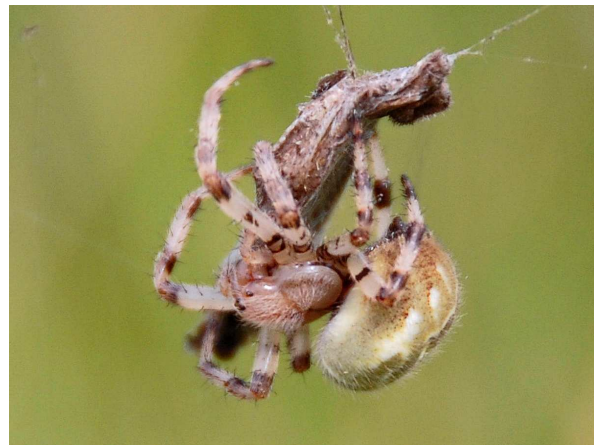
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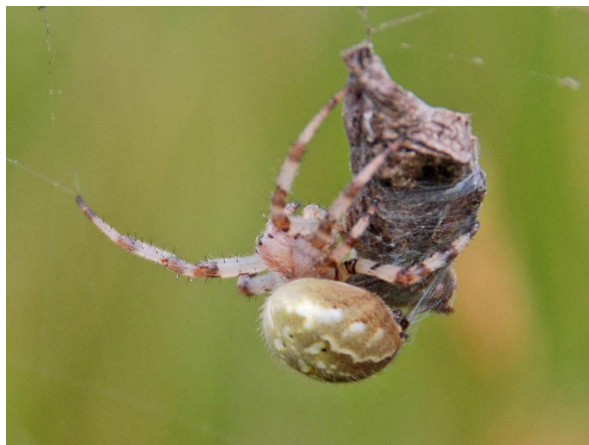
0.34 minutes

This as said was after 5 seconds and already you see the spider starting to enmesh his, or her, victim which was still struggling at this stage. Half a minute later, the Meadow Brown was still moving but you can now see the spinnerets working overtime and the spider was circling with occasional pauses, presumably to pacify by biting.

By now struggles have ceased and we think this picture shows a bite going in.



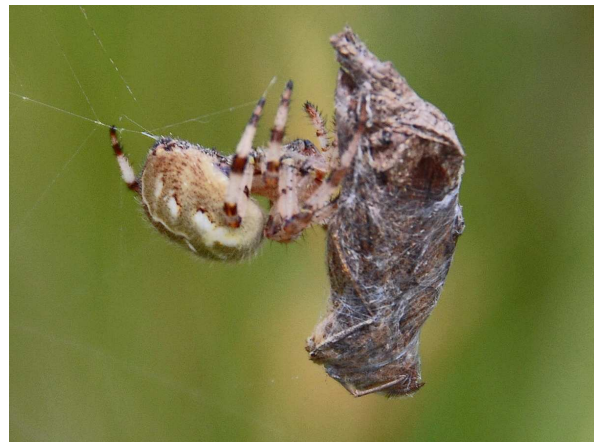
1.26 minutes



1.48 minutes

Parcelling continues, as neat as a super-market, and never mind the labelling or Sell-by date.

Job done, and one the Pharaohs would appreciate, and the spider takes a breather. The legs and head of the butterfly are still clearly visible.



2.07 minutes

This is real "Fast Food". On the wing to oven-ready in 2 minutes 7 seconds. Beat that Tesco!

For the conservationists among you, we did see quite a few Meadow Browns that day and this was the only fatality we saw, so we think the species will survive this tragedy.

## Orange-tips

John Fair, Etrickbridge

Last year and again this year we found lots of Orange-tip caterpillars on a plant we can't identify in one of our flower beds, three plants in all. They look like a variegated form of Lady's Smock, with large double flowers and lots of 'pods'. We encourage as much Lady's Smock as possible in our small (40x16 ft) 'wild bit' on our lawn, but they are not half as successful as this plant. We moved to Scotland from Dorset some ten years ago and think we possibly brought it in the soil with other plants by accident.



the unidentified plant

This year one plant had fourteen caterpillars, one had six and one smaller plant had two. Last year one plant had eighteen caterpillars. I watched these carefully through their development and could detect no cannibalism. One caterpillar dried up and had a black hole in its side so I presume it was attacked by a parasite or pecked by a bird. All of the rest developed to full size (30mm) and disappeared.



Orange-tip larva



spot the chrysalis!

I grow orchids and *Cymbidiums* are supposed to spend most of the summer outside in the garden after frosts have finished, and before they start again in the autumn, to promote flowering. Imagine my amazement when bringing in an orchid and checking for new shoots to the incredible bit of camouflage of the green form of the Orange-tip chrysalis, looking exactly like one of the dried up leaves of the orchid. Do caterpillars really know what their chrysalis form looks like or was this a happy accident?

The Orange-tip is one of my favourite butterflies and for me, along with primroses, which also grow in our wild bit, herald the onset of spring. We also have a few Small Copper butterflies and we are encouraging as much Common and Sheep's Sorrel in the wild bit to help this beautiful little butterfly.

## A Berwickshire Butterfly Briefing

Iain Cowe, Chirnside

A year that began well for butterflies, surprisingly, also ended well. After the dismal offerings of 2007-08, it was fully expected to have to endure another wet summer. That though, at least here in East Berwickshire, was not to be the case. I do however put a lot of my discoveries down to the fact that right on my doorstep I have the encouragement of Barry Prater, who earlier in the year sent me a list of gaps in butterfly recording in the Borders forwarded to him by Duncan Davidson. I don't know about any of you, but I love lists, I looked at this list as a Treasure map, eager to explore all the grid references that I could sensibly achieve. I made new personal discoveries, and visited parts of Berwickshire I would otherwise have ignored....and it opened my eyes to the possibilities of new discoveries in the future. I am by nature very enthusiastic, and blindly optimistic, but even I could never have dreamed that I would see two species that I had never seen before...right on my doorstep!!

The three destinations and target species I chose to pursue were the sharp knolls and cattle grazed grassland of Greenlaw Dean, for Northern Brown Argus and Dark Green Fritillary, the unforgiving brackish birch bog of Gordon Moss, for Small Pearl-bordered Fritillary, and the barren windswept upland of Dogden Moss, for Large Heath.



Flower-rich meadow above Greenlaw Dean

At Greenlaw Dean, I have to say I was awestruck at the sight of this habitat....flower rich grassland....and lots of it! Steep gorges cutting through the landscape swathed in Rockrose, Thyme, Bird's-foot Trefoil and Red Clover, grazed by a free roaming herd of mixed breed cattle. I made three visits here, managing to see plenty of Northern Brown Argus (my first away from the coast), Common Blue, Small Heath, Meadow Brown, Ringlet, Peacock, Small Tortoiseshell, Painted Lady, Small Copper, and all the Whites as well as on my second visit Dark Green Fritillary. A very beautiful area in the mid summer; along with all the butterfly life, additional treasures included Swifts grazing the steep slopes for insects, screaming and wheeling, Hummingbird Hawkmoths extracting nectar with ease from Hawkweed clinging to impossible sandstone cliffs and the joy of Hawker Dragons quartering the slopes with precision aerodynamics.

My next destination was Gordon Moss....from advice, things did not bode well for this trip; the Small Pearl-bordered was thought to be lost....how lucky I was....the Gordon Moss reserve is a mass of Birch and Tussock that dwells in an ancient wetland, a mosquito paradise. Cutting through the birch jungle is the old railway line which affords safe passage through the moss. The edges of the moss are surrounded by a moat like network of wide deep ditches filled with brackish water and, usually, impossible to cross....however owing to a long dry spell in early spring the ditches were shallow and traversable...if it had not been for this, I would never have discovered the wet grassland to the back of the moss. And it was here that the first Small Pearl took to the air just a few feet away....I had never seen one before...but I knew straight away I had struck butterfly gold. I spent the next few hours running like an excited child around the field...I am no spring chicken, but I may have beaten quite a few Olympians with my efforts.



Small Pearl-bordered Fritillary



Large Heath

The Small Pearls were nectaring almost exclusively on Bugle, and after a while I realised all I had to do was stay still and wait by a sizeable patch. I visited twice more, and on both occasions saw good numbers of Small Pearls along with one Small Skipper on the 8th July...by then the Small Pearls had dispersed to nearby fields and were nectaring on Cross-leaved Heath.

My final assignment was to the Dogden Moss, a very different and difficult environment...a seemingly barren desolate raised bog; on that day a harsh northerly cut down through the cotton grass, the thousands of open mouthed Sundew looked very optimistic to be expecting a meal on such a day. When you are searching for an insect that you have not seen before, or know little about its habits or indeed habitat....it takes a certain amount of brute ignorance and blind optimism to succeed, oh and running....lots of running. Five Large Heath were finally flushed, identified and photographed....I do feel I never saw this species at its best that day....however I don't know if I would go back to this site soon, as traversing this terrain is a true task of Hercules.

Other highlights this year were many, The Small Blue were in record numbers on the Burnmouth coast, from the 24th of May through to the 24th June, the most we have had in the past is 6 !!!...this year 30, 40, 50 counts and an astonishing official 67 timed count on May 29th. Wall Brown early and late, coastal counts in May and later in August well into double figures, 21 sighted from Burnmouth to Blaikie Heugh on August 6th.



A mass of Small Copper with 60+ at Burnmouth on August 6th. Small Skipper at Piper's Knowe in good numbers, probably their best year so far. Small Skipper also at Plendernethy burn north west of Duns: a deep burn gorge, a butterfly oasis hidden away below the dominating Windfarm at Blackhill. And a chance discovery on the 1st June of a Blackneck moth and again on 24th June a count of 5 on the Burnmouth coast.

And briefly, Comma are consolidating across the region with a very strong and for once very visible summer brood after the secrecy of their spring emergence....Red Admiral in huge numbers nectaring among the Ivy florets 60+ Whiteadder riverbank September 26th. And finally a very successful field trip at Piper's Knowe where everyone at least saw Small Skipper - no Large Skipper or NBA were in evidence.

So to sum up, I could have written a mighty tome describing discoveries, and expressing thoughts, such has been the nature of 2009. 2010 will have to work very hard to beat this season's riches.

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## Cinnabar Moth Postcard Survey

### Barry Prater, Eyemouth

The postcard survey of the Cinnabar got underway during the summer and so far over 60 records have been received - not a huge number considering around 4000 cards were distributed, mostly across the Scottish Borders region. But many very useful records have emerged and, pleasingly, from much further afield in the country. These have shown that the moth occurs on Skye, Tiree, Bute and Arran on the west coast, along the east coast at many points as far north as Angus and, most interestingly, at sites all the way across the Borders and Dumfries & Galloway, including some at elevations over 250m in the Borders hills. Over the coming months I will be seeking records from all the Scottish Vice County Moth Recorders to try and get as complete a picture as possible - this will help the planning of where to focus next year's survey activities.

If you have spotted any Cinnabar moths or their caterpillars this year and haven't yet sent your records in, please let me have the details, either by e-mail ([barry@prater.myzen.co.uk](mailto:barry@prater.myzen.co.uk)) or by post to the address on page 1. Thanks.

## National Moth Night at St Abb's Head

Barry Prater, Eyemouth

We had a great evening on Friday 18<sup>th</sup> September at St Abbs Head as part of this year's National Moth Night events. The night-time weather was kind (calm, cloudy and no colder than the day), seven members of the public joined in and we found good numbers and variety of moths in the four traps which were set out.

In total 58 moths covering 19 species were caught and one of the highlights was a Square-spot Dart found by Malcolm Lindsay in the actinic trap closest to the shore. This is really quite a rarity, especially this far north, although it has been recorded at St Abb's before. Unexpected species were Brimstone Moths and a Burnished Brass, presumably from a second generation and some striking Canary-shouldered Thorns were at two of the traps.



Canary-shouldered Thorn



photo: Douglas Methven

Thanks to Liza Cole and Louise McHugh from NTS for facilitating the event and to Malcolm Lindsay and Douglas Methven for coming across from Galashiels with traps and ID expertise.

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## New Butterfly Atlas

Look out for the long-awaited Atlas of butterflies in the Borders, which is to be published imminently. Get one for yourself and buy several to give to friends and family as Christmas presents.

