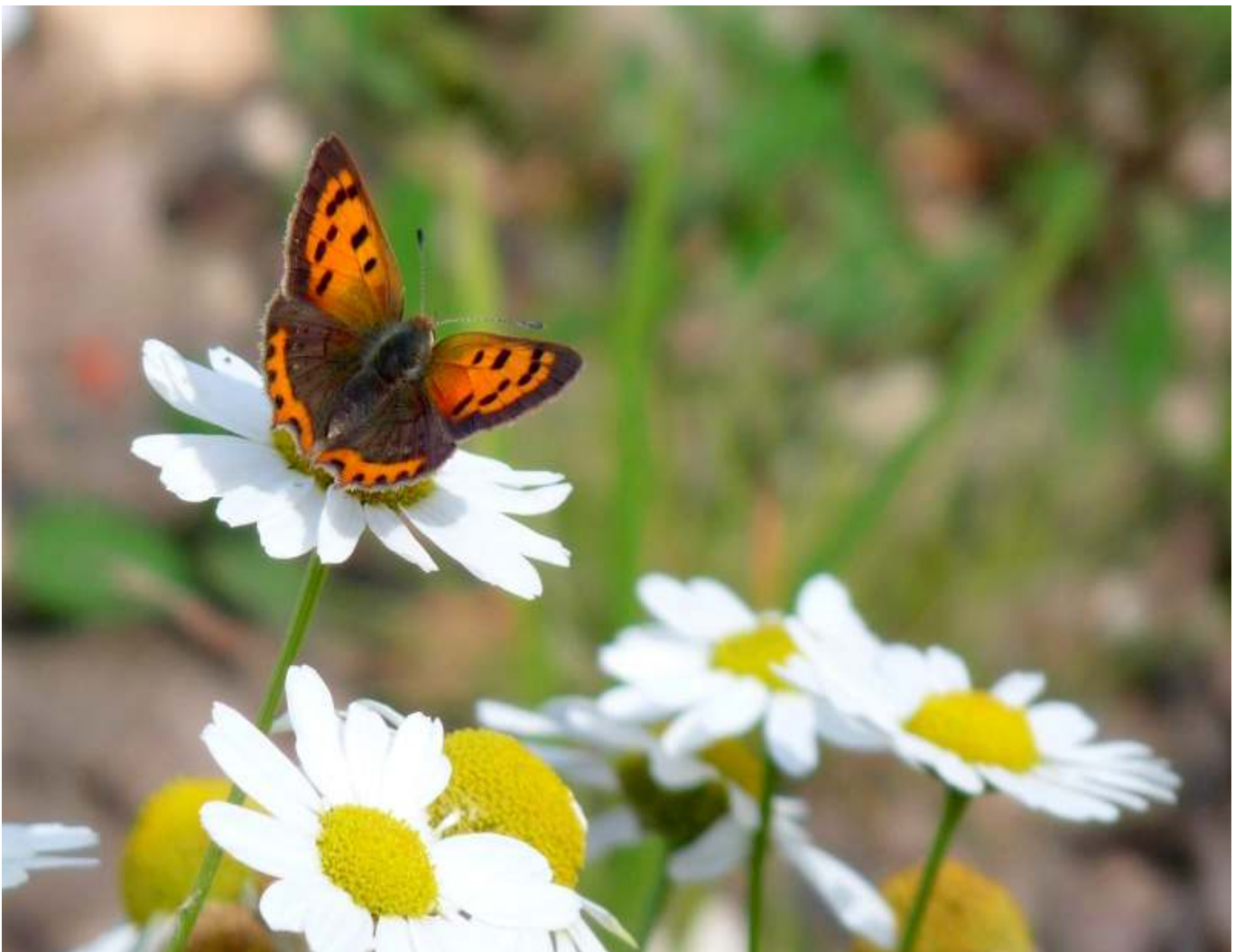




# Spring 2013

## East Scotland Branch Newsletter 20





Bedstraw Hawkmoth *Malcolm Lindsay*



Small Pearl Bordered Fritillary *Barry Forbes*

Photographic credit: Front Cover: Small Copper at Musselburgh Lagoons; Fiona Govan. Winner of our photographic competition.

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Common Blue *Malcolm Quirie*

## **Chairman's Notes** *Barry Prater*

Our branch is very large; you may be surprised to learn that its land area is slightly greater than that of Wales. What won't surprise you is the huge diversity of landscapes, habitats and wildlife that it contains including, of course, many butterflies and many, many moths.

Our membership continues to increase, with over 80 new members joining the branch during 2012 - 20 of these from the Scottish Bird Fair event at Hopetoun House - so this is encouraging news. However, if you imagine dividing up the branch between all our members you arrive at the figure of around 40km<sup>2</sup> per member! So we remain very thin on the ground and this means there are lots of gaps and under-recorded areas across the branch which open up plenty of opportunities for valuable survey work and the prospect of exciting discoveries.

You don't have to be an expert to contribute to butterfly recording; as long as you can identify most of the local species you can have a valuable input. There's the Wider Countryside Butterfly Survey which just involves two summer walks through a small defined area (a 1km square) where you simply count the different species you see, with the results building up a picture of how our commoner and widespread species are faring, often in habitats which can be neglected, such as farmland. Then there is the on-going five-yearly survey of butterflies across the whole of the UK. This started back in 1995 and led to the publication of the 'Millennium Atlas' which has been followed up by two further progress reports. We are now approaching the end of the 2010-2014 survey period and there are plenty of parts of the branch which haven't been thoroughly explored recently. Without complete coverage it's difficult to identify trends and unlikely that we'll be able to have confidence over the possible impacts of climate change, conservation measures or other factors. And then there are all our special butterfly species, like the Pearl-bordered Fritillary, Small Blue and Mountain Ringlet. These can take a bit more effort to record and monitor either because of their scarcity or remote habitats (or both!).

Now our moths. Each 10km square should hold at least 200 species of macromoths - most of ours don't, many have fewer than 50 recorded and amazingly some appear to have none. So wherever you live in the branch area there will be plenty of moth discoveries to be made, often at, or close to home. You could borrow a trap to get started or perhaps try low-technology techniques such as sugaring, wine ropes or simply going out and about with a torch at night. If you're daunted by the number of different moths and how to distinguish them, don't worry, we've all been there and after a couple of years you'll be teaching others how to do it.

If you want to help with any of these survey activities just get in touch with your local branch committee member, Vice County Moth Recorder or me. You can also find out more and follow developments by keeping an eye on the branch website.

You'll probably have heard of Butterfly Conservation's '2020 Vision', which is an ambitious strategy aimed at greatly increasing our membership, funding and influence and thereby our ability to undertake conservation work. To make these things happen the active support and involvement of branches and branch members will be necessary and over the coming year there will be moves to get branches to collaborate and share expertise more - not just on conservation matters but also on ways of developing volunteers (i.e. you and me) so that Butterfly Conservation is better known and has more supporters. So, if you're not inclined to take on any of the survey work mentioned above, perhaps there are other ways of helping the branch? I am convinced that the branch membership is a reservoir of varied talents - including people who can write (for magazines, local press), take photographs (for publication, displays), talk enthusiastically about butterflies and moths (at BC stands at fairs and outdoor events), raise money (project funds, sponsored activities, selling plants, photographs) encourage people to become members, etc. Could you do any of these things?

We've expanded our publicity efforts quite a bit during the year, including a very effective presence at the Hopetoun House Bird Fair; the photographic competition which inspired many entrants and resulted in a travelling exhibition of photos around the branch area; a display at Edinburgh Zoo during National

Insect Week and working with Edinburgh Printmakers on a moths project at Traquair House. So there is much to build on.

As usual, I'll leave it to the articles by people from around the branch to let you know what happened on field trips and moth evenings during 2012 and how our butterflies and moths fared in the poor weather of last year - from my perspective it certainly wasn't all bad news. I'm looking forward this year's events and hope to meet many of you at them.

### **Early Notice of Branch AGM**

It is planned to hold the branch AGM during the annual Members' Day which will be at Battleby near Perth on 28 September 2013. This will be a short meeting covering just the necessary business and no further details are available at the moment. An agenda will be made available nearer the time.



Orange Tip - *Barry Forbes*



Descent to Lumsdaine shore 30th June *Barry Prater*

### **The branch photographic competition.** *Richard Buckland & Amanda Wilson*

At the beginning of last year, the branch had a stroke of good fortune. Someone actually volunteered to hold a position on the committee! This was Amanda Wilson, who was interested in becoming our Youth Development Officer. Her offer was instantly accepted, which was just as well. As we were to find out, Amanda works extremely quickly and if we hadn't accepted immediately, she would probably have been off to do something else.

Within a couple of weeks, she had set up our Facebook site and opened an account on Twitter with a following of several dozen people/organisations.

Within another couple of weeks, Amanda had organised a photographic competition, short-listed examples of which you can see throughout this newsletter with the winner on the front cover! In all there were 54 entrants who submitted 254 photos. It was launched in biodiversity week in May and was open for approx. 3 months and advertised in the Courier newspapers so that they may take snippets again.

Amanda said "I was astounded by the large quantity of excellent photographs we received and it's clear there are a lot of talented amateur photographers within East Scotland branch. The photographs will now tour exhibition spaces in the East of Scotland to allow others to appreciate the wonderful moths and butterflies that have been photographed and to serve as a recruitment tool".

[Just in case anyone wondered about ownership of the photos and publication, the terms and conditions were "By entering this competition you provide permission for Butterfly Conservation Scotland and its associated branches to use your entry in future publications, online and in its social media."] Some people asked to be acknowledged if we used their photo and that's what we have done.

So far a selection of photos from the competition have been exhibited in the Field Studies Centre at Kindrogan, the Scottish Deer Centre and the National Trust Centre near Dunkeld.

### **Walking a butterfly transect at Tentsmuir NNR.** *Anne-Marie Smout*

Readers will already be familiar with Tentsmuir National Nature Reserve from the excellent articles by Daphne and Gillian in East of Scotland Branch Newsletters no 14 (2006) no 15 (2007) and no 18 (2011). So here is a recap:

For butterfly transect purposes Tentsmuir NNR is split up into two sections: Daphne and Gillian walk the southern part and several other people, including myself, walk the northern one, but the habitats of the two sections are very similar, except that the southern section has lost a significant percentage of its total area over the last couple of years, due to severe storms from the east, whereas the northern transect seems more stable, even increasing, having probably received some of the sandy soil blown or washed away from further south. It also receives a large amount of soil and gravel brought down by the River Tay, which flows just to the north, and the Abertay Sands, a large sandbank lining the outfall of the Tay, is apparently growing at the rate of five meters a year. People are sometimes at low tide enticed out on this seemingly sturdy sandbank, where grey seals like to haul out, but this is highly dangerous, because the tide comes in at an unexpected gallop, and more than one unfortunate walker has been drowned as a consequence. Rest assured, my transect is bordered towards the sea by substantial sand dunes and goes nowhere near Abertay Sands – I can just enjoy looking across it and the seals in the distance.

It takes about an hour and a half to walk the transect at a steady pace. My transect is really part of one of the longest running datasets of its kind held by the national Biological Records Centre and organised by Butterfly Conservation. Originally there were just two transects covering Tentsmuir and Morton Lochs NNRs. I don't know who started them, but Pete Kinnear, when he was employed by SNH in Cupar, took

them on and continued doing them for years. Quite a feat, considering that it now takes a whole team of us to replace his efforts.

My transect is divided up into eight sections for recording purposes, each section having slightly different habitats, ranging from warm sheltered places with crowfoot and heather to sun-baked soil or windswept moorland. The moorland is packed with Creeping Willow, and at different seasons the Bird's-foot Trefoil, Silverweed and Grass of Parnassus, transform the landscape into a blaze of colour (photo; IMG\_0747 Bird's foot Trefoil carpet, Anne-Marie Smout).

In the longer grass many plants flourish including Ragged Robin and Lady's Smock. A few Willows in a stand of Alders are a godsend to Bumblebees in early spring, when the flowers attract huge numbers, and the hum of their buzzing wings is like an orchestra warming up as you approach.

Unlike Daphne and Gillian I share my transect with lots of other people and only walk it about once a month, occasionally accompanied by Chris, my husband. We used to do more, but it is quite a commitment of time and effort. As Daphne said, the weather is the real problem because, for the transect count to be valid, the weather has got to be right (sunny or at least really warm and not too windy) and in this part of the world these conditions are not always easy to come by. Each of us transect-walkers sign up for particular weeks, and for my weeks I really have to clear the entire week, so as to be prepared and ready, when the weather looks to be suitable, to drop everything and dash off. True, the weather men are getting better at forecasting but still not reliably so for several days ahead. Another issue is that it takes over one hour to drive from Anstruther, where we live, to the start of the transect, even if I have a key to Forestry Commission's gates, and the weather in the East Neuk can be surprisingly different from that in north-east Fife.

However, don't get me wrong: it is a huge pleasure to be walking the transect and pure magic on a good day. Tentsmuir and in particular the NNR is a truly wonderful and wild place, not like anywhere else in Fife. As you walk, seals can be heard singing in the distance, Terns and Redshank calling, Meadow Pipits and Skylarks pour out their song overhead, Swallows and Swifts sweep over the open heathland, Green Woodpeckers and Mistle Thrushes call from the Alder copse. At migration time we have seen Cuckoos, and Wheatears are regulars. Right down the centre of the site runs a prominent line of now weathered anti-tank blocks from World War II, a reminder of the astonishing accumulation of landmass over the last 50-60 years. These one-time beach defences now provide excellent look-out posts for small birds. One or two pairs of Stonechats raised broods successfully here for several years, but the cold winters recently have put an end to that.

Of course the reason for the walk is to count butterflies, and albeit that 2012 was generally regarded as a poor insect year, some species did really well. I had my best ever counts of Small Coppers (63), both Meadow Browns and Ringlets were about in good numbers, Common Blues did reasonably well, and Tentsmuir Point is one of the few places in Fife where Small Heaths are still common. However, numbers of Vanessids were generally poor, and I had no Commas in 2012, (two in 2011). There was no repeat of the extraordinary Painted Lady year of 2009, when Chris and I saw literally hundreds out here. It was like a fairy land: clouds of fluttering butterflies rising up whenever you took a step. A sight never to be forgotten.

Over the years that we have walked this transect, there have been substantial changes – the Green Hairstreaks have sadly declined – I saw none this year and only one individual was recorded for both transects in 2012. However, the Orange-tips have arrived; Peacocks were rarely seen in all Fife before the 1990s, then they soon became very common, but I did not see many on the transect and only 26 were recorded for the north transect in 2012. Cold winters may have stopped them over-wintering successfully. Red Admirals are most common in autumn, and the greatest number were recorded in the last week of the transect season. Graylings had a poor year, and the same was the case – at least for me – for the fritillaries. Dark Greens were not too bad, but only one Small Pearl-bordered Fritillary was

reported for the north transect, so unlike the hot summer of 2009 when we had 20 in June and Chris spotted a SPBF on 28 August – which must have been a second brood individual, very unusual up here.

The rule is to keep up a steady slow walk, but it is hard to resist stopping off to look at some of the other wildlife you come across and there is usually lots to see: tiny fluttering or dashing grass veneers, but they have to be caught to be ID'ed, which takes time. I have seen Mother Shipton moths before but this year I managed to get a photo. On one walk I just had to stop and photograph some of the abundant insect life on the Ragworts along the route, which included Ear Moths, Antler Moth, Flounced Rustic, 6-spot Burnets, Silver Ys, Cinnabar caterpillars, and masses of hoverflies. I have found at least 6 different kinds which are fairly easily identifiable in the field, but undoubtedly there were many other species, and out of the corner of my eye I have spotted Sloe Sheldbugs and various Ladybirds. Tentsmuir is also famous for Odonata, and the stream across the middle of the site holds plenty of Common Darters *Sympetrum striolatum* (which was very rare in Fife twenty years ago) and this year I came across a splendid male Common Hawker *Aeshna juncea*, drying out in the heather.

My knowledge of fungi is poor, but various puff balls are common as are Egg-head Mottlegills on cowpats, left behind by the herd of friendly cattle employed to keep the vegetation short. I have often wondered how these beasts react to ticks, because that is the proverbial snake in this paradise. Less than twenty years ago they were unknown in Tentsmuir, but now you have to check yourself over after each walk to remove any little critter before they get stuck in! Tom Cunningham, SNH's Reserve Manager, caught Lyme disease from them a couple of years ago, but fortunately he was treated successfully with antibiotics.

If Chris is sharing the transect walk there is more time to linger. This is when one of us can check out the Bumblebees to species level. When the Rose-bay Willowherb is in full flower (and allowed to remain so), there are usually large numbers, especially of the White-tailed (*Bombus lucorum sensu lato*). The Buff-tailed *B. terrestris* is also common but especially in the shorter vegetation in section one and three, and I have also seen *B. pascuorum*, *B. lapidarius*, *B. pratorum*, *B. hortorum* and a few *B. bohemicus* (a cuckoo bee).

And then there are the bryophytes and lichen..... So as you can see it is truly a most brilliant place, and not just for butterflies.



Pendulus at Tentsmuir  
*Anne-Marie Smout*



Mother Shipton *Anne-Marie Smout*



Birds-foot trefoil *Anne-Marie Smout*

## The Garden Moth Scheme 2012. Heather Young

*The Garden Moth Scheme (GMS) runs from early March to early November, with people recording the numbers of around 260 species of the more common moths in their gardens once a week throughout this period. Further information on the findings of the GMS for the whole of the UK and Ireland, both current and historical, is available in the form of annual reports and quarterly newsletters, which can be found in the Downloads section of the web-site: <<http://www.gardenmoths.org.uk>>*

Butterfly Conservation's report "The State of Britain's Larger Moths" in 2006, and its 2013 update, indicate that a lot of previously common moths are declining across Britain as a whole, but particularly in the southern half of the country. The Garden Moth Scheme (GMS) was set up to try to find out what's happening to our common garden moths, and welcomes recorders from all parts of the United Kingdom and Ireland, greatly adding to the value of the scheme as a long-term dataset.

The main aim of the GMS is to coordinate records to get standardised data which can be used for future study. The more people that take part, the more useful the data. Scientists at Birmingham University have already used the GMS data to analyse the effect of trap and bulb type on moth catches, recently publishing a paper on this in a peer-reviewed journal (Bates et al, 2013), with more in the pipeline on factors affecting our moth populations. It will probably come as no surprise that, of the most commonly-used equipment, a Robinson Trap with an MV bulb will maximise your moth catch, an MV Skinner comes a close second, and using a Heath Trap or an actinic light in your Robinson or Skinner will reduce the number of both individuals and species caught. This research is based on records returned by 314 GMS participants in 2010, gathering over half a million moth records over a very wide geographical area.

Scottish recorders returned 24 sets of results for the GMS in 2012, up from 21 in 2011. Of these, 7 are from the Glasgow & South-west (G&SW) BC branch region, 11 from the East, and 6 from Highland.

Members counted 22,435 individual moths of 228 species at an average of 934.8 per garden over 790 trapping events (ideally everyone traps once a week for 36 weeks – inevitably some weeks are missed, but these are kept to a minimum), and not including any 'extra' species encountered that are not on the monitored list of common moths. Compliance was excellent overall, with three people managing to return records for all 36 weeks, with an average of 32.9 across Scotland. Moth numbers were well down on 2011, the average / garden showing a decrease of 26.5%, although the same number of species were recorded.

Large Yellow Underwing recovered from a poor 2011 to displace Dark Arches as the commonest moth overall, although still not quite as abundant as in 2010. True Lover's Knot remains locally abundant in South Uist, keeping it in the top three overall, despite a 36% decline in numbers, but interestingly appeared in twice as many gardens as last year (12 out of the 24). The Scottish top 20 are shown below, along with their regional averages – figures highlighted in bold designate the regional Number One species – and last year's rank shown in brackets, with the percentage change in average numbers per garden across Scotland year on year. The four species disappearing from the top 20 are also listed along with their 2012 rank – note the crash in numbers of the Chestnut in particular.

Rank 2012 (2011)	Percentage change	Species	Average per garden 2012			
			Scotland	G&SW	East	Highland
1 (4)	+65.0	Large Yellow Underwing	136.3	187.4	150.7	50.3
2 (1)	-55.8	Dark Arches	63.6	45.3	48.8	112.2
3 (2)	-36.2	True Lover's Knot	60.0	0.9	0.7	237.5
4 (3)	-41.3	Hebrew Character	52.5	13.7	76.2	54.3
5 (8)	+63.3	Lesser Broad-bordered Yellow Underwing	50.8	37.7	72.7	25.8
6 (13)	+53.3	Lesser Yellow Underwing	32.5	30.6	46.7	8.5
7 (7)	-19.5	Square-spot Rustic	27.3	1.6	6.2	96.0
8 (6)	-40.7	Common Rustic aggregate	25.4	21.3	33.1	16.0
9 (12)	-0.8	Dotted Clay	24.2	15.1	35.3	14.5
10 (5)	-69.8	Common Quaker	20.7	9.4	37.4	3.3
11 (10)	-41.5	Small Wainscot	16.5	0.4	1.9	62.2
12 (18)	+12.7	Beautiful Golden Y	15.1	14.0	15.0	16.5
13 (14)	-30.4	Antler Moth	13.3	2.7	5.6	39.7
14 (15)	-21.8	Rosy Rustic	12.9	1.0	17.1	19.0
15 (22)	+4.5	Smoky Wainscot	11.5	3.1	10.3	23.5
16 (11)	-62.1	Clouded Drab	9.4	1.3	15.5	7.7
17 (37=)	+34.3	Mottled Beauty	9.0	5.7	8.7	13.2
18 (29)	+2.4	Common Marbled Carpet	8.7	10.3	10.8	2.8
19 (23)	-21.1	Silver-ground Carpet	8.6	3.7	7.8	15.7
20 (20)	-30.8	Burnished Brass	8.3	2.4	11.6	9.0
24 (19)	-49.6	<i>Agriphila tristella</i>	6.6	9.9	1.0	13.0
42 (17)	-73.2	Bird-cherry Ermine	4.2	4.4	6.2	0.3
59= (16)	-82.7	Red Chestnut	2.8	0.0	0.6	10.2
83= (9)	-93.7	Chestnut	1.9	1.0	3.0	1.0

As in 2011, regionally on average Highland recorders trapped the highest number of moths, with the fewest being encountered in Glasgow & South-west, as shown below.

	Average / garden 2012	Average / garden 2011	Percentage change
Scotland	934.8	1271.2	-26.5
G&SW	612.1	637.3	-4.0
East	970.7	1507.6	-35.6
Highland	1245.3	1907.4	-34.7

All regions showed a decline in numbers, with G&SW faring better than the others, but as mentioned previously, other factors such as trap type and recorder effort do have an effect. Every one of the 7 members in G&SW used a different type of trap, while 8/11 in East and 5/6 in Highland used 125W MV in either a Robinson or Skinner trap. Highland also managed a higher number of weeks trapped (34.5 on average, compared with 32.9 in G&SW, and 32.1 in East).

The top 20 for the East of Scotland branch region is shown below, along with their regional rank in 2011 in brackets, 2012 rank in Scotland, average numbers per garden, and the percentage change in that year on year. The eight species dropping out of the top 20 of last year are also shown – two summer micros (Bird-cherry Ermine and *Agriphila tristella*), and a group of mainly autumn / early spring macros.

Rank East 2012 (2011)	Rank Scotland 2012	Species	Average per garden 2012	Percent age change
1 (5)	1	Large Yellow Underwing	150.7	+118.4
2 (1)	4	Hebrew Character	76.2	-56.0
3 (6)	5	Lesser Broad-bordered Yellow Underwing	72.7	+24.3
4 (3)	2	Dark Arches	48.8	-45.7
5 (11)	6	Lesser Yellow Underwing	46.7	+36.2
6 (2)	10	Common Quaker	37.4	-75.7
7 (9)	9	Dotted Clay	35.3	-5.6
8 (8)	8	Common Rustic aggregate	33.1	-31.0
9 (12)	14	Rosy Rustic	17.1	-26.6
10 (7)	16	Clouded Drab	15.5	-71.2
11 (34)	12	Beautiful Golden Y	15.0	+76.5
12 (18)	20	Burnished Brass	11.6	-22.1
13 (21)	18	Common Marbled Carpet	10.8	-23.4
14 (47=)	15	Smoky Wainscot	10.3	+74.6
15 (22)	25	Double Square-spot	9.7	-27.6
16 (65=)	33	Map-winged Swift	9.2	+116.5
17 (44=)	17	Mottled Beauty	8.7	+45.0
18 (31)	27	Snout	8.5	-5.6
19 (26)	19	Silver-ground Carpet	7.8	-25.7
20 (16)	32	Silver Y	7.2	-54.4
27= (10)	42	Bird-cherry Ermine	6.2	-82.7
32 (19)	13	Antler Moth	5.6	-62.2
36= (13)	66	Yellow-line Quaker	5.0	-78.2
44= (17)	73=	Spruce Carpet	4.1	-73.2
48= (20)	77	Small Quaker	3.9	-72.9
66= (4)	85	Chestnut	3.0	-95.8
75= (15)	81	November Moth aggregate	2.6	-85.2
108= (14)	24	Agriphila tristella	1.0	-94.4

The general feeling was that 2012 was a poor year for our garden moths, with every member recording at least one week when none of the target species were seen. Numbers were low particularly in spring and autumn, and this is shown in the declines seen in several of the commonest species – Common Quaker, Clouded Drab, Hebrew Character, Chestnut, Yellow-line Quaker and the Epirritas all experienced big drops in abundance. The yellow underwings all had a better year in 2012, as did several of the other summer species – Mottled Beauty, Map-winged Swift, Beautiful Golden Y and Smoky Wainscot all showed big gains. This trend is repeated in other species not numerous enough to appear in any of the top 20 charts; summer species fared better in 2012 than those that fly at other times of year.

The GMS in Scotland continues to grow, and I am hopeful that at least 30 people will manage to complete the 2013 season. The more the merrier though, so if you may be interested in taking part in the future, please get in touch; the value of the scheme grows alongside the membership.

Bates AJ, et al. (2013) Assessing the value of the Garden Moth Scheme citizen science dataset: how does light trap type affect catch? *Entomologia Experimentalis Et Applicata* 146: 386-397.

Heather Young, GMS coordinator, Scotland. e-mail: [heather.young@tiscali.co.uk](mailto:heather.young@tiscali.co.uk)

## Field Trips and other Activities in the Borders during 2012 *Barry Prater*

Despite the record-breaking poor weather during much of last year's summer, conditions during our outdoor events in the Borders were generally pretty fair and enabled us to find what we were looking for and also to enthral newcomers able to see many of our special species for the first time. Maybe I just remember the good bits.

On 27 May Iain Cowe led 11 of us down the coastal path from Burnmouth to examine the Small Blue site at Catcairn Bushes. (Photo; Catcairn Bushes, *Barry Prater*). It wasn't sunny and quite a thick mist engulfed the cliffs but our spirits were lifted by the songs of Sedge Warbler, Whitethroat and Grasshopper Warbler coming from scrubby bushes by the track. Arriving at the site the group spread out and thoroughly explored this steep, rocky slope with scattered gorse and debris from past engineering work on the East Coast rail line which passes close by. Over 40 Small Blue were located, including mating pairs, along with Small Heath, Small Copper, Wall and other common species. Moths weren't to be outdone, though, with a recently emerged Poplar Hawk-moth stunning people while it clung to vegetation and a rare Marsh Pug being spotted - and by now the sun had started to burn off the mist and round off a perfect trip.

A month later on the lovely sunny day of 30 June we linked up with the Edinburgh Natural History Society for another coastal event, this time to Dowlaw and the amazing cliffs at Lumsdaine Shore, (Photo; Lumsdaine Shore, *Barry Prater*) under the leadership of Michael Braithwaite, the Botanical Recorder for Berwickshire, who knows pretty much every inch of the county and all its plants. As well as noting the butterflies during the day, a couple of moth traps had been put out over the previous night and their contents were examined en route. These proved exciting for members of the party unfamiliar with moths, who were introduced to plenty of new species,

including Small Angle Shades, Clouded-bordered Brindle and Map-winged Swift - we had 23 of these in total, one of which was a male of the faintly-patterned gallicus form. Once on the rather treacherous slopes down to the beach the butterflies came into their own with a Dark Green Fritillary and a Common Blue appearing together with a couple of Northern Brown Argus confirming that the colony of this important Borders species is still present here. Amongst the surprises on the trip were a Small Elephant Hawk-moth down on the shore and a Ruby-tailed Wasp *Chrysis ignita* for which there is only a handful of Scottish records. Another great day out.



Catcairn field trip - *Barry Prater*

The following weekend (8 July) and on the other side of the Borders it was time for the Small Pearl-bordered Fritillary, (photo; Small Pearl-bordered Fritillary (Kippit), *Barry Prater*) and Alison McArthur ventured out with a select party of just three on a rather dull and damp morning to the fields of Kippit Farm, near Dolphinton, one of her local patches. Once again, optimism paid off and we did locate 3 of the fritillaries and the mediocre weather ensured they remained posed for the cameras. There were lots of Ringlets too, scattered amongst the wet grasses. An overnight moth trap yielded a bumper crop of nearly 100 moths of 30 different species, including the lovely Gold Swift (hardly seen before in Peeblesshire), the Common Lutestring (pretty scarce in the area) and two Cinnabar, a species which was first recorded in Peeblesshire in 2009 and seems to be extending its range across much of southern and

central Scotland.

Later in the month we combined forces with the SWT Central Borders group for a general wildlife outing round Lindean Reservoir SSSI on 28 July led by Malcolm Lindsay. Despite the fact that it became a bit wet during the day, butterflies were in evidence, including a nice count of 50 or more Ringlets and 3 Small Skippers along with a few Narrow-bordered Five-spot Burnets. The growing trend of incorporating moths from the previous night's trapping paid off with Gold Spangle and Double Dart among 12 species found. And the weather certainly didn't interfere with the challenges posed by grass identifications!

The final field trip was a two-day event at Duns Castle SWT reserve, this time run jointly with the Berwickshire SWT group. On the evening of 17 August Ron McBeath and I set up four moth traps near the Hen Poo lake and a dozen people scurried between them for a few hours checking, comparing and hopefully identifying what turned up. They yielded 45 different species and we were delighted to find Satin Beauty, Blue-bordered Carpet, (photo; Blue-bordered Carpet, Barry Prater) and Welsh Wave amongst them, these last two having been hardly recorded in Berwickshire for about half a century. Enthused by these successes we re-grouped the following morning for a walk around the St Mary's Glade area of the reserve to seek butterflies. This time there were nine of us and the weather was pretty gloomy so the butterflies were thin on the ground and we only saw Green-veined White, Red Admiral, Meadow Brown and Ringlet, along with a sprinkling of day-flying moths such as Twin-spot Carpet. Once again, though, the event showed that there are plenty of interesting discoveries to be made even at well-known and much visited sites.



Blue Bordered Carpet - Barry Prater

As well as the field trips there were plenty of other activities across the Borders where our members got involved. In June it was at the Kailzie Wildlife Festival where Reuben Singleton, Alison McArthur and John Woolliams wowed the crowd with moths from the previous night while running the BC stand. Later, in August, we teamed up with Edinburgh Printmakers at Traquair House. Here a project called 'Reflective Histories' was running, which brought in a wide range of artwork connected in some way to the House or its occupants. Teyl de Bordes, John Woolliams and I ran some moth traps one evening and the next morning a group of printmakers used images of these moths in printing exercises - all were fascinated by the variety of colours and shapes of the many moths found, ranging from Large Emerald (photo; Large Emerald, Barry Prater) to Lempke's Gold Spot and Plain Clay. Conservation-related work has focused on a limited number of butterflies.

A project (led by Iain Cowe) to intensively survey the coast for the Small Blue and also for Kidney Vetch, its larval foodplant, resulted in almost complete coverage of the strip from Pease Bay to Cheswick in Northumberland and involved around a dozen volunteers who either contributed valuable pre-survey information or did the practical survey work. The results showed that while Kidney Vetch is often abundant at many sites the butterfly itself was only found at its two known sites. Nevertheless, further work is planned for this year with possible extensions north into East Lothian and inland in Northumberland. Because there is so much apparently ideal habitat it is hoped that the butterfly will be able to spread (possibly with some encouragement) into new areas, including those which it formerly occupied.

For some years there have been discussions aimed at safeguarding or restoring wetland habitats in the Gordon Moss area, which have great wildlife interest, especially for plants and invertebrates. A group led by the Tweed Forum and with inputs from several other organisations, including Butterfly Conservation, started some activities during 2012 which may lead to progress with this idea. The work has included intensive survey days for the Small Pearl-bordered Fritillary (which has a strong colony here) and the

Large Heath (recorded in 2006, but not located in 2012). Moths at Gordon Moss were studied in some detail by Albert Long and others in the 1950s and 1960s, but the area has been largely neglected since; over the period November 2011 to October 2012 moth-trapping took place on 17 nights and this has confirmed the presence of some important species (e.g. Scalloped Hook-tip, Saxon) and also found some new arrivals for the area. The results of all this survey work will feed into any habitat plans which are formulated and further recording will take place during coming years.

Some survey work has been prompted by potential habitat damage, such as that caused by proposed new forestry - so the Large Heath colonies near Clearburn Loch and Thorniecleuch Hill were checked and confirmed and this information was conveyed to the forestry group involved. A new site for the Large Heath was located at nearby White Knowe and the colony on the SWT reserve at Din Moss to the east of Kelso was also confirmed. The branch is actively involved with the group identifying Local Biodiversity Sites in the Borders and although these sites have no statutory protection, if they are highlighted this way landowners and planners can be made aware of their importance. For many of the proposed sites there are no Lepidoptera records at all which is perhaps disappointing but not very surprising some will become candidates for future survey work.

General moth recording has continued around the Borders and despite the small number of people actively involved there have been some really good findings. These include four Barred Carpet (James & Julia Edey - first Borders records of this rare moth since 1976) (photo; Barred carpet, *Nick Cook*), Orange Underwing (Nick Cook - first for the Borders), Dark Spinach (Derek Ogston), Northern Arches (Malcolm Lindsay), Bedstraw Hawk-moth (adults - Malcolm Lindsay, Wendy Walker; caterpillars and pupae - Iain Cowe), Maple Pug (Barry Prater) and Brown Plume (Ron McBeath - first for the Borders).

Finally, in line with the overall increase in branch membership, we now have about 45 households with members across the Borders, which is double the number of four years ago and is also good news.



Barred Carpet - *Nick Cook*



Green Emerald - *Barry Prater*

## Portmoak Moss – a Lowland Raised Bog under restoration *Duncan Davidson*

Portmoak Moss is located between Scotlandwell in Kinross-shire and the eastern shore of Loch Leven. It was used extensively as a source of peat from the 17th to 20th centuries and although the original dome of the raised bog remains largely intact, its perimeter is characterised by a 2.5m step down to the surrounding area, rather like a gigantic muffin. (Photo – Portmoak moss, Duncan Davidson) In the 1960s the habitat was further damaged and the natural hydrology effectively destroyed when it was drained and planted with Sitka Spruce and Scots Pine. There are over 6km of drainage channels criss-crossing the 42ha site!

The Woodland Trust bought the site in 1996 and installed visitor access paths. Around the same time, the Portmoak Community Woodland Group was formed and a plan was drawn up to try to restore at least part of the site, although it was recognised that it could never be returned to its former glory. A phased programme of tree-felling followed and the main dome is now almost clear of the conifers. (Photo, Sitka removal, Duncan Davidson) Selected drains have been dammed and the water table is rising. Six types of Sphagnum have been identified and the appearance - or re-appearance - of other bog species indicates that the restoration work is having some success.

One of the significant ongoing challenges is scrub control. There is extensive regeneration of birch and pine scrub and despite vigorous volunteer campaigns, it is a real battle to keep it under control. Of course, as the bog habitat improves, the scrub should disappear naturally, but there is a lot of work required to reach that stage. Professional scrub clearance has been organised over the next few months and hopefully this will help – if there is no marked reduction in the effort required over the next couple of years, the site might be allowed to revert to a wet woodland habitat. Part of the area off the main dome has already reverted and is now home to Small Pearl-bordered Fritillary. Green Hairstreak can also be found across the moss, where Blaeberry is sparse but widespread.

There are now patches of both Common and Hares-tail Cottongrass and Cross-leaved Heath on the dome and so there is a possibility of Large Heath –we shall find out how realistic this is during the Large Heath discovery day later in the year.

Meantime, we have undertaken to carry out regular moth trapping sessions throughout the year, initially to build up a picture of the population, and later to try to assess if the number of bog related species is increasing. This might give some indication of the success of the restoration work.



## Northern Brown Argus (NBA) butterflies at East Lammermuir Deans (ELMD). 2002 - 2012 *Lesley Fairweather*

Aikengall farm in the Lammermuir hills has many deans, looked after by the Scottish Wild-life Trust (SWT) by agreement with the owner, John Hamilton.

Fairy Glen, is named after the “fairy castles” which are pinnacles of conglomerate rock, isolated after erosion on the floor of the glen.

Here there is a small population of Northern Brown Argus (*Aricia artaxerxes ssp artaxerxes*) butterflies due to the presence of its caterpillar food plant, common rock rose, (*Helianthemum nummularium*), and other nectar plants such as wild thyme, clover and bird’s foot trefoil.

Grazing by sheep has always kept the vegetation cropped so in order to increase the very small population of NBA butterflies, recorded sporadically in previous years, consultation with the farmer, John Hamilton, the local biodiversity officer, Stuart Macpherson, and SWT, took place. This resulted in the setting up of a small enclosure in April 2003 with a single strand electric fence and there it remained until September when SWT volunteers removed it.

There were never more than 2 butterflies seen at one time but a number of eggs were counted in July. This number doubled the following year. A second enclosure was put up in 2005 and numbers of adults flying at any one time soared to 6 with egg numbers increasing to 112 in enclosure 1 and 76 in enclosure 2. This rise did not continue unfortunately and either due to hard winters or wet weather the numbers of adults and eggs dropped off.

In 2010 permanent fencing was put in place, paid for by Community Wind Power who had placed 16 turbines in the moorland above the Deans the previous year. This allowed sheep to be excluded from a large part of Fairy Glen over spring and summer but with the opening of the gates in winter the sheep could return for shelter and winter grazing.

So far, the numbers have not reached the heights of 2005, with only 2 adults and a sprinkling of eggs in 2012 - probably the wettest summer for some time - but hopefully their numbers will increase with better weather conditions. Grayling butterflies are also a speciality of this site, but none were seen this time – normally by July there are several at ELMD – so all in all - a poor display of butterflies this year. Other butterflies to be found on a sunny day in this area are: Dark Green Fritillary, Meadow Brown, Ringlet, Tortoiseshell, Red Admiral, Small Copper, Small Heath and Common Blue.

**Conclusion.** The NBA colony remains a weak one ( compared to Linn Dean where 12 were counted on the 17th July.)

NB. A field trip has been organised to this site this year (see events in the Lothians).



Small Pearl Bordered Fritillary - *Barry Prater*

## Five years of the WCBS *Richard Buckland*

Following four years of pilot studies, the Wider Countryside Butterfly survey (WCBS) was formally launched in 2009.

The WCBS is run as a partnership between Butterfly Conservation (BC), the Centre for Ecology & Hydrology (CEH) and the British Trust for Ornithology (BTO). 360 BBS squares (47% of the total) were surveyed by BTO recorders, whilst BC volunteers covered 403 squares (53%). The rest were covered by contractors (mostly in Scotland, in order to fill in the many gaps). A total 1642 visits were made to 763 1-km squares by 611 recorders, who collectively walked 3300 km of survey line, counting 67,570 butterflies of 47 species. It took more than 30 years to reach a similar level of sampling coverage for annual monitored sites in the UK Butterfly Monitoring Scheme! By last year, this recording effort had levelled out to 648 recorders covering 771 squares and counting 64,452 butterflies of 46 species. This might have been a result of the volunteers from one of our partner organisations (BTO) dropping off slightly.

The WCBS has generated 12,382 butterfly distribution records for the Butterflies for the New Millennium (BNM) database, including 90 new 10-km square records.

### The Records

This survey is where the commoner species (wider countryside species) come into their own, as it is these that are primarily monitored by this survey. You will be very lucky if you manage to count any of the habitat specialists in this survey, as they are very concentrated in the environment, being restricted to areas where their food plants grow. As it happens some of the East Scotland members who took part in the pilot study in the run-up to rolling out this project fully, were given a square that contained both Large Heath and Small Pearl-bordered Fritillary, so you can get lucky! (see write up by John Woolliams and Reuben Singleton in the 2009 issue of the annual newsletter).

The advantage of carrying out surveys on the commoner species is that there are a fair number of them! This allows you to carry out good population studies on them. So you should end up with reliable data and conclusions.

More than three-quarters (47 of 59) of the UK's regularly occurring butterfly species were recorded. Good coverage (i.e. present in more than 30 squares) was achieved for all of the target wider countryside species, with the exception of Scotch Argus (found in 17 squares). Optional spring visits boosted coverage for several species, with the main bonus being good coverage for the Orange-tip (present in 65 squares).

The most widely recorded species over the core July and August period was the Large White, occurring in nearly 90% of squares, whilst the most abundant species was the Meadow Brown with approximately 15,000 individuals counted. Two Browns (Meadow Brown, Gatekeeper) and three Whites (Large, Small and Green-veined) accounted for two thirds of all butterflies counted.

With the five years of consecutive results we now have 404 squares in each of the three years of the survey and 78 squares with a five year data run (including pilot surveys). In 2011 172 new squares were established, 13% by BTO recorders, 38% by BC recorders and 49% by contractors in Scotland. As a result of the extra coverage in Scotland, it is interesting to note that Scotch Argus has risen to eleventh in the league table of most abundant UK butterflies. Highlighting the difference between the first year of the survey (2009) and last year, both Common Blue and Small Tortoiseshell had bad years last year, so we still need to keep an eye on the commoner species.

### Moths and Dragonflies

WCBS surveyors are encouraged to count dragonflies and day-flying moths, and there was an excellent response with records generated in 383 squares (50% of the total).

439 moths of 52 species were counted in 251 squares (131 BC, 120 BTO). A migrant, the Silver-Y was the

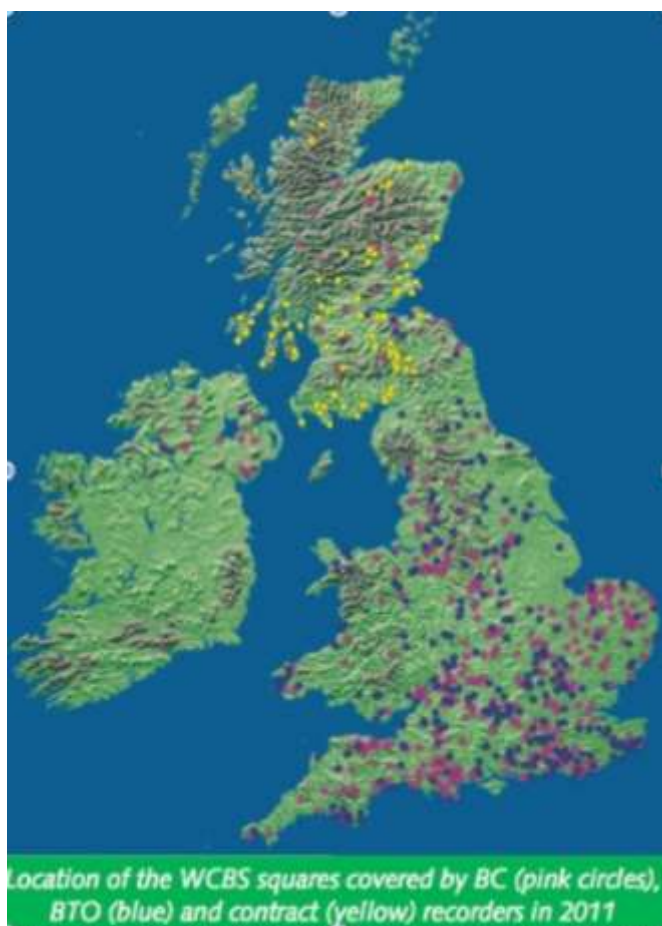
most widespread and abundant species, with 194 counted in 152 squares. The only other moderately widespread species was the Six-spot Burnet with 49 individuals counted in 40 squares. Of conservation relevance, several UK BAP Priority moths were recorded including Argent and Sable, Drab Looper and Narrow-bordered Bee Hawk Moth.

2370 dragonflies of 28 species (plus 3 'unidentified' groups) were counted in 283 squares (161 BTO, 122 BC).

#### The branch effort

I am glad to say that the branch has managed to survey most of the squares allocated to it so far. In 2009, we were given 20 squares to survey – along with every other branch in the country. Of these we managed to survey 17. As a result of this magnificent effort we were given another 5 squares to survey in 2010. Unfortunately, some of the surveyors who managed a square the previous year were no longer able to commit to doing it a further year, so the branch effort declined in that year to 16 squares surveyed. Last year (2012) we were allotted 50 squares and our magnificent band of volunteers managed to survey 40 of them. Of the original set of volunteers, 6 were still surveying their square in 2012. Happily, we are still signing people up at a reasonable rate, so we are still managing to survey most of our allotted squares. But it does help if you can commit to doing a square a few years on the trot, as it always takes a while to work out that a particular person is not doing it, and then another while to get someone else to take it on.

As far as I am aware, BC has the finance to continue this survey for a few more years, so I would encourage all participants to keep on doing their square until further notice. Also, I have butterfly nets available for any surveyors to borrow if they want. This also applies generally. If you need help in carrying out your survey get in touch with me and I will try and sort out any problems. Many thanks to all those who have given up their time to help with this survey, I hope you can see from this article how valuable your efforts are. If you are interested in taking part in this survey, then please get in touch and I will try to find you a suitable square.

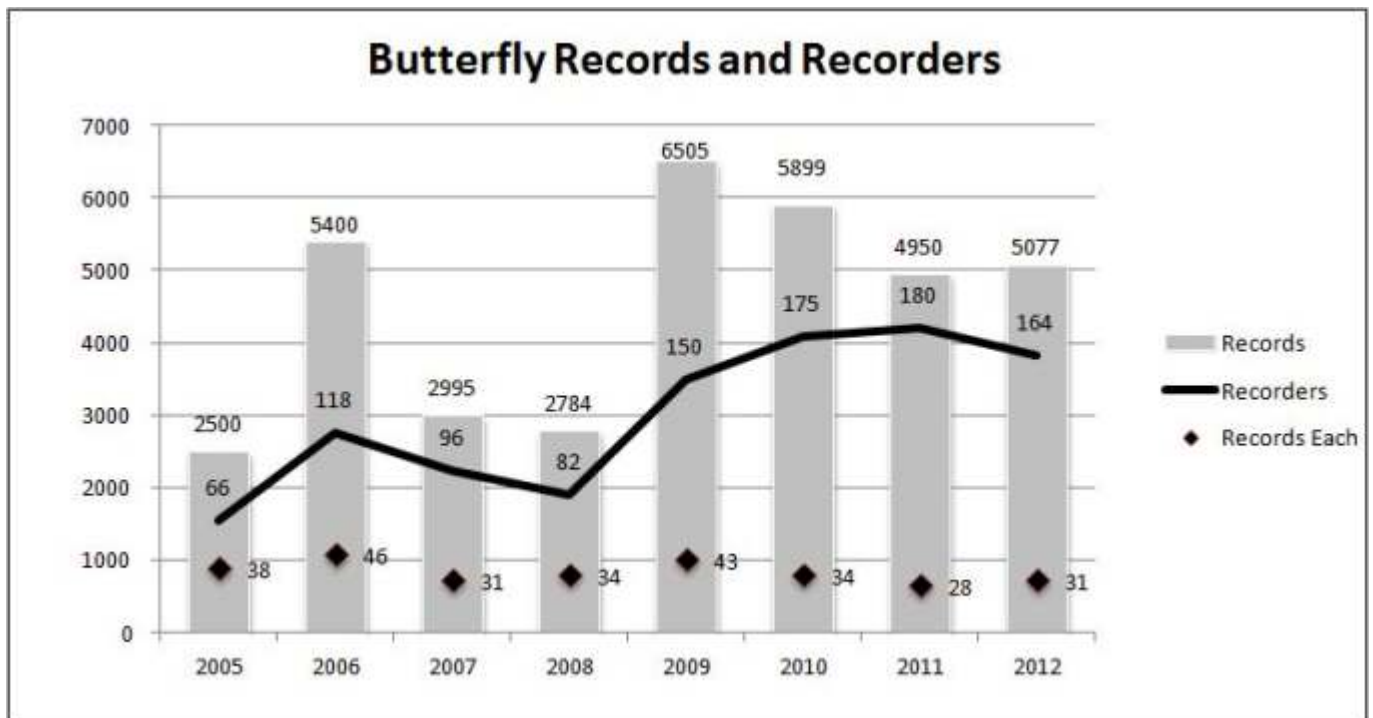


## Butterfly Records in 2012 *Duncan Davidson*

Everyone knows that the summer of 2012 was one of the worst in living memory. According to the Met office, it was the coolest summer for 15 years, with the exception only of 2011. Over the summer months, Berwickshire experienced over two and a half times the 30 year average rainfall; Edinburgh and Fife had well over twice the norm, while much of Aberdeenshire had about one and a half times the expected amount. In 2011, the poor summer was followed by an exceptionally mild end to the year that saw late runs of Red Admiral and Small Tortoiseshell but 2012 didn't have quite the same profile. October and November continued the theme of being wetter than usual and although there were nearly as many October records of Red Admiral, there seem to have been none at all in November.

So what about the statistics?

Below is a chart showing the number of records received each year and the number of recorders having submitted these records. Remember that a record is a report of a species on a particular date at a particular site – not a count of the actual number of individual butterflies seen. For example a report from my garden of 3 Red Admiral and 5 Small Tortoiseshell on 11 October is a total of two records. It would also have been a lie.



We can see that in 2012, I have received 5077 records from 164 different recorders. So, record numbers are better than 2011 and actually surprisingly good given the conditions. The number of recorders has dropped slightly, but I'd like to think that the drop is more to do with the weather than a reduced interest. The average number of records per person has crept up, but I'm not convinced that this is a useful figure. For example 56 recorders submitted a single record, while two recorders submitted more than 600 records each.

The following table shows the total numbers of selected species across recent years.

Species	2005	2006	2007	2008	2009	2010	2011	2012
Small Skipper		1	2	2	19	160	149	33
Large Skipper		0	4		3	47	98	40
Large White	639	972	228	245	1587	1305	217	328
Small White	580	2413	628	717	2436	1538	216	448
Green-veined White	1969	2758	1296	1655	4124	3794	1186	2135
Orange-tip	322	679	626	290	515	741	773	568
Green Hairstreak	64	216	339	38	136	213	87	132
Purple Hairstreak		2			10	10	31	53
Small Copper	562	703	579	199	866	596	365	516
Small Blue	20	136	58	65	113	87	125	336
Northern Brown Argus	408	281	188	332	406	499	224	218
Common Blue	949	1120	405	589	812	921	800	655
Holly Blue		10	25	17	10	21	7	6
Red Admiral	528	2015	385	871	1418	616	1340	973
Painted Lady	62	1191	430	21	4907	71	37	23
Small Tortoiseshell	963	1360	961	529	2709	2598	1437	1880
Peacock	1697	3982	1817	2214	2669	3023	1309	1104
Comma	11	94	99	128	189	329	235	128
Small Pearl-bordered Fritillary	452	729	276	238	384	516	394	245
Pearl-bordered Fritillary	394	268	88	63	167	11	9	270
Dark Green Fritillary	169	467	297	288	353	489	309	266
Speckled Wood	5	2	13	11	31	103	79	190
Wall	3	7	12	15	42	187	122	171
Mountain Ringlet	138	5	2	105	889		142	35
Scotch Argus	368	498	154	132	181	633	356	1119
Grayling	119	401	216	187	256	374	394	194
Meadow Brown	1371	2851	1883	1140	2547	1979	1066	1595
Small Heath	1572	3270	1068	1273	2166	2562	882	1426
Large Heath	40	121	8	43	20	22	49	74
Ringlet	2804	4616	3213	2077	4515	3804	2127	4363
Totals	16209	31168	15300	13484	34480	27249	14565	19524

Small Skipper and Large Skipper numbers are down. Perhaps as summer grassland species this is not surprising... Did they suffer because of the very wet summer, or did the usual recorders not really fancy being out in the wet grass and so they just weren't counted?

I am personally surprised that Orange-tip numbers held up. In 2011 I found eggs on almost every Cuckoo Flower I looked at, but in 2012 I found not a single one and so I had imagined that there were not many adults about.

Purple Hairstreak numbers are well up due to a couple of factors. One member reported seeing up to 30 butterflies one afternoon at Ballathie Estate in Perthshire and three new sites were discovered in Fife. I remain convinced that these butterflies are much more common and widespread than we know and are just waiting to be discovered. One was also seen for the first time on Balgay Hill in the middle of Dundee!

Small Blue also seem to have increased significantly. This is largely due to the Small Blue surveys that were instigated last year, one in the Scottish Borders and one in Angus. The Angus survey was very disappointing with only a dozen individuals seen across Barry Buddon, Carnoustie, Seaton Cliffs and near Glamis. This was no reflection on the volunteers who were out searching every sunny day we had. There is lots of Kidney Vetch, but my own experience was that even when the sun shone, the bitterly cold east wind blew just as hard. By contrast, the records in Berwickshire were outstanding, with emergence as early as May, and counts of 20, 30 or 40 individuals not uncommon. The peak count of 57 on the 26th of May must have been amazing to see.

Pearl-bordered Fritillary numbers again reflect the results of targeted surveying, where 115 individuals were counted in one day across seven sites along Deeside. A further 100 were reported from four surveys in the Loch Tummel area.

Speckled Wood continues its range expansion. There was of course increased publicity in the form of the national on-line Speckled Wood survey in 2012, but even with those 30 on-line records discounted, there have been substantial increases, with single counts of 20 or more from both the Borders and Aberdeenshire.

Scotch Argus shows an enormous increase over any other recent year, but this statistic is due to a small number of observations. An estimated 500 were seen on one occasion in Glen Buchat in Aberdeenshire and other counts of 50 or 100 were reported from elsewhere in Aberdeenshire and in the Borders. Take away these 800 individuals from 5 reports, and the numbers are more in line with earlier years. But don't you wish you had been there to see 500 Scotch Argus in one place?

Other large counts include 350 Small Heath, also in Glen Buchat, 200 Ringlet near Pitmedden Forest on the inner Firth of Tay, over 150 Ringlet at Tentsmuir in Fife and over 100 Green-veined White on Angus's Seaton Cliffs.

Finally, here is a table that indicates expansion of species into new 10k squares. The first data column is the number of 10k squares in the branch area where the butterfly has been recorded since 1990, the next is the number of squares the species was found in 2011 and the other columns are numbers from 2012.

Species	Total 10k squares	2011 10k squares	2012 10k squares	New squares in 2012
Small Skipper	14	4	7	2
Large Skipper	7	2	3	
Large White	225	38	44	
Small White	200	39	44	1
Green-veined White	266	82	127	1
Orange-tip	203	65	62	1
Green Hairstreak	75	18	20	4
Purple Hairstreak	15	5	5	3
Small Copper	188	41	47	1
Small Blue	18	3	4	
Northern Brown Argus	92	13	26	1
Common Blue	235	49	53	1
Holly Blue	14	3	4	
Red Admiral	244	70	83	3
Painted Lady	228	15	15	
Small Tortoiseshell	260	81	134	1
Peacock	234	86	84	
Comma	108	56	39	6
Small Pearl-bordered Fritillary	138	25	26	3
Pearl-bordered Fritillary	27	5	12	1
Dark Green Fritillary	175	37	46	2
Speckled Wood	38	11	20	6
Wall	15	8	6	1
Mountain Ringlet	18	7	3	
Scotch Argus	69	8	25	4
Grayling	39	12	11	
Meadow Brown	241	50	74	
Small Heath	229	51	84	1
Large Heath	60	5	13	1
Ringlet	234	74	113	6
Number of 10k squares recorded	279	171	196	

Remarkably, considering what has already been said about the weather, nearly every species was found in more 10k squares than in 2011 and the total number of 10k squares visited in 2012 was quite a lot higher than in the previous year.

There are a lot of new squares as well – some as a result of genuine expansion, such as the Comma and Speckled Wood, but others because of targeted surveys or just from looking in new places!

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### **Searching for the Black Hairstreak** *Colin Whitehead*

In early July 2012 my wife and I made a visit to Glaphorn Cow Pastures near Corby in Northants to try to see the Black Hairstreak. We parked in the lane opposite the entrance to the reserve and started along the main track. Not having seen this butterfly before we were not sure of the best places to look but scanned the tops of surrounding trees and scrub in hope. There were some Large Skippers about but nothing that resembled a hairstreak. We paid careful attention to a flowering privet bush, but nothing. Then, along one of the side tracks, we saw a person with clipboard in hand also looking upwards. We approached him hopefully, to find he was the Reserve Warden scouting his transect. He kindly took us to a spot where he had recently seen a hairstreak. Looking over the tops of a cluster of blackthorns we eventually spotted our target in the distance, flitting in and out of the tops of bushes and eventually managed to get a shot with a telephoto lens. Unfortunately it was taken looking into the sun, so was not very satisfactory.

The warden then took us to a more favourable spot, a clump of dewberry that was a favourite hairstreak feeding spot. The clump was surrounded by trampled grass so was obviously well-visited by butterfly watchers. Nothing present...but suddenly there was a Black Hairstreak nectaring on the flowers and very amenable to close-up photography for a few minutes. Then it was away just as suddenly! (Photo; IMG\_2911, Colin Whitehead).

At this point, another two people appeared, cameras in hand. This was satisfying for me because my wife is not really a butterfly enthusiast, though she likes sunny country walks. So I could point out that I was not the only person in the area obsessed with butterflies. We all spread out along the glade and, with 5 pairs of eyes, it was not long before other hairstreaks were spotted, in trees and on a large flowering privet, and providing further photo opportunities. In all, we saw five hairstreaks. This quite made the warden's day as it was his largest daily total in what up till then had been a late and overly damp season. We were also very happy!



Black Hairstreak - *Colin Whitehead*

## **The hunt for Green Hairstreaks at Kenmore Hill** *Lesley McCabe*

A few years ago we visited Kenmore Hill with Dan Baker to look for Green Hairstreak in early May, but it was a late season that year and we didn't find any, although we did see some moths. The habitat looked perfect with plenty of patches of Blaeberry, and there were records from the area, so thought it was worth another try in 2012.

This time the outing to Kenmore Hill had been arranged for 19th May, right in the middle of the flight period for Green Hairstreaks. Two friends turned up to join Eric & me; however, although it was a dry day, the temperature was a chilly 8 degrees C. We enjoyed a Cuckoo calling from across the valley as well as Mistle Thrushes and Redstarts but our walk brought us no butterflies at all.

A few days later, with temperatures at much nicer 20 degrees C, Eric & I returned to Kenmore Hill to try yet again. This time we had only just started the walk when we saw our first Green Hairstreak flying over the Blaeberry. (Photo: Green Hairstreak – Eric McCabe) We saw at least 12 over our walk at various Blaeberry patches as well as Common Heaths, a Fox Moth, Green Veined Whites, including a pair in cop, Orange-tips and a Red Twin Spot Carpet. What a difference the warmer temperature had made!



Green Hairstreak - *Eric McCabe*

Over the past year, Butterfly Conservation members in North East Scotland have continued to engage in recording and raising awareness of butterflies and moths to encourage more people to become involved. Various events were arranged during 2012, many in partnership with other organisations.

Several public moth (and bat) nights/mornings and butterfly walks were held at nature reserves, country parks and other local wildlife sites across Aberdeenshire, one as part of a 24 hour Bioblitz event and some contributing to community festivals/projects. Many were organised by myself, an Aberdeenshire Council Ranger, with support from other recorders/members in the area or colleagues from Aberdeenshire, Aberdeen City Council and Balmoral Estate Ranger Services plus Scottish Natural Heritage. These were generally well attended, even when the weather was less than favourable, so people of all ages were able to discover the diversity of species in their local area and learn about their importance in ecosystems and need for conservation.

Highlights included:

10 different moths and 2 species of butterfly at Cambus O' May riverbank moth morning/butterfly walk, near Ballater on 2<sup>nd</sup> June – few species, but included a Birch Mocha (local and scarce in NE Scotland) in the Heath trap, mating pairs of both Brimstone Moths and Pearl-bordered Fritillaries and also a seldom seen Dark Green Fritillary caterpillar. Those attending included some keen photographers who were able to get some fantastic close-ups.

31 species at Muir of Dinnet NNR moth morning on 3<sup>rd</sup> July from 4 traps at different sites – numbers well down compared with previous years, but included Scalloped Hook-tip (local in NE Scotland), Clouded Buff and Saxon (new 10km square record for both species; local and scarce in NE Scotland). This event also had one of the highest attendances, with over 30 people, including a few local and visiting members/recorders that were able to help identify moths and show them to other participants.

29 species at Grandholm, Aberdeen moth night on 4<sup>th</sup> August – notable were Blue-bordered Carpet (new 10km square record; local and scarce in NE Scotland) and Swallow-tailed Moth (rare in NE Scotland; first recorded 1998, but spreading). A male and female of the latter species arrived late in the night, so sadly not everyone who attended stayed long enough to see these exotic-looking moths. However, photos taken the next day before releasing the moths at the site were posted on the River Don Corridor Facebook page for others to see.

72 species at Crathie moth night on 10<sup>th</sup> August from 2 traps (MV/actinic) – a good range including a number of local/highland species, most significantly a new 10km square record of Scotch Annulet (local and scarce in NE Scotland). Over 30 people attended this event, which has become a regular fixture of Ballater Victoria Week, using a variety of local sites over the years.



Pearl Bordered Fritillaries mating *Helen Rowe*

A 'scrub bashing for butterflies' day was organised in April on a species-rich grassland site in Glen Muick, one of the best sites in the area for

Northern Brown Argus and many other butterflies and moths. Local members and volunteers worked alongside Aberdeenshire Council and Balmoral Estate Rangers to remove invasive birch and broom. (Photo: scrub bashing team – *Helen Rowe*) The site will be revisited to see if the work has enabled the larval food-plant of the Northern Brown Argus, rock rose to spread and hopefully maintain/increase the butterfly population.

A Pearl-bordered Fritillary survey day was organised as a follow-up to one organised in 2011, this time focusing further up the Dee corridor around Ballater. Local member/recorder Nick Picozzi had previously identified sites with potential habitat where the species had not previously been recorded. Although several people were interested in helping to survey these sites, only a few were able to come as the original dates proposed were unsuitable because the butterflies emerged very late due to the cold spring weather. However, 'new' sites were discovered on a hot day at the end of May when the butterflies were very active, (Photo: Pearl-bordered Fritillaries *in cop* – *Helen Rowe*) filling in gaps between known locations and building up a better picture of habitat connectivity.

On-going monitoring on Deeside of the nationally very rare Dark Bordered Beauty moth was also affected by later than usual emergence. Eventually, some were recorded by a combination of daytime observation and light trapping, but numbers were lower than in some previous years. Suckering aspen and other scrub will be cut back in 2013 in some areas to maintain supply of young/short suckers favoured by the caterpillars, while on one sub-site BC Scotland is negotiating with the tenant farmer to exclude during critical periods sheep that have previously browsed suckers.

Over the past year, I have, in my ranger role, had requests from local groups to give butterfly and moth talks, as well as leading an introductory course on butterflies and moths for the North East Scotland Biological Records Centre. Another local recorder, Brian Stewart ran a butterfly and caterpillar identification workshop for the Scottish Countryside Rangers Association. These have all provided further opportunities to promote the work of Butterfly Conservation.



Scrub bashing team

## Your lasting legacy

Have you ever considered leaving a gift to Butterfly Conservation in your Will? An increasing number of members and friends are choosing to support Butterfly Conservation in this way. All gifts, however small, are welcome and make a crucial and lasting contribution to the conservation of butterflies and moths. Accounting for over one third of voluntary income, legacy gifts make a real difference to the work we can undertake.

So as well as leaving gifts to loved ones in your Will, please consider leaving a gift to Butterfly Conservation, it will help ensure butterflies and moths thrive in the years to come.

For more information about leaving a gift to Butterfly Conservation and sharing your love of butterflies and moths with future generations please contact Helen Corrigan on 01273 453313 or [hcorrigan@butterfly-conservation.org](mailto:hcorrigan@butterfly-conservation.org) or write to her at Butterfly Conservation, Manor Yard, East Lulworth, Wareham, Dorset BH20 5QP

Thank you for your support.



Orange Tip female - *Malcolm Quirioe*

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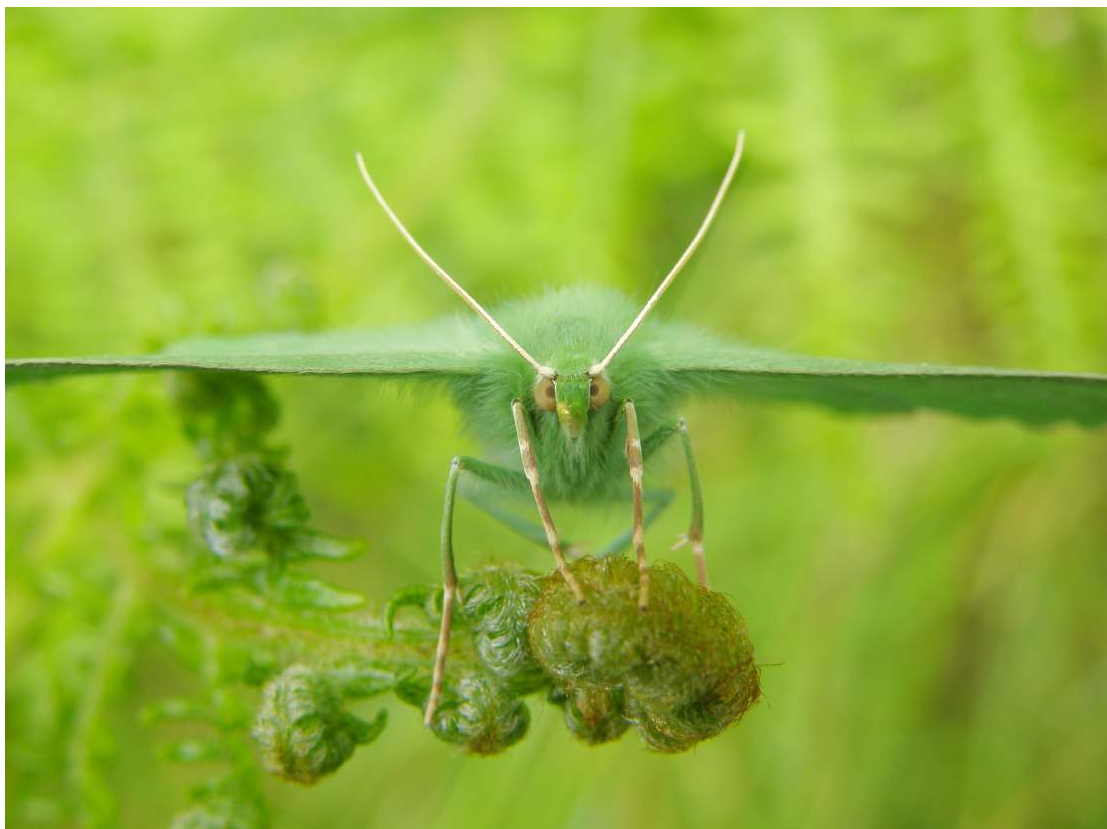
Richard Buckland, (as above).

Local Organiser, Borders sub -group, Barry Prater,  
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Puss Moth - *Alistair Graham*



Large Emerald *Helen Rowe*