



Borders Newsletter

Issue 14 Spring 2015

www.eastscotland-butterflies.org.uk/

<http://www.facebook.com/EastScotlandButterflyConservation>

Welcome to a new issue of our newsletter for people living in the Scottish Borders and for many folk further afield. Please forward it to others who might like to read it and be kept in touch with our activities.

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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 autumn 2015. Email to me at the above address or by post to:
12 Barefoots Crescent
Eyemouth, Berwickshire
TD14 5BA

Butterfly Conservation in the Borders

At this time of year we have the prospect of summer, although May weather can be extraordinarily fickle, with some cold and unsettled days and nights making conditions appear unattractive for both butterflies and moths. But they will be out there and it's often a question of taking advantage of short spells of good weather. On the next page you'll see details of all the outdoor events arranged across the Borders from May to September and these give opportunities to see some of our special and precious local butterflies and moths, including Speckled Wood, Small Blue, Northern Brown Argus, Scotch Argus, Wall, Blackneck and all the mystery moths which come to light traps. Get some of these dates in your diary and come along - you won't be disappointed.

Last year I mentioned a windfarm planning application (SBC ref 14/00083/FUL) for Belling Hill, south of Jedburgh, which could have impacts on the Green Hairstreak colony there. No decision has been made on this yet and SBC inform me that it is likely to be August or September before this happens as a range of concerns has been identified by consultees. Over this summer there will be checks made on the hairstreaks as well as some moth recording in what is a patch of very nice habitat.

Many thanks to this issue's authors, whose pieces all give much food for thought and demonstrate to us what can be achieved and how much more there is to discover in our area - there are some positive aspects to conifer plantations, we can still locate new sites for some of our scarcer butterflies and inspiring younger folk with moths is easy and rewarding, if a bit fraught at times!

Don't forget this year's Big Butterfly Count which starts on Friday 17th July and runs until Sunday 9th August - make sure you take part and please encourage family, friends and neighbours to do likewise. More details here <http://bigbutterflycount.org/about>.

Have a good summer!

Barry Prater

Events in the Borders in 2015



Sunday 31 May 2015. A Borders Nature Festival event at Paxton House. A butterfly walk with target species of Speckled Wood and Orange-tip and if weather permits moths from an overnight light trap.

Meet at 2.00pm at Paxton House (grid reference NT922520, postcode TD15 1SZ). There will be butterfly-themed activities for youngsters after the walk, finishing at 4.30pm. Charge £3 per child, £5 per adult (this includes the £4 annual grounds pass) and £15 family tickets.

Booking advised - please email allison@paxtonhouse.com.

Contact: 1. Paxton House allison@paxtonhouse.com 01289 386909; 2. Barry Prater, barry@myzen.co.uk 018907 52037; 3. Iain Cowe. orb@lammer.orangehome.co.uk 01890 818314 or 07775 747838.

Friday 5 and Saturday 6 June 2015. Moth trapping and moth breakfast at Whitmuir, West Linton; a Borders Nature Festival event. Light traps for moths will be set up at 9.30pm on the Friday with the contents being identified the following morning at 9.00 am. This is a joint event between Butterfly Conservation and Whitmuir the Organic Place. Breakfast will be available in the farm shop.

Whitmuir Farm is by the A701 about halfway between Leadburn and Romannobridge (postcode EH46 7BB and grid ref NT191510). This event is free and suitable for families. Contact: 1. Reuben Singleton; 07783 047398

reuben@tweedecology.co.uk. 2. Pete Ritchie, pete@whitmuirtheorganicplace.co.uk.

Sunday 7 June 2015. Berwickshire Coastal Walk for butterflies and moths; a Borders Nature Festival event. This is a walk south along the Berwickshire coastal path to visit a colony of the Small Blue butterfly. Some of the areas off-track are steep and rocky, so please have suitable footwear.

Meet at Burnmouth Village Hall at 11.00am. Turn off the A1 at Burnmouth and the village hall is on the right just after crossing the railway line bridge. Accessible by bus routes 235 and 253. Children should be accompanied by an adult and it's best not to bring dogs as they disturb the wildlife. Finish around 3.00pm.

Contact: Iain Cowe; orb@lammer.orangehome.co.uk. 01890 818314 or 07775 747838.

Sunday 14 June 2015. Moths with the North Northumberland Wildlife Watch Group; a Borders Nature Festival event. The event will run from 2pm to 4pm at Hunting Hall Farm when youngsters can discover moths in last night's light-trap, followed by butterfly-themed activities. Tea and cakes too!

Meet at Hunting Hall Farm, about 2km NE of Lowick village in N Northumberland (grid ref NU028410, postcode TD15 2DP) . Free if you're a member of the Wildlife Watch group, otherwise a charge of £2.50 per child. Children must be accompanied by an adult; the site is wheelchair accessible if advised before.

Contact: Harvest Harris-Jones harvest643@btinternet.com 01289 388867.

Saturday 27 June 2015. Flowers, Butterflies & Moths at Thornielee; an event arranged by the *Scottish Wildlife Trust, Central Borders Group*. An easy afternoon walk from 2.00pm to 4.00pm along paths with adjacent meadows rich with wild flowers, butterflies and day-flying moths. Wonderful views of the Tweed Valley and also the site of the Muckle Mou'd Meg sculpture.

Meeting Place: Thornielee Forest Car Park , NT402366, just off the A72 between Clovenfords and Walkerburn at 2.00pm.

Contact: Malcolm Lindsay, malcandles46@talktalk.net 01896 753425.

Sunday 16 August 2015. Tima Water for the Scotch Argus. A walk to find the Scotch Argus butterfly. Meet at 10.30 am at car park by the Tima Water at NT276135. Take the B7009 then the B709 from Selkirk towards Ettrick (approx. 16 miles). At Ettrick follow the B709 to the left across the Ettrick Water and follow the Tima Water. If anyone wants to share transport there is a large car park in Selkirk near the square, where you can meet. Bring lunch and suitable footwear.

Contact: Sarah Eno, saraheno@riseup.net.

Friday 4 September 2015. Mothing @ Harestanes - a Family Moths evening at Harestanes Countryside Visitor Centre. Come along at 8.00 pm to join a moth expert. Finish around 10.00 pm. Ages 8+, under-16s must be with an adult. Adult £3, Child £2. No dogs. Booking: Essential. The Visitor Centre is near Ancrum at grid ref NT641244 , postcode TD8 6UQ.

Contact: Harestanes Countryside Visitor Centre, harestanes@scotborders.gov.uk. 01835 830306

Plant Communities for Butterflies and Moths Part 2: Coniferous Woodland

Roger Manning, Sprouston

Something like 17% of the Scottish Borders has wooded cover, but unlike a number of English counties the majority of that area is comprised of coniferous trees. The overall biodiversity is far less than that found in deciduous woodland and yet some species of Lepidoptera take advantage of this specialised habitat and a few can, on occasions, occur in truly massive numbers.



Many stretches of coniferous forests and plantations appear not only dark but thoroughly uninviting and for anyone exploring such an area the outer margins, clearings and woodland rides are likely to prove the most rewarding sectors. These blocks of timber will often sit adjacent to the sea, farmland, wetland or moorland areas so increasing the diversity of the habitat - and the range of butterflies and moths which might be found. Yet more sites will include within their boundaries clumps of deciduous trees and bushes, gullies, quarries, ponds, marshes and more so again providing the potential to host a much wider range of creatures.



Peacock caterpillars on Nettles

Sheltered and sunny spots will often attract some butterflies but the range is likely to be somewhat limited with Vanessids such as the Small Tortoiseshell, Peacock and Red Admiral homing in on patches of Common Stinging Nettle *Urtica dioica*, Creeping Thistle *Cirsium arvense* and, where moist, Marsh Thistle *Cirsium palustre*.

Green-veined Whites are frequently encountered and they may well be flying in the vicinity of the ditches which often border forest tracks. Meadow Browns and Ringlets are well known in the forest glades during mid-summer with areas of rank grasses being important to both species. One of the great success stories of recent years has been the arrival and spread of Speckled Woods, although this is actually a reappearance as there are records from many years ago. These handsome butterflies like to 'dance' in the dappled sunlight but they can also be studied resting on low-growing bushes and patches of Bracken.



Ringlet



Speckled Wood from Clarabad, Berwickshire, 1960
(in Northern Discovery Museum, Newcastle)



Speckled Wood from Oxenrig, Berwickshire 2014



Common Footman with lichen
on fencepost

Some moths have extremely specific, not to mention curious choices for their larvae to feed on. These include the Common Footman which often develop on algae or lichens and the Dotted Carpet which selects Old Man's Beard Lichen *Usnea* sp. Tufted Hair-grass *Deschampsia cespitosa* is often plentiful in and around coniferous woodland and is utilised by the Dark Arches, whilst Purple Moor Grass *Molinia caerulea* - perhaps best known for its rounded hummocks in upland areas - also favours moist conditions and is one of the larval foodplants for the Straw Dot.



Dotted Carpet

I have already touched on Bracken, and this is of particular importance for a Geometrid moth, the Brown Silver-line, which is often fairly numerous at this, its foodplant.

We know that Nettles are good for butterflies but they are also valuable for many species of moths, providing at least part of their caterpillars' diet. The presence of this plant in a coniferous wood might well prove to be the focal point for the Angle Shades, White Ermine, Map-winged Swift, Ghost Moth, Spectacle, Snout and more. Common Ragwort *Senecio jacobaea* will often be encountered and its presence provides the possibility of finding Common, Grey, and Golden-rod Pugs whilst Heath Bedstraw *Galium saxatile* - often abundant in this habitat - is, on occasions, the diet for the larvae of the Barred Straw, Green Carpet and Mottled Grey.



Foxglove Pug

Patches of Raspberry *Rubus idaeus* are often commonplace and it's there where the Buff Ermine might well be lurking. Some coniferous woods and plantations have at least a good sprinkling of more showy plant species and their presence may well help to provide further scope for yet more moths. Likely examples might include Foxgloves *Digitalis purpurea* for the Foxglove Pug and Primroses *Primula vulgaris* for the Riband Wave.

There are areas of woodland which contain a range of related, or loosely related, conifers whilst others might be composed of mile after mile of one type which has been planted as a crop. Monoculture may well reduce the range of moths present although many of these insects are capable of living closely with and feeding on either one or quite a range of different conifer species. European Larch *Larix decidua*, Japanese Larch *Larix kaempferi* and Hybrid Larch *Larix decidua x kaempferi* have all been planted extensively and they host the Larch Pug, Scalloped Hazel and Satin Beauty, although the last mentioned moth also lays its eggs on Douglas Fir *Pseudotsuga menziesii*.

Lawson's Cypress *Chamaecyparis lawsoniana* - typically with stringy bark - is seldom particularly plentiful but, where found, might shelter Blair's Shoulder-knot. The traditional Christmas tree, Norway Spruce *Picea abies* could well be attractive to the Mottled Beauty, Willow Beauty and the handsome Barred Red. Sitka Spruce *Picea sitchensis* trees have been planted in their millions with the Satyr Pug being attracted to young specimens, whilst the July Highflyer and Spruce Carpet also visit the more mature stands. Meanwhile, the Winter Moth can be so numerous that it becomes an unwelcome pest.



Blair's Shoulder-knot

Our native Scots Pine *Pinus sylvestris* is of particular importance and is visited by moths which include the Grey Pine Carpet, Pine Carpet and Tawny Barred Angle. Unfortunately, the Pine Beauty is another species which can cause economic damage and it also attacks Lodgepole Pine *Pinus contorta*. Yet another, the Bordered White (also known as the Pine Looper Moth because of the behaviour of its caterpillar) can be a most serious pest for foresters and has been known to defoliate enormous areas.

Moth populations are forever changing with species disappearing and others colonising new ground. Both scientists and enthusiasts have already contributed greatly to our knowledge, but new discoveries - including that of preferred host plants - continue to surprise and increase our awareness. Unfortunately not all newcomers are welcome and should species such as the Asian strain of the Gypsy Moth or the Pine Processionary arrive in the UK from Europe they could cause serious defoliation problems in the future.

Our coniferous woodlands might well attract fewer butterflies and moths than many other habitats but they are certainly areas which deserve thorough study.

Summer Butterflies and Moths in the Southern Uplands

Ewan Munro

In the spring of 2014 I descended from my Highland (Branch) home to the Southern Uplands in order to survey birds at Dun Law windfarm (the one the A68 drives through at Soutra) and five control sites for the RSPB. For the duration of my contract I stayed in Musselburgh – unfortunately, my flat had no garden, ruling out moth-trapping. On the upside, Mark Cubitt's excellent online maps showed that the area I was working in – NW Berwickshire and SE Midlothian – was fairly under-recorded, so even any day-flying moths I spotted were liable to be new records. Things started off well: my first day of survey work turned up a couple of Peacock butterflies, a Small Tortoiseshell, a Ruby Tiger caterpillar and the micromoth *Philedonides lunana*. I had more of these butterflies over the next few days until the weather went downhill for a time.

Around this time, Barry Prater asked me to keep an eye open for Green Hairstreak, which had never been recorded in Berwickshire before. The habitat on some of my sites looked decent for it, with good amounts of blaeberry around, so I was fairly hopeful. As it happened, it was the volunteer who was helping with the survey work, David Thompkins, who found the first six Berwickshire Green Hairstreak. David isn't a butterfly expert, but the description he gave meant that they could be nothing else. The following day, I was surveying a different part of the windfarm and found nine Green Hairstreaks along the edge of a forestry plantation, next to an area with a fair amount of blaeberry. I was able to get photographs for official confirmation. In the following days and weeks I found further Green Hairstreaks in a couple of other parts of the windfarm, and on a control site several miles away, deeper into Berwickshire.



Green Hairstreak

They also turned up in good numbers on my two Midlothian sites. There's every chance that there are many more colonies in the area, so keep a watch out this year if you're passing through!



Female Emperor Moth

Apart from Green Hairstreak, many other species were turning up: Green-veined Whites and Common Heaths soon became abundant, a few Emperor Moths were seen, Brown Silver-lines gave early warning of the areas that would later become near-impassable because of bracken and the caterpillars of Dark Tussock, Northern Eggar and Garden Tiger made a show.

By the start of June, the range of Lepidoptera I was finding became ever more impressive. Small Heaths were appearing in numbers, and at one of my sites I discovered a Red-necked Footman and a Small Purple-barred. Both were new records for the area, but the Small Purple-barred was also the first for Berwickshire since 1927! Two days later I saw another at one of my Midlothian sites, but I was unable to catch it to get photographic proof of what would have been a new record for the vice-county.

The following week, in between records of Wood Tiger, Mother Shipton and Latticed Heath, I found a couple of Small Pearl-bordered Fritillaries on the edge of the windfarm, in the same location as the first Green Hairstreaks. This is another rare (but probably under-recorded) species in Berwickshire, but I didn't find any more sites for it there, although it turned up copiously at one of the Midlothian sites.

After that, things began to quieten down a bit. Ringlet numbers quickly built up to replace the Green-veined White as the most abundant species on the wing, while moth sightings included Chimney Sweeper, Silver Y, Beautiful Yellow Underwing and Middle-barred Minor. A final highlight occurred at one of my control sites, where I'd noticed Rock-rose growing during an earlier visit. An inspection of the leaves of this plant turned up the distinctive eggs of the Northern Brown Argus, and some further searching turned up a couple of adults. Meanwhile, in Midlothian, a Red Twin-spot Carpet turned out to be only the third vice-county record.



Small Pearl-bordered Fritillary on thistle

In all, I enjoyed the contract, especially the opportunity to see a number of species I don't see often at home, and I'm happy to have been able to add many new records to the Berwickshire and Midlothian databases. It just goes to show that even if you don't have a battery-powered moth trap or a generator that you can still get valuable records in under-recorded areas just through daytime sightings. This year I'm working in the Highlands, looking for Golden Eagles, and hopefully this project will prove just as fruitful for Lepidoptera as last year's job in the Southern Uplands.

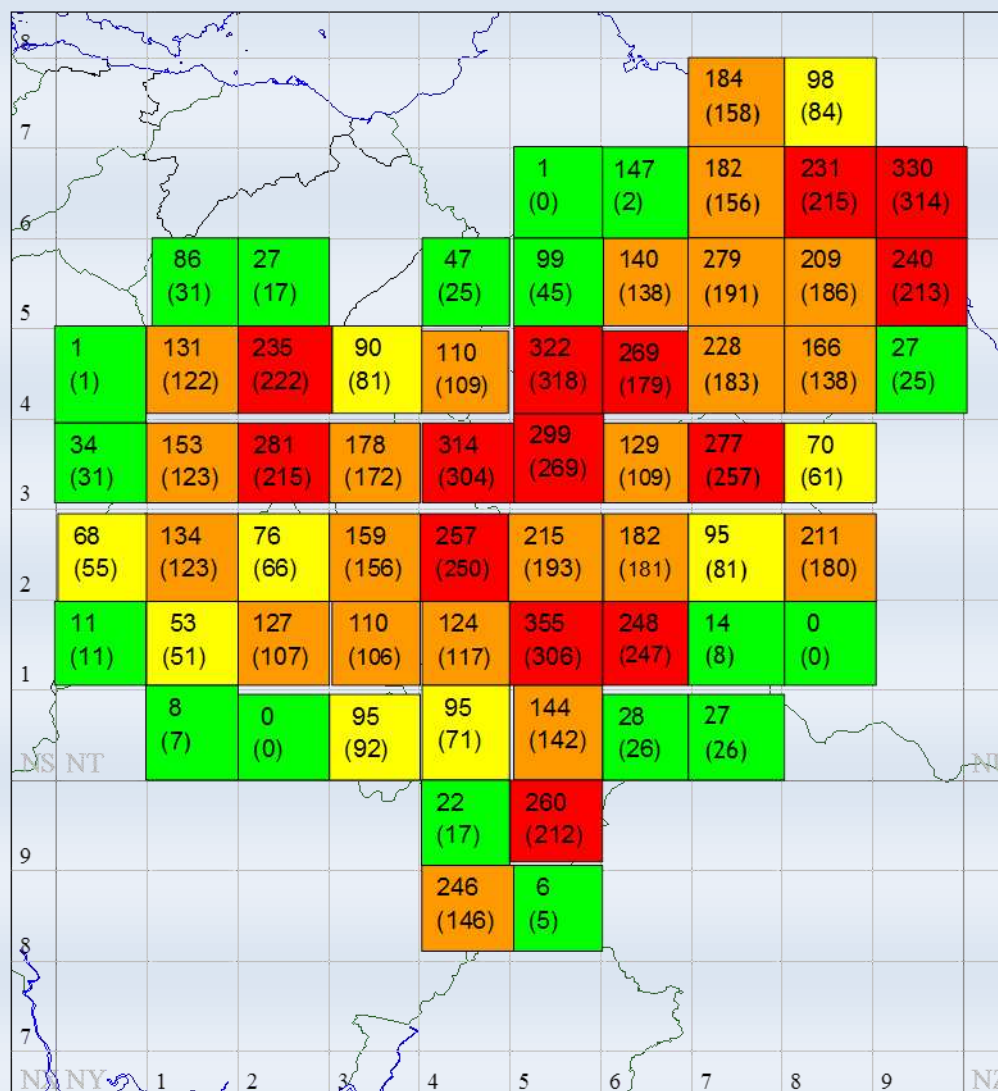
Some Recording Suggestions for 2015

Barry Prater, Eyemouth

While many discoveries of both butterflies and moths come from people out and about in the countryside or running a garden moth trap, for certain species (particularly butterflies perhaps) some rather more focused searches are important to check on known sites and to seek out new ones. The priority species remain the same from previous years - Green Hairstreak, Small Blue, Northern Brown Argus, Large Heath, Small Pearl-bordered Fritillary - but there are many more with changing distributions or of national concern where all records are important, such as Small Skipper, Large Skipper, Comma, Speckled Wood, Grayling and Wall. We have a good understanding of where all these species have been seen in recent years, so advice and guidance on where to start looking for them are readily available. In the first instance contact Iain Cowe our new Borders Butterfly Recorder orb@lammer.orangehome.co.uk or me barry@prater.myzen.co.uk for more information.

Great strides have been made in moth recording across the whole of the Borders over recent years and coverage is now good, although some of the more remote areas need more investigation as the map shows. The Vice County Moth Recorders (details later on) would welcome any new recruits who'd like to get started on this fascinating activity - you are guaranteed to make some discoveries!

Scottish Borders – Macromoth Species* Recorded at 10km level - all records (+ post-2000 records in brackets)
Situation at 16 February 2015



*sub-species and selected aggregates removed



The Generation Game - or How to Catch Moths and Youngsters!

Richard Bramhall, Innerleithen

More than thirty years ago I was introduced to mothing by my Dad in an unusual way – quite eccentric, although I didn't realise it at the time. As a seven- or eight-year-old I remember getting up early, full of excitement and anticipation, to do the 'moth round' about the then new housing estate of Tweedbank. This involved grabbing a tattered old knapsack filled with a variety of tubes and bottles and heading off armed with a two-piece split cane fishing rod! This rod, joined together, was then used to gently knock moths off from high up on the lamp posts where they had settled overnight, having been attracted by the light. These hapless moths would flutter to the ground in their daytime stupor where they were then eagerly pounced upon and secured in a suitable bottle for identification. While these moths were very often, to my young mind, grey, brown and featureless (requiring a trip to Langlee to see the late Andrew Buckham for identification), every now and then the early morning trip was enlivened by something special. Perhaps a 'Garden Tiger' flashing its cream and chocolate brown wings to reveal its vivid orange hind wings and body, maybe the marvel of a huge Poplar Hawk-moth, or, best of all, the jewel of an Elephant Hawk-moth – which even today I find hard to take in just how beautiful it is. However, these early morning trips began to get less and less. Perhaps it was the realisation of just how weird it was to go 'fishing' for moths early in the morning, coupled with the growing number of comments from my school friends ("What *is* your Dad doing with the fishing rod in the morning?"). However, the mothing seed was sown!

Fast forward to the present day. I now have three children of my own who are, thankfully, not yet old enough to realise how 'weird' their Dad is! While not quite eccentric (or brave?) enough to patrol the streets early in the morning armed with a fishing rod, I do have a homemade moth trap which I run regularly from my back garden in Innerleithen. Weekends and holidays will see the two older children (aged four and three) eagerly helping to empty the trap early in the morning, desperate to find out what delights have been drawn in from the previous night.



This is not a job for the faint-hearted. It does prove to be quite a stressful experience! Moths have fluttered off into the distance having been disturbed by a little hand grabbing the egg box too roughly (they don't quite understand when I exclaim in dismay "It might have been something rare!"). Several more moths have been inadvertently squashed between thumb and forefinger as they are shown to me in triumph "What is this one Daddy?" (New book title – 'The Squashed Moths of the British Isles?'). However, the awe is there as we pick a Poplar Hawk out of the trap, the wonder as we gaze at an Elephant Hawk-moth, the excitement as they run off to show mummy the intricate detail on a Beautiful Golden Y, the strange glasses on a Spectacle moth, or the amazing camouflage of a Buff-tip. They love trying to help identify the moths with the field guide and note down what is found. (These days tricky moths can be photographed and e-mailed to an expert for identification.)

The interest remains there for me. I still love to discover an Elephant Hawk-moth or Poplar Hawk-moth in the trap. Invariably there is something new to puzzle over in the trap and try to identify, as well as something that will cause that "Wow, what's that?" moment. 2014 saw over 100 different moth species trapped in my garden (excluding pugs and micros which I have to admit I usually ignore). These included some moths which were first records for Peeblesshire – Oak Beauty and Lunar Marbled Brown for example, and also moths that were new to me – the exquisite Green Silver Lines and the impressive Northern Eggar among others. It is great fun and I am sure the stress is worth it too.



Oak Beauty



Lunar Marbled Brown



Green Silver-lines

It is also great fun to visit Grandpa now. The children love to help empty his trap (much to his frustration). They can now confidently identify (and dismiss) Large Yellow Underwings and Dark Arches. I can now sit back and chuckle as Grandpa sets off down the garden in pursuit of a 'rare' Geometridae that has been disturbed by a small hand or as he groans when offered a mush of wings and moth guts. Well, he did start it, after all!

And so, I hope, the seed is sown amongst the next generation. I wonder what mothing in thirty years' time will look like? What is sure – with habitat destruction, pesticides, global warming and who knows what environmental calamities yet to come – surveying our moth population as a key indicator of the health of the whole ecosystem will have an important part to play.

If you've seen it, report it

Below are the people to whom you should send your sightings of moths or butterflies during 2015. If you come across something which you think is unusual or interesting then do get in touch quickly as others will like to hear about it, but you still need to send in records to the various people listed to make sure they get logged. You can also publicise your sightings through the forums on the branch website www.eastscotland-butterflies.org.uk/

or on our Facebook page <http://www.facebook.com/EastScotlandButterflyConservation>

The work of recorders is made a little easier if records are sent in from time to time during the year rather than all together at the end.

The Borders County Moth Recorders

Peeblesshire: Reuben Singleton, 5 Frankscroft, Peebles, Scottish Borders EH45 9DX
reuben@dukehaugh.free-online.co.uk Tel: 01721 723858

Selkirkshire: Malcolm Lindsay, Burn House, Mossilee Road, Galashiels TD1 1NF
malcandles46@talktalk.net Tel: 01896 753425

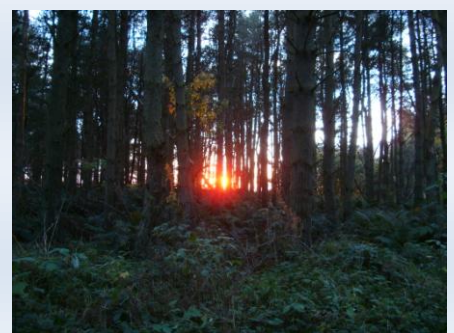
Roxburghshire: Jeff Waddell, 33 Eildon View, Dingleton, Melrose, Roxburghshire TD6 9RH
jeffwaddell11@yahoo.co.uk Tel: 01896 822089

Berwickshire: Barry Prater, 12 Barefoots Crescent, Eyemouth, Berwickshire TD14 5BA
barry@prater.myzen.co.uk Tel: 018907 52037

& the Borders Butterfly Recorder

Iain Cowe, 6 Lammerview, Chirside, Berwickshire TD11 3UW
bordersbutterflies@eastscotland-butterflies.org.uk Tel: 01890 818314 or 07775 747838

There is guidance on submitting your butterfly and moth records on the branch website and also some recording forms which you can use - these help enormously when collating all the records.



The Answer Lies in the Soil

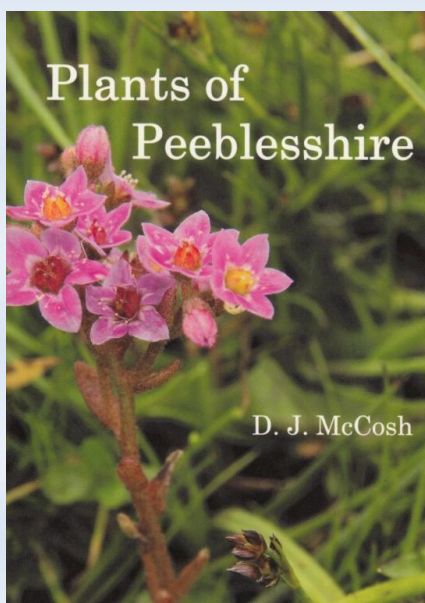
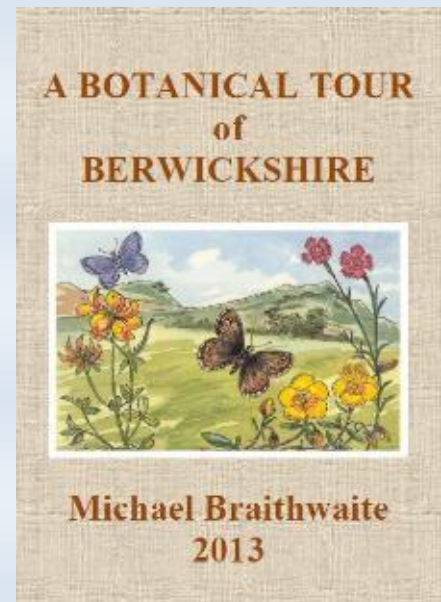
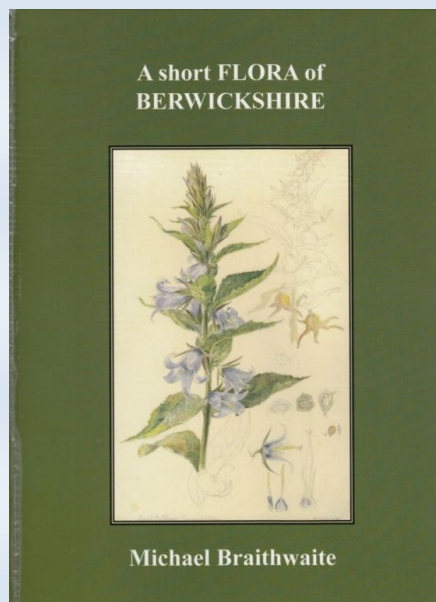
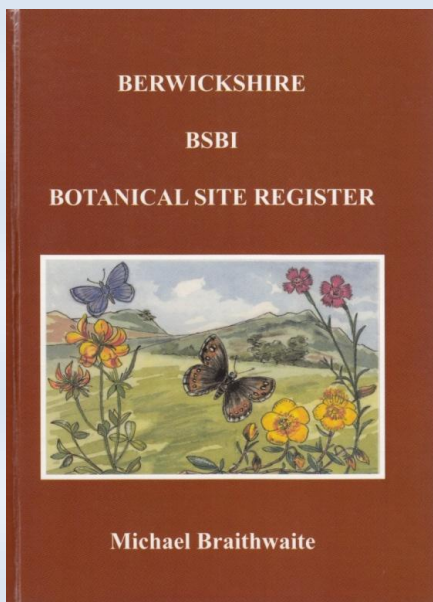
On 24 April 2013 the Food and Agriculture Organization (FAO) of the United Nations agreed that 2015 was to be the International Year of Soils (IYS). The IYS will serve as a platform for raising awareness on the importance of sustainable soil management as the basis for food systems, fuel and fibre production, essential ecosystem functions and better adaptation to climate change for present and future generations. Lepidopterists know that the plants which butterflies and moths rely on are often critically dependent on the types of soil present - so Common Rock-rose on which Northern Brown Argus caterpillars feed is mostly associated with basic soils, while Heather, so important for many of our upland moths, grows on acid soils. Roger Manning's articles stress the importance of particular plants for certain species and we are blessed in the Borders with a wealth of information on our plant life and plenty of knowledgeable botanists.

On-line a good place to start is the Botanical Society of the British Isles (BSBI - <http://www.bsbi.org.uk/>) where there are detailed distribution maps for all plants which can help determine areas which could be suitable for particular butterflies or moths. The local Botanical Recorders are:

VC78 Luke Gaskell l.gaskell@homecall.co.uk

VC79 & VC80 for both - Rod Corner rod@hawthornhill.net and Jeff Waddell jeffwaddell11@yahoo.co.uk

VC81 Michael Braithwaite has recently stepped down from this role but remains as Emeritus Recorder and he is still happy to deal with records or requests for information (within reason) mebraithwaite@btinternet.com



VC78 "Plants of Peeblesshire" available online at

<http://bsbi.org.uk/peeblesshire.html>

VC81 "Botanical Tour" at

<http://bsbi.org.uk/berwickshire.html>

