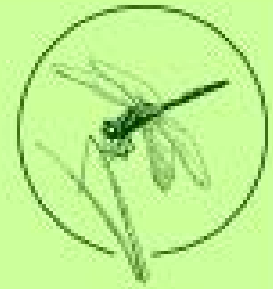


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# *Lakeland Naturalist*



— a journal of Cumbrian Natural History

**Autumn 2013**



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*Lakeland Naturalist* publishes material on all aspects of the natural history of Cumbria. General articles, results of personal research, news items, records and items of relevance to Cumbrian natural history and naturalists are welcomed. Material accepted for publication must not be submitted in a similar form to any other journal or magazine.

Material offered for publication should be in the formats used in this issue. Computer files should be in rich text format or Microsoft Word and e-mailed to the Editor, or submitted on CD/DVD accompanied by a paper copy. **Bold** and *italic* may be applied to text, but no other formatting should be applied. References should be given in full at the end of the article or note. Authority names for species, where given, should be in full. Line illustrations should be in black ink and must be originals. All figures and tables should be submitted as separate files. Good quality photographs are welcomed where these relate to submitted text. Whilst every care will be taken of original artwork, the Editor can not be held responsible for any loss or damage. Authors of papers will be provided with PDF format copies on request. The Editor reserves the right to submit papers to a referee, and to reject items.

Opinions expressed in *Lakeland Naturalist* are not necessarily shared by the Council of the Carlisle Natural History Society or its Editorial Panel.

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### Copy deadlines

**1st March 2014 & 1st October 2014**

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**Cover:**  
Northern Dune Tiger Beetle (*Cicindela hybrida*), Drigg dunes, 5 May 2013. © Stephen Hewitt

## Wildlife Reports

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*The following is a selective extract from the many interesting reports received since the previous issue. All records form part of computerised data traceable to named recorders, held as a CNHS dataset by Cumbria Biodiversity Data Centre at Tullie House Museum. Most non-credited records are my own.*

The weather has played a significant role in a most unusual season. April was cold with a record of 17 days frost and rain a little below average. May continued cold and unsettled, with heavy rainfall causing localised flooding on 17/18. However, from June onwards we experienced a generally warm and pleasant summer with below average rainfall. The impact on wildlife in general was mixed. **Long-tailed Tits**, **Blue Tits** and **Great Tits** laid about two weeks late compared with most years since the 1960s; some **Long-tailed Tits** gave up on first nests but **Linnets** were on eggs by 24 April. The migrants were held up in March and first records of **Chiffchaff** were on 3 April (DH/JR/FM), **Sand Martin** on 11 April (SG) and **Wheatear** 7 April (AA). **Swallows**, **House Martins** and **Willow Warblers** were seen in mid-April as usual. **Cuckoo** (SW, FM), **Blackcap**, **Sedge Warbler** and **Whitethroat** were in by the end of April but **Garden Warblers** were quite late and even later were **Spotted Flycatchers**, though these subsequently produced a number of nest records from PG, TF, FM & CA. **Chiffchaffs** seemed to have a hard time with first broods but did much better with re-lays. A pair of **Reed Warblers** bred at Watchtree NR for the first time. **Barn Owls** were scarce, with small and late broods, whilst some did not attempt to breed. **Great Tit** broods were smaller than average but **Blue Tits** were the usual ten to twelve.

On Cardewmires, Dalston, a **Little Gull** was present on 27 April; a pair of **Black-necked Grebes** were in full breeding plumage there on 5 May; **Green Sandpipers** were noted on 7 July and 8 August and **Mandarin Duck** was seen on 8 and 28 August (with two females on 28 September) – all by TM. Other interesting bird sightings included two dark-plumaged **Marsh Harriers** at Drumburgh Moss on 8 August (DC) – and it seems there have been regular sightings there earlier in the year. Two **Green Sandpipers** were at Watchtree on 9 September (FM). A late broods of **Swallows** fledged at Wetheral on 26 September (JR), and late broods of **House Martin** were variously reported at about the same time. I flushed a **Jack Snipe** on Bowness Common on 29 September. **Pink-footed Geese** (still present in mid-April) were returning in large numbers on 17 and 18 September: 2504 flighted off Wedholme at dawn on 22 September. By 28 September **Redwings** were being reported (JM, DH especially).

Butterflies provided a lot of interest this year and early records were scarce and limited to the few sunny days in May. **Green Hairstreaks** were seen at Geltsdale on 23 May (RH) and Scaleby Moss (DC) on 16 May. **Walls** were especially scarce, as were early sightings of **Small Copper** but good numbers of both species were seen later in the year by several observers, including 180 **Wall** in Sowerby Wood on 23 August (DH).

As the summer warmed, reports increased and several species did very well, notably the **Marsh Fritillary** at re-introduction sites (per SD). Large numbers of **Green-veined White** were seen, possibly boosted by migrants from the continent. A particularly notable sighting was a **White-letter Hairstreak** (plate 1) nectaring at midday at the Heaves Garden Centre near Sizergh (DC). **Small Skippers** were reported from several locations by JM/DC/FM and are still expanding their range. (With reports of **Essex Skipper** near Dumfries, all 'small skippers' now need close inspection.) **Comma** reports include one on 7 April at Fishgarth Wood (DC), with summer generation seen 7 August at Geltsdale (JM) and Cumwhitton on 22 September and 24 October (DC). The latter recorder also reported **Speckled Woods** from three Eden valley sites, and BW noted it on 20 August at Bowness Gravel Pits. Further south in the county it is common, e.g. Cartmel Priory 28 September (AAr). Large counts of **Small Tortoiseshell** included 50 plus near Bowness-on-Solway on 7 August (DI) and c. 60 **Peacock** at a Dalston Nursery on 7 August (DH). **Red Admirals** finally became numerous in September/October, but the only sightings of **Painted Lady** reported were at Dalston by the Caldew 12 August (DH), Irthington, 14 August (KC), Jockey Shield, 22 August (JM) and Calvo Marsh on 22 September (FM).

Dragonflies were scarce in May but became more abundant as the summer progressed. **Banded Demoiselles** were noted on the River Eden at Brockleworth to be about two weeks late emerging (DC). The species was later reported beyond breeding sites at Bowness-on-Solway, 5 July (LS) and Finglandrigg, 6 July (CM). **Broad-bodied Chasers** are increasingly seen south of Kendal, but a male on 29/30 July at RS's garden pond at Broadwath (plate 2) was a rare northern record. Its use of a peanut feeder as a perch is novel! **Keeled Skimmers** appeared at non-established sites in Swindale and Wet Sleddale (SH), and Borrowdale (per IB) in July, perhaps dispersing in the warm weather. DC reports that **White-faced Darters** had a particularly good emergence at the Foulshaw Moss re-introduction site, with the good weather ideal for breeding activity at both ends of the county. Rarely reported insects (per DC) have included the large **Birch Sawfly** (*Cimbex femoratus*) at Argill NR, 13 June and the hoverfly *Parhelophilus versicolor* (plate 4) at Cumwhitton.

An **Otter** at Watchtree predated several **Moorhen**, **Coot** and **Little Grebe** nests in May and June before moving on, but road casualties were reported near Fingland on 19 September (FM) and on the A7 near Longtown on the same day (RD). Early season **Hedgehog** sightings included 14 April, Kirkbride, and 17 May, Etterby (DI). The species was also noted at Stoneyholme Golf Course through July and August (GB). **Red Squirrel** sightings are becoming very scarce, with one at Geltsdale 17 September (GB) and occasional road casualties. Two **Adders** were on Wedholme Flow on 7 June and **Slow-worms** the same day in Dalston Churchyard (both DH). A dead juvenile **Harbour Porpoise** was washed up at Bowness-on-Solway on 8 August (GB).

*Recorders:* AA Anne Abbs, AAr Allen Armsby, CA Colin Auld, IB Ian Brodie, GB Glen Bryson, KC Keith Clark, DC David Clarke, RD Richard Dixon, SD Steve Doyle, TF Teresa Frost, PG Paul Greaves, SH Stephen Hewitt, DH David Hickson, DI Dorothy Iveson, CM Chris Mawby, FM Frank Mawby, TM Trevor Merrington, JM John Miles, JR Jeremy Roberts, RS Rob Shaw, LS Liz Still, SW Steve Westerberg, BW Bob Wright.

Frank Mawby

## Field Meetings

### 16 June 2013: Teesdale flora

Leader Jeremy Roberts

On a perfect June morning, sunny, but not too hot for walking, twelve members of the Society met in Ettersgill car park to hear the programme for the day outlined by our leader, and Society President, Jeremy Roberts.

For much of our exploration of the dale we were to remain close to the River Tees itself, looking first at the lower section of river bank downstream of High Force, moving on after lunch up the dale to the Harwood Beck, and then, if time permitted (it did), we would take a short walk along the track over the thin soils on the Whin Sill and the Sugar Limestone above the Cow Green reservoir. Jeremy Roberts' comprehensive knowledge of the area and its flora was supplemented by the expertise of Phill Brown with whom Jeremy had reconnoitred the area a few days before, and who was able to make sure that those towards the tail of the party missed nothing. As a result we were treated to a demonstration of a wonderful array of very special plants, set within the upper Tees valley, seen at its best. Throughout the day we were accompanied by the sight and sounds of many of the iconic birds of upland valley and moor. Curlew, Oystercatcher, Redshank and Lapwing were calling, we had excellent views of a pair of Redstarts, of Dipper, Spotted Flycatcher and Common Sandpiper, while Swallows and House Martins skimmed over the surface of the water.

However, the day was primarily about the flora, and in particular the range and number of botanical gems that have survived and developed since glaciers retreated at the end of the last Ice Age. We were impressed with the variety of ferns that we encountered, twelve species in all, from the Brittle Bladder-fern (*Cystopteris fragilis*) on the bridge at Holwick, through a range of more familiar *Dryopteris* species, to the diminutive Moonwort (*Botrychium lunaria*) in the short turf at Cow Green. Horsetails too figured: unmistakeable stands of Wood Horsetail (*Equisetum sylvaticum*) were easy to see, the Shady Horsetail (*E. pratense*) less so, but quite frequent. This plant was once recorded in Cumbria in 1844, but is now believed to be extinct in our county. We searched successfully for the easily

overlooked Variegated Horsetail (*E. variegatum*) which we found on a boulder-clay bank alongside the Harwood Beck, adding a number of new localities for this rather inconspicuous plant to those already recorded. The Angiosperms, or 'Flowering Plants' may be remembered for three main reasons: firstly for the splashes of colour provided by stands of Globeflower (*Trollius europaeus*), Wood Geranium (*Geranium sylvaticum*), Mountain Pansy (*Viola lutea*) and common orchid species; secondly, the number and variation of species within some groups such as the sedges and lady's-mantles (*Alchemilla*); and, thirdly, the individual Teesdale 'rarities'.

We encountered *Alchemilla* species throughout the day. Early on, near the Holwick bridge, we examined the smooth leaves of *A. glabra* which 'squeak' when gently pulled between the fingers, contrasting with the superficially similar leaves of *A. xanthochlora*, hairy on the underside and consequently remaining silent when pulled in the same way. Amongst four or five other lady's-mantles that we were shown was *A. acutiloba* which is special to Teesdale and Weardale, displaying hairs on both sides of its acute-lobed leaves.

Sedges (*Carex* spp.) and willows (*Salix* spp.) are notoriously difficult plants for the amateur to identify with certainty. It was therefore a delight to have key distinguishing features of many so ably demonstrated to us. To have all these species in combination with such a range of other rare plants is unique in the U.K. and supports the view that Teesdale has been a refuge for Late-glacial plants through the Post-glacial period to the present day. The highlight of the sedge list was probably the large stand of Water Sedge (*C. aquatilis*) near Wheyside House. First discovered there in 2009 this has been described as the 'finest patch in England'. It was certainly much easier to find and to see than the equally rare Hair Sedge (*C. capillaris*) which we saw growing in the short turf at Cow Green.

Willows (*Salix* spp.) comprise a huge genus with many hybrids, and time did not permit detailed examination of the group. As we picnicked on a shingle bank in the shade alongside the river we felt quite pleased that we had recognised Tea-leaved (*S. phylicifolia*), Grey (*S. cinerea*) and Goat (*S. caprea*) Willows. We sat on boulders amongst Shrubby Cinquefoil (*Potentilla fruticosa*) bushes just coming into flower. This has long been recognised as a 'late-glacial' plant and its survival here depends on the presence of unstable, bare shingle, constantly renewed by the action of the Tees in spate. Concerns raised about the 'control' of the Tees caused by the presence of the Cow Green dam provided an interesting topic over lunch. 'So far so good' seemed to be the current opinion, but clearly continuation of careful monitoring is essential.

To be in upper Teesdale in late May or June, and not to see Spring Gentians (*Gentiana verna*) must be a disappointment to any visiting naturalist. We were a little late in the year, but keen eyes and diligent searching soon located a handful of these

stunning blue star-like flowers in the short, trackside turf above the reservoir. More Teesdale specialities followed in quick succession. We had already remarked on the beautiful Bird's-eye Primrose (*Primula farinosa*) – our leader's favourite flower, and here it was again with Spring Gentian, Teesdale Violet (*Viola rupestris*), Northern Bedstraw (*Galium boreale*) and Mountain Everlasting (*Antennaria dioica*). Right up until the last minute, thrills were provided by the finding of Scottish Asphodel (*Tofieldia pusilla*) and Alpine Meadow-rue (*Thalictrum alpinum*).

The debate over the loss of arctic-alpine plant communities submerged by a reservoir needed to supply the industry of Teesside, the wealth of information gathered prior to the flooding, and the opportunities for post-inundation research, will continue. There is no doubt however that on this occasion, we were indeed privileged to have experienced such a wealth of very special wildlife, on such a perfect day, in what may still be regarded as England's prime botanical destination.

Russell Gomm

#### 14 July 2013: Grey Mare's Tail & Loch Skeen

Leader Richard Clarkson

Fifteen members were undeterred by the prospect of our advertised 'arduous mountain walk' in the Moffat Hills. We duly set off from the car park under the expert leadership of Richard Clarkson, the National Trust for Scotland's Ranger, stopping at several points on the steep ascent beside the famous waterfall to hear his commentary, admire the scenery – and draw breath. The constant moisture and variable amounts of shade beside the Tail Burn supports an interesting mix of upland flora. Purple Saxifrage (*Saxifraga oppositifolia*) and Roseroot (*Sedum rosea*) are true mountain plants, but the many niches and ledges here had a rich assemblage of herbs, including Globeflower (*Trollius europaeus*), Lesser Meadow-rue (*Thalictrum minus*), Wood Crane's-bill (*Geranium sylvaticum*) and lady's-mantles (*Alchemilla*). We had brief views of two Peregrines, of which one was a juvenile, presumably the single fledged there this season.

After reaching more level ground we soon headed off on a gentler climb through heather towards the slopes of White Coomb. En route we found much Cloudberry (*Rubus chamaemorus*), freely fruiting, and eventually became adept at finding the diminutive orchid Lesser Twayblade (*Neottia cordata*), here growing in *Sphagnum*, often completely shaded by the miniature forest of heather.

The area Richard led us to was a 1 ha fenced enclosure on a rocky hillside. This was one of the key sites in the NTS's work to rejuvenate the upland flora by reduction of grazing and re-introduction of rarer/declining species. Exclusion of large grazers – Red Deer, sheep and feral goats – was essential to this process. (Smaller grazers such as Field Voles and Mountain Hares still have access: we saw the latter species – believed a nineteenth century introduction – on two occasions.)

Even before we entered the enclosure, Alpine Bistort (*Persicaria vivipara*) and Northern Bedstraw (*Galium boreale*) were signs of the richness of the vegetation. Once inside, Jeremy Roberts quickly found *Alchemilla glomerulans*, new to the reserve list of recorded species, and indeed apparently new to Dumfriesshire. Just beyond was a good stand of Northern Buckler-fern (*Dryopteris expansa*), a plant of high-altitude boulder screes both here and in the Lake District and North Pennines. There were soon many more exciting sights: Dwarf Cornel (*Cornus suecica*), some now fruiting, was making a strong come-back amongst the rich herb layer, with some extensive patches. Even more surprising was Sheathed Sedge (*Carex vaginata*), often flowering, and locally even dominant. This species was not reported from this part of the Moffat hills in the classic account written by Derek Ratcliffe\* – perhaps a true indication of the suppressive effects of past over-grazing. Perhaps Derek would also have been as delighted as were we at a magnificent stand of Alpine Saw-wort (*Saussurea alpina*), nearing flowering. We found it at several other points too.

The most famous plant of the Moffat hills, the fern *Woodsia ilvensis*, was one of two species being experimentally re-introduced here. The sites chosen for the fern were stable screes with large rock fragments: some plants had survived well, but others had not, and the current heat-wave was no doubt unhelpful. We walked with great care around this fragile colony. New plantings of the willow *Salix lapponum* showed better results, with some healthy-looking growths. Amongst these true botanical treasures were others we would have equally expected in Lakeland, such as Mountain Sorrel (*Oxyria digyna*), Least Willow (*Salix herbacea*), Alpine Meadow-rue (*Thalictrum alpinum*), Mossy Saxifrage (*Saxifraga hypnoides*) and *Alchemilla wichurae*. The absence of some species widespread in Lakeland such as Yellow Mountain Saxifrage (*Saxifraga aizoides*) and Alpine Lady's-mantle (*Alchemilla alpina*) had been noted by Ratcliffe and others. John Parker noted a dwarf willow having some features of *S. arbuscula*: further study was necessary.

Following this concatenation of botanical experiences, some of our party headed back, whilst those remaining headed north and yet further uphill, to explore high-level flushes at about 700 metres. Increasing presence of Stiff Sedge (*Carex bigelowii*) marked the increasing altitude. Some flushes had the tiny Alpine Willowherb (*Epilobium anagallidifolium*), but our real target was the grass Alpine Foxtail (*Alopecurus magellanicus*) – growing in situations redolent of flushes in the high Pennines. Quite a few heads were already showing in the enclosure created to encourage this species, but Richard assured us that the peak flowering was not until August.

We then circled back downhill towards the corrie loch, Loch Skeen, passing with some regret the splendid ravine of Midlaw Linn, with its Raven nests and promise of yet more mountain plants. The hillsides here had some abundance of Alpine



Clubmoss (*Diphasiastrum alpinum*). At Loch Skeen we paused to examine Awlwort (*Subularia aquatica*). Growing in the stony shallows, this tiny aquatic crucifer is confined to mountain lakes. Loch Skeen is one of the sites chosen to rescue the critically endangered Bassenthwaite Lake population of the Vendance (*Coregonus albula*): fortunately this very rare whitefish is flourishing here.

A full day in perfect weather and in a landscape setting hard to better.

David Clarke

\* Ratcliffe, D. A. (1959) The Mountain Plants of the Moffat Hills. *Proceedings of the Botanical Society of Edinburgh*, **37**: 257-271.

### **27 July 2013: Burgh-by-Sands wildlife areas**

**Leader Russell Gomm**

Until recently the Village Green had been a low-lying, largely unused rushy pasture. In 2005 it was purchased, by local subscription and with generous grants and help from local business has been converted into a recreational resource comprising a playing field and 'wildlife area'. The leader provided an illustrated booklet outlining the landscaping and other changes leading up to the Opening in 2010.

A few Society enthusiasts living in Burgh-by-Sands had operated two moth traps overnight and some of the more interesting and colourful of the fifty or so species collected had been retained for members to see. Smoky and Common Wainscots, Drinkers and Large Yellow Underwings had been the most abundant, whilst Peach Blossom, Satellite, Burnished Brass, Lempke's Gold Spot, Plain Golden 'Y' and many more, shone in the bright sunshine before being taken away for release. Moving on through the small 'community orchard' into the 'wildlife area' itself, we were treated to a wide range of colourful and interesting grassland and wetland plants, nearly all of which have grown on from the eight thousand or so 'plugs' planted out on the site by volunteers from the village, mainly in the summer of 2009. Knapweed, Meadow Crane's-bill, Oxeye Daisy, clovers and Yarrow in the drier grassland gave way to Bur-reed, Flowering Rush, Purple Loosestrife, Green Figwort and Forget-me-nots alongside the small beck and around the shallow margins of the pond. Ringlet and Green-veined White butterflies fluttered over the site and as we left the field Large Skippers and a single Small Skipper were seen. The latter has only recently been noticed in the area.

Whilst looking at dragonflies and damselflies (Four-spot Chaser, Black Darter and Azure, Common Emerald and Blue-tailed Damselflies), Jeremy Roberts spotted an interesting-looking small emergent plant in the middle, deeper part of the pond. When a sample was retrieved the following day, it proved to be Needle Spike-rush (*Eleocharis acicularis*), an exciting find. Listed as 'very rare' in Halliday (1997), it has only been seen on a handful of occasions in the county since it was first noted in

the nearby Thurstonfield Lough (less than two miles away) in 1937.

Leaving the Village Green, we next visited a small, privately owned and managed nature reserve just to the south of the old railway line. Recent thinning of the coniferous shelter crop around the margin of the site, and of some of the more central aspens and willows, has let in much-needed light to the pond and allowed us a fascinating display of dragonflies and damselflies. In all, eight species are regularly seen here and a ninth provided much discussion. Although a close view was not possible, there was general agreement that this could only have been a Migrant Hawker.

A long and shaded lane took us alongside the damp rushy fields of Burgh Moor. We made our way to a large field owned and managed by a local farmer who has a particular interest in grassland management in terms of both agriculture and nature conservation. Owing to this year's relatively dry summer, almost all the hay fields that we might have visited had been mown and the crop 'lifted'. This field however was still standing – a small reminder of what Burgh Moor must have supported years ago. In a small clearing in the otherwise rushy field, Devil's-bit Scabious, Marsh Cinquefoil, Cottongrass, and at least five sedge species, were still surviving.

Beyond the field boundary was another large artificial (flight) pond constructed years ago. Disused, it is now largely infilled with *Typha*, although there was still sufficient open water for us to watch Four-spot Chasers hunting over it. The area is surrounded by low scrub, which together with the pond forms a small site of value to migrating and nesting birds. Otter spraints are regularly found at the pond's margin. We left Burgh Moor and headed north through extensive wet rushy meadows and pastures known locally as 'fog fields', where the drier earth banks supported a good show of Harebells.

In the afternoon we moved onto the Marsh, part of the large Upper Solway Flats and Marshes SSSI/SPA (comprising some 39,700 ha). There was much discussion about suitable grazing levels in relation to the disparate demands of varied resident and visiting wildlife. Derek Ratcliffe (2002) gave estimates of 50-100 pairs of Lapwing nesting on Burgh marsh in the 1940s and 1950s – numbers crashed in the 1960s and have never been allowed to recover.

Nevertheless, the walk out to the edge of the Marsh was a delight, with Skylarks singing overhead and the occasional distant Curlew. Bare muddy patches where cattle crowd to cross drainage ditches provided both Toad Rush and Frog Rush. Celery-leaved Buttercup was in flower, and there were scattered low bushes of Spiny Restharrow. Halliday (1997) describes the latter as 'local and largely restricted to the grazing marshes at the head of the Firth'. A sudden disturbance amongst the gulls roosting on Rockcliffe Marsh proved to have been caused by the presence of an Osprey, and further scanning of the salt flats revealed a lone Little Egret.

Our enjoyable day had encompassed sites ranging from the wholly artificial to

ecologically important grazing marshes of international importance, all managed by members of a small community and within walking distance of the village.

### References

Halliday, G. (1997) *A Flora of Cumbria*. Lancaster: University of Cumbria.

Ratcliffe, D.A. (2002) *Lakeland*. London: HarperCollins (New Naturalist).

Russell Gomm

### **2 August 2013: Orton Moss, Moth Trapping Leaders Mike Clementson & Liz Still**

Fifteen members including the leaders attended the meeting. Tristan Reid brought his light to give us three lights and MC also set an actinic light trap. The weather was overcast and breezy but stayed dry. The traps were set in rough grassland and amongst woodland on the Cumbria Wildlife Trust-owned areas on the south side of the site, although the grassland areas are quite small.

Orton Moss SSSI is predominantly secondary woodland on a valley mire peat with a few very small fields on the south side where the land rises out of the peat. It is well known for the Marsh Fritillary colony studied by E.B. Ford and discussed in his *New Naturalist* volume – *Butterflies*. The colony became extinct in the mid-1970s when Tyson's field was improved. The Cumbria Wildlife Trust now owns a significant area of this site, which is still in multi-ownership small stints dating back to the Enclosures of the early 1800s. The site is a SSSI for the peatland element and has a number of notable plants and invertebrates. CWT's aim is to manage the meadows to restore habitat for a reintroduction of the Marsh Fritillary butterfly.

The lights drew a significant number and variety of moths and notably a Red Admiral butterfly to Tristan's lamp. The full list was 76 species of which the notable ones were Blue-bordered Carpet and the tortricid *Zeiraphera isertana*, both of which are fairly widespread but have few Cumbria records.

Antler Moth, Brimstone, Large Yellow Underwing and July High Flyer were the most abundant. Some of the more spectacular moths included The Drinker, the Large and Light Emeralds and Peach Blossom Moth. Also attracted to the lights were other groups such as harvestmen, water-beetles, craneflies and leafhoppers and the striking orange-and-black burying-beetle *Nicrophorus investigator*.

Frank Mawby

### **4 August 2013: River Caldew, Nestlé land**

**Leader David Hickson**

Thirteen members met at the Cummersdale car park by the River Caldew. The river is notably a site for the native White-clawed Crayfish further along the upper reaches, although how long this species can survive the invasive North American Signal Crayfish remains to be seen. Otters are seen regularly along the river.

The walk from Cummersdale to Dalston was enlightening for first-time visitors like myself. I can now see why the area provides so many first records for migratory birds each year. The river meanders through the wide valley with the railway and cycleway forming a natural boundary. The land on the first section of the walk is owned by Stead McAlpine and is over 100 hectares of rough, unimproved grassland that has had no agricultural management for at least 30 years. Considering this is such a long period of time with no management the area has remained grassland with only scattered scrub. The second half of the walk was through fields owned by Nestlé Ltd, which David informed us was used for dumping highly nitrogenous waste milk products until ten years ago. The Society carried out a botanical survey for Nestlé last year and David has been trying to persuade them to carry out work to improve the area including constructing wader scrapes and planting small areas of woodland to improve wildlife interest. To date though all that has been done is a small area of butterfly meadow habitat on another part of their holding.

The day was pleasantly warm and dry but generally cloudy, being particularly good for invertebrates. Nine species of butterfly were recorded including late and worn Ringlets and Meadow Browns, Small Copper and, notably, a Small Skipper on the shingle bank where lunch was taken. Small Tortoiseshell, Peacocks, Green-veined White and Large White were quite abundant but only two Red Admirals were seen. Good numbers of bumblebees and hoverflies were present on every patch of suitable flowers, especially Knapweed. Hoverflies identified by Dorothy Iveson included *Scaeva pyrastris*, *Episyrphus balteatus*, *Volucella pellucens* and *Syritta pipens*.

Notable birds included Kingfisher, Swifts (5), Common Sandpiper (2) and three juvenile Grey Wagtails. A good range of mostly common plants was noted but in the old Mill Pond by the river a splendid Arrowhead with its large white flowers was the North American *Sagittaria latifolia*. By the railway track David pointed out the dead trees killed by herbicide and said this was the modern method 'Railtrack' have adopted to control tree growth.

Frank Mawby

### **23 August 2013: Bat walk at High Stand Plantation**

**Leader Robin Hodgson**

It was a fine summer evening when five members joined Robin Hodgson for a walk through High Stand Plantation with bat detector at the ready. Initially too light for bats, we turned our attention to birds, flowers and insects. In the still evening we heard the Chiffchaff and Willow Warbler, then in the distance a Great Spotted Woodpecker. As we followed a path through an area that had been felled some years previously the scrub was searched for insects which lead us to find the Shaded Broad-bar moth (*Scotopteryx chenopodiata*), and the Small Copper butterfly, and

others. The purple-flowering Ling and the yellow flowers of the Western Gorse brightened up patches of the scrub along the way. A young oak had both spangle and oak-apple galls. Many young Toads were seen making their way across the path.

At 8.25pm we saw our first bat and using the bat detector Robin was able to tell us it was a Soprano Pipistrelle (*Pipistrellus pygmaeus*), having an echolocation call at about 55 kHz. A strange rasping noise coming from the detector was the bat catching and eating an insect. We had reached some ponds at this stage. Three Mallard flew in to stay the night at the ponds but decided against it when they saw the group of us standing near by. One Soprano bat, and then two, kept flying around the pond area. A Tawny Owl was heard calling in the distance. By this time we were getting attacked by various biting insects including mosquitoes and decided we could stand still no longer. Heading back by a different route through the trees and at the later time of 9.10pm the bat detector picked up an irregular set of rapid clicks. This was the sound of a *Myotis* bat which Robin said was most likely Natterer's bat (*M. nattereri*), foraging amongst the trees in this mixed woodland. Further along and a characteristic 'chip chop' from the bat detector was recognized as coming from a Noctule bat (*Nyctalus noctula*).

Despite the good evening weather, few bats were to be seen, possibly because they did not have to travel far from their roosts to find food as there were so many insects on the wing. By now it was very dark in the woods and we decided to call it a day and head back to the cars.

Marie Saag

## 24 August 2013: Dubmill Scar

Leader: Steve Garner

Dubmill Scar is stretch of stones and erratics, deposited in Late-glacial times, and occurring in the inter-tidal zone between Allonby and Mawbray on the Cumbrian coast. The stones and boulders have been colonised by Honeycomb Worms (*Sabellaria alveolata*) which build tube-like homes of fine sand in contiguous groups across the rocks forming so called '*Sabellaria* reefs'. It is at this site that fifteen CHNS members met early in the morning with our leader Steve Garner who knows the area very well. Lucy Merry was on hand to help too – especially with seaweeds.

It was a particularly low tide, so for a few hours we had easy access to the reef. Steve told us that the size of the reef is not static and after harsh winters or storms parts of reef can be destroyed but it gradually rebuilds and recovers. This year the reef was more extensive than usual. '*Sabellaria alveolata* reefs' are a UK BAP (Biodiversity Action Plan) Priority Habitat, but unfortunately the major part of this reef is not currently protected as the SAC starts a short distance away and the latest proposed list of Marine Conservation Zones omits this site.

As we headed out across the wet sand the first fauna to be found growing on the

stones were Mussels (*Mytilus edulis*). Then, on the rocks in the mid inter-tidal area, we came across growths of yellowy-green Breadcrumb Sponge (*Halichondria panicea*), the green algae Double Ribbon Weed (*Ulva linza*) and Gut Weed (*Ulva intestinalis*), and occasional groups of the *Sabellaria* worm tubes. Soon, as we reached the area only emerging at extreme low tides, all the exposed rock seemed to be covered by these honeycomb-like colonies, extending seaward to the low-water mark – and for some way beyond as the reef continued to show as projections out of the water surface.

We did some hunting in the pools between the reef finding two types of anemone adhering to the rocks, Beadlet Anemone (*Actinia equina*) and Dahlia Anemone (*Urticina felina*). Crustaceans included Common Prawn (*Palaemon serratus*) and the Brown Shrimp (*Crangon crangon*) as well as at least three types of crab: Hermit (*Pagurus bernhardus*), Shore (*Carcinus maenas*) and Edible (*Cancer pagurus*), including a female crab that had recently moulted and still had a soft carapace. A good selection of different seaweeds was present including the red algae: Sea Beech (*Delessaria sanguinea*), Irish Moss (*Chondrus crispus*), Dulse (*Palmaria palmata*), and Purple Claw Weed (*Cystoclonium purpureum*). Brown seaweeds included the Oar Weed (*Laminaria digitata*), Sugar Kelp (*Saccharina latissima*), the Channel Wrack (*Pelvetia canaliculata*) and Serrated Wrack (*Fucus serratus*). Colonies of the hydroid Sea Fir (*Dynamena pumila*) were found growing on some Serrated Wrack. In one pool we saw a small group of the Oaten Pipe hydroid (*Tubularia indivisa*) which was particularly attractive being a pinkish colour and having stalks ending in waving tentacles which catch the plankton on which they feed. On the bare patches of sand were a few scattered individuals of the Sand Mason Worm (*Lanice conchilega*) – recognised as each has a straight tube of sand grains cemented by mucus that projects several centimetres out of the sediment and ends in a tuft of tentacles. A King Ragworm (*Nereis virens*) was caught for examination, while signs of Lugworm (*Arenicola marina*) were seen with the characteristic dip in the sand and sand coils a few centimetres away.

Gastropods found included Common Limpets (*Patella vulgata*), Common Whelk (*Buccinum undatum*), Dog Whelk (*Nucella lapillus*), as well as Edible and Rough Periwinkles (*Littorina littorea* and *L. saxatilis*). We also saw lemon-shaped Dog Whelk eggs attached to some rocks and the papery empty egg cases of the Common Whelk. A Lion's Mane jellyfish (*Cyanea capillata*) was discovered in one of the pools. It was orange tinged with a mass of tentacles below the bell – it was alive but did not look in the best of health.

A few species of fish were seen including young small specimens of the flat fish: Dab (*Limanda limanda*), Plaice (*Pleuronectes platessa*) and Flounder (*Pleuronectes flesus*). The Long-spined Sea Scorpion (*Taurulus bubalis*) was the most spectacular of the fish found with its large head and tapering body. It had two long spines on

each of its gill covers and a skin that was a blotched pattern enabling it to mimic the colour of its environment as camouflage. A very active Butterfish or Rock Gunnel (*Pholis gunnellus*) was also captured in a net for further inspection. It had an eel-like body with spots on the dorsal side. Two other species of fish were identified: a young Cod (*Gadus morhua*) and a Lesser Sand Eel (*Ammodytes tobianus*).

While out on the reef a few of us occasionally looked up and further afield to spot various birds including a Sparrowhawk, Swallows, Oystercatchers, Herring Gulls, Curlew and Greenshank. All too soon the tide started to come in and we headed back towards the shore.

The Dubmill Scar *Sabellaria* reef is of considerable national importance, being near the northern limit for the species. The scar itself provides one of the few places in the Solway where the development of this plant and animal community can occur as there are very few suitable areas of exposed inter-tidal rock. Hopefully we will see the area given protected status before too long.

Marie Saag

## Notes and records

### The hoverfly *Rhingia rostrata* (L.) at Latterbarrow, new to Cumbria

Three of us – myself, husband John and Mo Richards – were visiting Latterbarrow CWT Reserve (SD 440827) on 25 May 2013 with the aim of finding insects and flowers to photograph. Though it was mainly sunny there was a cold wind and we saw very little in the way of insects so, around lunchtime, we decided to move on to Meathop Moss. Our cars were parked alongside the verge just below the entrance to the reserve and, because it was sheltered from the wind, we saw more insects on the flowers there than we had seen in the reserve itself. In the few minutes that it took for John and Mo to pack things away in the cars I took some photos of a couple of hoverflies that were on dandelions in the verge: one was *Helophilus pendulus*, the other a *Rhingia* species, which I assumed to be *R. campestris*. Not wanting to hold things up I only took a few quick shots and thought no more about them until I'd transferred the day's photos to the computer and started looking through them. When I came to the *Rhingia* images I realised the insect looked quite different from *R. campestris*, having yellow legs and no dark edge to the abdomen (plate 3). In fact, it looked just like photos of *Rhingia rostrata* but I doubted this species had ever been found so far north in the UK.

I sent an image to Steve Hewitt, and he sent it on to Roger Morris (co-ordinator for the National Hoverfly Recording Scheme), who confirmed that it was indeed *R. rostrata*. I was thrilled to receive an email from Steve telling me that it is a new record for Cumbria. *R. rostrata* was previously considered a rare southern species in Britain, but

has apparently been increasing in frequency in recent years. The latest hoverfly atlas (Ball *et al.*, 2011) shows one or two records for the species as far north as Cheshire, so it has made quite a leap to reach south Cumbria. So the best find of a day spent in nature reserves came from passing a few idle moments snapping away at a hoverfly that happened to be next to our car!

## Reference

Ball, S.G., Morris, R.K.A., Rotheray, G.E. & Watt, K.R. (2011) *Atlas of the Hoverflies of Great Britain (Diptera, Syrphidae)*. Wallingford: Biological Records Centre.

*Linda Reinecke, Scawdell, Grange-in-Borrowdale, Keswick, CA12 5UQ*

## Three additions to the list of Cumbrian hoverflies

On 12 June 2012, I swept a small hoverfly from the marshy grassland at the edge of the Marsh Fritillary field at Finglandrigg National Nature Reserve (NY272568). The striped thorax initially suggested one of the *Helophilus* species but it was rather small and dark for that genus and closer examination showed that it had the orange antennae indicative of *Parhelophilus* or *Anasimyia*. Later consultation of the key in Stubbs & Falk (2002) confirmed it as *Parhelophilus consimilis* (Malm), a wetland species associated with areas of transition between fen and bog. *P. consimilis* is thinly distributed from the south coast of England to southern Scotland but has not previously been recorded in Cumbria (Ball *et al.*, 2011). It is classified as RDB2: Vulnerable in Falk (1991).

On 20 April 2013 I collected a hoverfly puparium of the genus *Brachyopa* from sappy decay beneath the bark of a fallen Aspen on the Cumbria Wildlife Trust Reserve at Orton Moss (NY339543). I kept the puparium in a jar with a small piece of bark and five days later the adult hoverfly emerged and could be keyed out as *Brachyopa pilosa* Collin. In common with other species in the genus, *B. pilosa* larvae feed on microbes in sap-runs on trees. This Nationally Scarce species appears to have a disjunct distribution in Britain with the species being associated with sap-runs on oak and beech in southern England north to Staffordshire, with a separate northern population centred on the Moray Firth being associated with sappy decay on Aspen (Ball *et al.* – *op. cit.*). This is the first record of the species in Cumbria and sits roughly equidistant between the two ranges as presently understood.

On 25 August I collected two specimens of a small dark hoverfly in the genus *Eumerus* from the sand dunes at Haverigg Haws (NY137783). These were later identified using Stubbs & Falk (*op. cit.*) as *Eumerus sabulorum* (Fallen). Whilst the larvae of *Eumerus* species generally develop by boring into bulbs, the larva of *E. sabulorum* has remained a mystery. However, larvae of this species have been



reported boring in the leaves of Sheep's-bit (*Jasione montana*) on the continent and this plant was plentiful in the immediate vicinity at Haverigg. *E. sabulonum* is a coastal species in Britain occurring in southwest England and Wales. There are also a couple of rather vague records from southwest Scotland. This is the first record of this Nationally Scarce species in Cumbria.

Together with the discovery of *Rhingia rostrata* in the county reported elsewhere in this issue (p. 49), these records bring the total number of hoverfly species recognised in Cumbria to 204 – 73% of the British fauna.

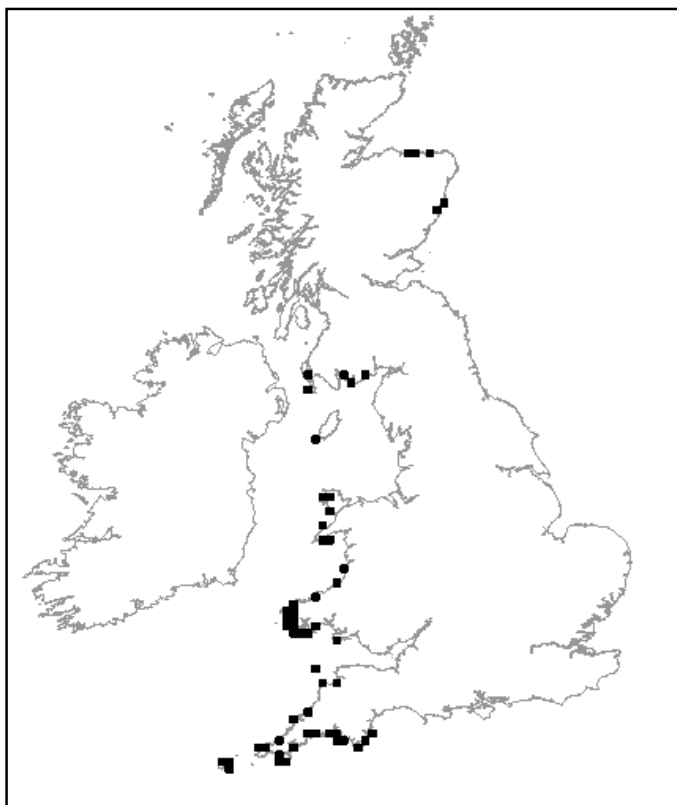
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- Ball, S.G., Morris, R.K.A., Rotheray, G.E. & Watt, K.R. (2011) *Atlas of the Hoverflies of Great Britain (Diptera, Syrphidae)*. Wallingford: Biological Records Centre.
- Falk, S.J. (1991) A review of the scarce and threatened flies of Great Britain (Part 1). *Research and survey in nature conservation, No. 39*. Peterborough: JNCC.
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Stephen Hewitt, Tullie House Museum, Carlisle

## Notes on the 2013 rediscovery of Thrift Clearwing moth (*Synansphecchia muscaeformis* (Esper)) at St Bees Head, Cumbria

In Britain, the macrolepidoptera family *Sesiidae* is represented by sixteen species, fourteen resident and two of unknown status (Waring & Townsend, 2009). Eight of these have been recorded in Cumbria (Virtual Fauna of Lakeland website, accessed September 2013). Commonly known as the clearwings, these small, attractive wasp-mimicking day-flying moths are seldom encountered in the absence of a targeted effort to find evidence of their larval or pupal stages, or by use of a specific pheromone lure (natural or synthetic) to attract adult males at breeding sites (Lastuvka & Lastuvka, 2001). With a forewing length of 6–8mm, the Nationally Scarce Thrift Clearwing (*Synansphecchia muscaeformis*) is the smallest British member of the *Sesiidae* family. As figure 1, overleaf, shows, it is restricted to rocky coastlines along the western coasts of Britain, including the southern coasts of Cornwall, Devon, Wales and southern and northeastern coasts Scotland. Thrift (*Armeria maritima*) is its sole larval food-plant. Probably owing to the paucity of rocky coastal habitat in Cumbria, *S. muscaeformis* has been recorded from just two sites: Fleswick Bay, St Bees Head, and Grange-over-Sands. There is only one referenced record before 2013: '2 specimens taken at St Bees, in May 1919, H.D.F.[ord]' (Routledge, 1933).



**Figure 1:** The British distribution of *S. muscaeformis* post-1999. Courtesy of the National Moth Recording Scheme.

On 13th July 2013, Lucy Merry and I followed in the footsteps of Ford, enjoying the stunning coastline walk to reach the Thrift-covered rocks of Fleswick Bay but unlike Ford, Lucy and I were armed, to our great advantage, with a chemically engineered pheromone to turn the hunted into the hunter. Whilst we could sit back and wait for the moth to come to us, I imagine Ford might have precariously hung over the cliffs, vigorously searching for larvae in the cushions of Thrift foliage. Stationing the lure (a marble sized impregnated rubber bung hung in a netted bag) at sward height level at the top of the sunken lane leading to the beach, we hoped the gentle easterly breeze would spread the pheromone over a large portion of potentially suitable host plants. After an initial dishearteningly unsuccessful 30 minutes we repositioned the lure closer to the shingle of the beach, more central amongst the Thrift patches. Just two minutes later there was jubilation as a single male arrived, which turned out to be the only individual to attend the lure during the visit (plate 5). The most probable conclusion from this fortunate encounter is that with little change to the rocky coastal habitat over the past 100 years at Fleswick Bay, the moth is likely to have been present but unrecorded there since H.D. Ford discovered it 94 years ago. The nearest currently known sites for *S. muscaeformis* are more than 40 km away over sea and more than 100 km over land (see figure 1, above). The only evidence for the presence of *S. muscaeformis* at the other historical Cumbrian site, Grange-over-Sands, rests on three non-dated specimens held at Bolton Museum. Its status at this imprecise location is currently unknown.

## References

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- Routledge, G.B. (1933) The Lepidoptera of Cumberland, Additional species and further records. *Transactions of the Carlisle Natural History Society*, V: p.126.
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- Website: 'Virtual Fauna of Lakeland': [www.lakelandwildlife.co.uk](http://www.lakelandwildlife.co.uk)

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## Hybrid Canada Goose × Greylag Goose at Derwent Water, Cumbria

Whilst checking the birds by the jetties at Derwent Water on 5 March 2013, I noted an odd-looking goose. Its plumage was very dull and showed clear characteristics of both Greater Canada Goose (*Branta canadensis*) and Greylag Goose (*Anser anser*), and was fairly obviously a hybrid in its first year of life (see plate 6). Hybrid geese, and particularly hybrids in which one partner is a Canada Goose, are not particularly unusual (though few get reported), but what made this observation worth putting on record was that the young bird was accompanied by both its parents, a male Canada Goose and a female Greylag Goose (the birds were sexed by their behaviour – male aggressive to other geese present, and dominant to Greylag Goose).

Description of hybrid: *Plumage*: top of head, nape and neck dull, dark brownish-black; throat patch dull white grading indistinctly with dark feathers of neck; breast dull white; belly, under and upper tail coverts brighter white; back and wings brown with feathers lightly edged buffish giving the barring typical of many goose species. *Soft parts*: bill dull light pinkish-grey, light grey at tip; legs dull greyish, iris black.

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## The Northern Dune Tiger Beetle on Drigg Dunes, Ravenglass

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The Northern Dune Tiger Beetle (see cover illustration) is a Nationally Vulnerable (Red Data Book 2) insect and a Priority Species of the UK Biodiversity Action Plan. It is restricted to coastal sand dunes in northwest England where it is now believed to occur in just two areas: the Sefton Coast of Merseyside and Drigg Dunes in Cumbria. Historically, the species is reported from additional sites at Wallasey and Carnforth in Lancashire, and Walney Island and Eskmeals in Cumbria. Recent publications have focused on the population on the Sefton Coast and have stated that as the Drigg population is declining, the Sefton Coast may soon become the only population for *Cicindela hybrida* in Britain (Judd, 2010; Smith, 2011). This alarming assessment of the state of the Northern Dune Tiger Beetle population on Drigg Dunes is at odds with our personal experience of the beetle here over the last 20 years.

### Ecology and life-cycle

Judd (2003) presented a thorough and detailed review of the autecology of the species. Northern Dune Tiger Beetles are specialists of bare and sparsely vegetated sand dunes, where the adults are active predators, using their good visual acuity to locate crawling and flying prey and hunting it down by running or flying in short bursts. This feeding behaviour is energy-demanding and requires a high metabolic rate to enable the bursts of activity. The optimal body temperature of 36°C is achieved by basking on warm sand. As a result the habitat requirements of *C. hybrida* in Britain are tightly proscribed with substrate, vegetation cover, aspect and angle of slope all being important factors. Bare slopes of loose sand provide the necessary conditions for adults to hunt and bask, and to excavate both overnight shelters and winter hibernacula. Whilst overnight burrows in summer may be just beneath the surface, hibernation takes place over 30 cm down in the sand. In common with other tiger beetles, *C. hybrida* has predatory larvae that excavate tunnels in open substrates, where they wait to ambush invertebrate prey crawling past the entrance. The walls of their tunnels are cemented with saliva to prevent collapse and the larva is morphologically adapted to grip the walls of the tunnel, with its flattened head capping the entrance. Larval tunnels may be up to 20 cm deep in summer with the larva burrowing to depths of over 40 cm to hibernate.

The beetle normally has a two year life-cycle, with peak numbers of adults occurring in May and August, representing largely separate, co-existing, populations. One population over-winters in the adult stage, whilst the other hibernates as larvae. This allows two generations to exist together, reducing competition, and may also lower

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the risk of the species becoming extinct at a site because of one disastrous season. Over-wintering adults emerge in early spring and lay eggs in May. The resulting larvae develop over the summer and most hibernate from September as second instar larvae although some go through to the third instar before hibernating. The following spring some 30% of second instar larvae develop into the final instar and pupate in June to emerge as adults the same year in August and September. Other larvae of this generation close their tunnels in May and aestivate, during which time they moult into the third and final instar. These larvae are active again in August but then enter a second winter as a larva. Most larvae that emerge in spring as third instars pupate in late May and emerge as new adults in August, which then overwinter to mate and lay eggs the following spring. Those larvae taking one or three years to develop effectively switch populations and provide a means of genetic exchange.

### **History of *C. hybrida* in Cumbria**

The basis for the perceived decline of the population at Drigg Dunes arises from a survey commissioned by English Nature (Copestake, 1999) which reported just 68 adults of the beetle in small and isolated areas of the dune system and concluded that the population was under threat. Copestake considered the beetle to be restricted to a small area of open dune slope on the east side of the peninsula facing across the estuary to Ravenglass (marked X on the map). He also identified a short stretch of fore-dune for about 200m south of Barn Scar as supporting low numbers (Y) and reported that John Read was familiar with the insect along the fore-dunes of the southern edge of the peninsula (Z). Our experience of *C. hybrida* on Driggs Dunes does not lead us to such a pessimistic view, with the beetle being encountered more widely over the site as incidental observations during regular visits over the last 20 years. In particular we are aware of the beetle occurring extensively along the west-facing fore-dunes as well as in discrete patches of bare sand in ‘blow-outs’ within the back-dunes.

No mention of Northern Dune Tiger Beetle is made in F.H. Day’s published list of *The Coleoptera of Cumberland* (1909). However, Day added the species to the county list that very year and annotated his personal copy of his published list to that effect – ‘*hybrida* L. Seascale, 1909. (F.H.D.)’. The voucher specimen of that record is in his collection at Tullie House Museum and provides the month of the find as June. ‘Seascale’ can here be assumed to refer to Drigg Dunes just to the south of the village. Confirmation of this is provided in the first published appendix to *The Coleoptera of Cumberland* (Day, 1923) where he includes *C. hybrida* in a list of species additional to the previously published list with the statement ‘*Common on the sandhills at Drigg.*’ Thereafter, records collated at the Cumbria Biodiversity Data Centre (CBDC) at Tullie House Museum show that the beetle has been reported sporadically from Drigg Dunes by visiting entomologists throughout the 20th century

to present. David Bilton (Key & Parsons, 1989) reported the species to be abundant on Drigg Dunes in the early 1980s. John Read of Whitehaven has a particularly long acquaintance with the species there over the last 40 years or so and has frequently encountered the beetle at various locations on the dunes. From 1999 to 2011 JT acted as a voluntary ranger for the Lake District National Park at Drigg Dunes and produced an account of the beetles of the site (Thomas, 2011) in which he observed that adult *C. hybrida* were frequently seen on sunny days between May and September over that period. On 8 July 2004 JT walked the length of the seaward-facing dunes from Barn Scar to Drigg Point and estimated an average of one adult *C. hybrida* every metre of the way – the distance of about 4km, giving an extrapolation of some 4,000 beetles.

According to the CBDC data base, the earliest date in the season at which adult *C. hybrida* have been seen at Drigg is 17 April, by SH in 1994; and the latest is 30 September, in 2012 by SH. On the latter date even in late afternoon and despite a cold easterly wind, the west-facing fore-dunes were sheltered and warm enough for 61 adult beetles to be counted along a 1km stretch south from Barn Scar.

Elsewhere in Cumbria, Luff (1998) provides a national distribution map of *C. hybrida* indicating historical records from SD17, 16, 26 and 47. The NBN Gateway website ([www.searchnbn.net](http://www.searchnbn.net)) shows a record provided by the Ground Beetle Recording Scheme for ‘Eskmeals Dunes’ in 1960. David Atty (1995) reports *C. hybrida* and other rare beetles from sites on the Cumbrian coast. In this case his *C. hybrida* record refers to a probable tiger beetle he saw in flight at Eskmeals Dunes on 13 June 1992 (pers. comm.). Searches by David Copestake in 1999 (Copestake, 1999) and SH in 2012 failed to find any evidence of the species surviving there, and very little suitable habitat. The NBN Gateway website has a record of *C. hybrida* on Walney Island in 1872, again provided by the national Ground Beetle Recording Scheme. Robert Angus (1964) recorded *C. hybrida* as quite common on Drigg Sands but not found on Sandscale Haws or the dunes of north and south Walney from 1960–63. It seems surprising that there have never been any records of the tiger beetle from the major dune systems at Sandscale and Haverigg on either side of the Duddon Estuary, which appear eminently suitable for the insect. Sandscale Haws has been very well recorded by Peter Burton as warden of this National Trust property over many years and such a distinctive insect as *C. hybrida* could not have avoided detection there. Haverigg Haws has been visited in 2012 and 2013 in good conditions specifically to search for this beetle – without positive result. The dune systems on the Solway south of Silloth are probably too small and of the wrong aspect to be suitable for *C. hybrida* and unsurprisingly there is no indication that the species has ever occurred there.

### **Distribution of *C. hybrida* on Drigg dunes**

In 2013 we determined to conduct an extensive survey of the dune system specifically to record the presence of *C. hybrida*. The crescent-shaped entrances to the adult burrows are fairly distinctive and can be numerous on dune slopes (see inset plate 8). However, as a beetle will excavate a new burrow as required and the burrows can last an indefinite period depending on conditions, the number of burrows could not be reliably used to assess population size. The burrows of *C. hybrida* larvae are difficult to differentiate from those of other beetles, wasps and spiders. Counting adults was therefore chosen as the simplest survey method. The fore-dunes fringing the peninsula were walked on three separate dates over the adult season and recorded using GPS. Where adults were in low numbers, the location of each adult was recorded on GPS but where adults occurred in numbers the total present between two GPS way-marked points was counted and recorded. The results of this survey are presented on the map (figure 1, page 59).

On 5 May the fore-dunes along the eastern and southern edge of the peninsula were surveyed (from X to Z on map). In cool conditions early in the day no adults were seen at the known east-facing site; three adults were seen at scattered locations on the southern dune-front. Later in the day 18 adults were spread along the 2km section of western fore-dunes south of Barn Scar.

On 1 June, on an unforgettably lovely day, adult beetles were counted along the south-facing dunes and around Drigg Point onto the seaward-facing dunes. In warm sunny conditions 309 adult beetles were counted along the fore-dunes and a single adult was seen on bare sand of a 'blow-out' in the back-dunes at the southeast corner of the peninsula (A–B and C–D on map).

On 13 August a 3km length of the west-facing fore-dunes was walked south from Barn Scar. Starting at 1030 hrs in cool conditions, no adults were seen until 1058 hrs after which time individuals began to be noticed emerging from their overnight tunnels and thereafter the number of observed adults rapidly increased. Consequently no adults were recorded in the first 0.5 km stretch on this occasion, although they have been noted in that length of dunes previously and very probably emerged there shortly after we had passed. Over the remaining 2.5 km, we counted a total of 1,179 adult *C. hybrida* (E–F on map). A further 60 adults were counted on areas of bare sand in ten or so scattered 'blow-outs' in the back-dunes (plotted as scaled circles on map). Most of the 'blow-outs' apparently supported very small colonies of the beetle with just one or two adults observed. Just two 'blow-outs' had counts of 10 and 27 adults respectively.

These data demonstrate that the whole length of the fore-dunes above the beach from Barn Scar south to Drigg Point and then running north-east along the southern edge of the peninsula are utilised by large numbers of *C. hybrida*. A 'shelf' of level or

gently sloping, thinly vegetated and bare sand runs for much of the length of the fore-dunes and seems to be especially favoured by the adults for basking and hunting (plate 8). The eastern face of the peninsula being more sheltered from the prevailing wind has less exposed sand and is of more limited interest to the beetle. However there are two areas of 'blow-outs' which support small colonies. Away from the coastal fringe, the back-dunes are generally too vegetated to support the beetle, although there is one good 'blow-out' by the old nature reserve fence across the peninsula that has a healthy colony where 27 adults were counted.

### **Conservation**

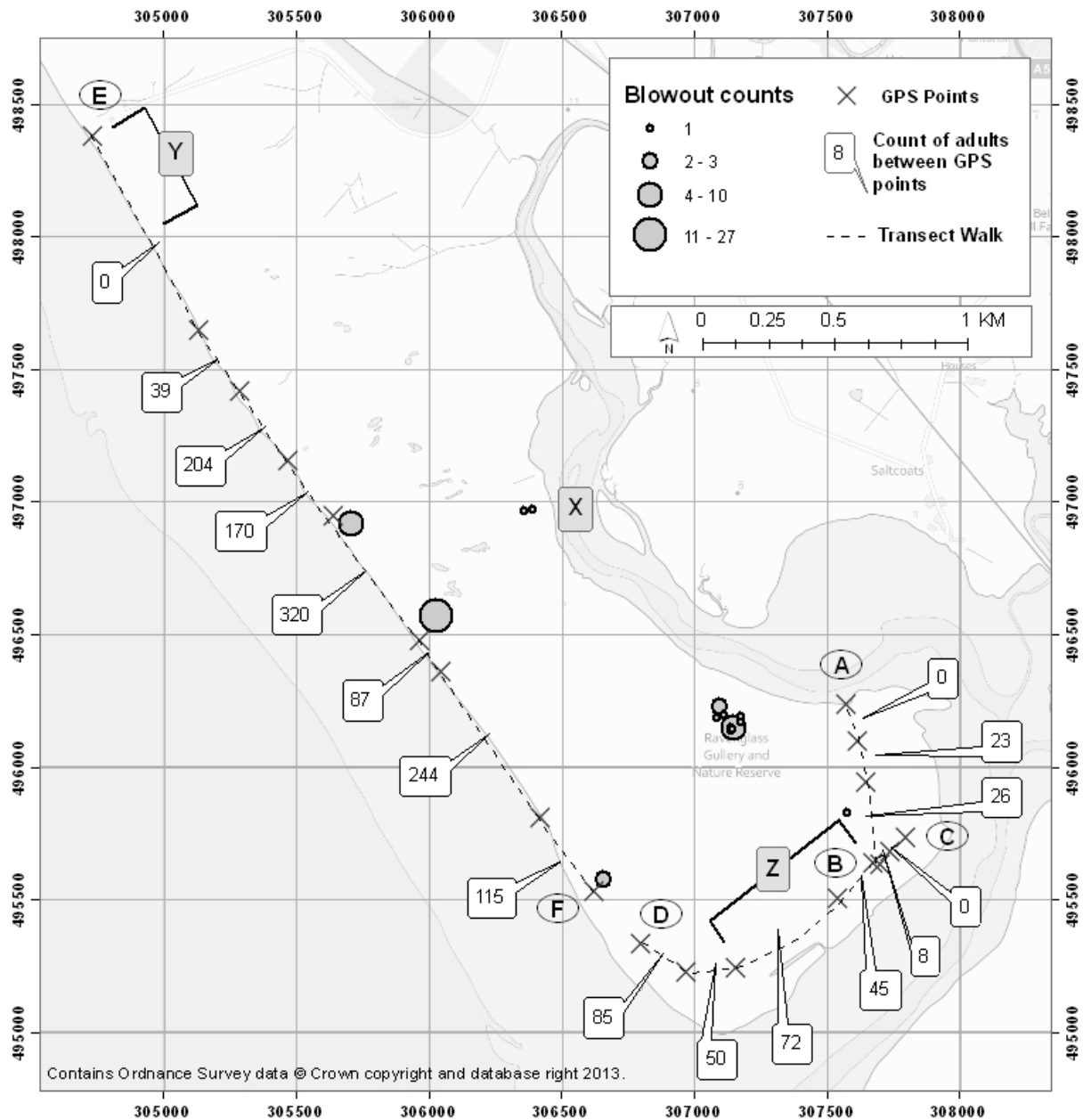
The vegetation in the back-dunes at Drigg may have become more dense and extensive in the late 20th century. This may be the result of myxomatosis reducing rabbit numbers there and lowered rabbit numbers may also be a factor in the demise of the famous gull and tern colony that existed there for centuries before 1985 (Simpson, 2001). Considered in this light F.H. Day's report of the beetle being '*Common on the sandhills at Drigg*' could be construed as indicating the beetle was then more widespread over the whole dune system than is the case today. Certainly, photographs of Drigg and Eskmeals dunes taken in the 1970s show more extensive areas of bare sand than is the case at present. The possible benefits of more extensive habitat availability may however have been out-weighed by the predation pressure of tens of thousands of Black-headed Gulls – the diet of the gulls nesting at Drigg was predominantly worms and beetles according to research by Tinbergen and others (Simpson, 2001). More erosion of the back-dunes to develop areas of bare sand would benefit the beetle. The use of cattle to extensively graze the dunes has been introduced by Natural England through Higher Level Stewardship payments and this should help increase diversity and openness of the sward.

Human disturbance is considered a potential problem on some areas of the Sefton Coast where trampling of sand containing larval and adult burrows could be damaging. Visitor numbers to Drigg Dunes are relatively low and there is no evidence of any significant damage to the beetle's habitat from this source.

### **Conclusion**

Copestake (1999) recorded 68 adult *C. hybrida* in limited areas during five visits to Drigg Dunes in 1999, giving rise to concern for the state of the populations there. Smith (2011) reports a count of 280 adult *C. hybrida* recorded on the Sefton Coast over 31 visits from April to October 2010, in what he considered an exceptionally good year for the beetle at this, its reputed UK stronghold. Over the course of three visits to Drigg Dunes during 2013 we counted 1,570 adult *C. hybrida*. In isolation this high total for Drigg Dunes could be considered extraordinary, perhaps a result of





**Figure 1.** Distribution of *Cicindela hybrida* at Drigg Dunes in 2013. Map produced under licence by Cumbria Biodiversity Data Centre.

a particularly good season. However these data are supported by anecdotal reports from previous years (see above) and it is apparent that there is a healthy and sustained population of the beetle at Drigg Dunes.

Surface temperature is critical to the activity of adult *C. hybrida*. Our experience supports Judd's (2003) findings that adult Northern Dune Tiger Beetles are not active on cool days. Surveys conducted in sub-optimal conditions – early or late in the day or in dull or cool weather – will significantly under-estimate the population size.

It is clear that rumours of the demise of the Northern Dune Tiger Beetle at Drigg

Dunes are unfounded. In fact this population is in good health and indeed may be the largest in the UK.

### Acknowledgements

Our thanks to John Read and David Atty for sharing their experience of *C. hybrida* in Cumbria, to El-Moustafa Eweda of Cumbria Biodiversity Data Centre for producing the map of our results and to Steve Judd of World Museum, Liverpool and Teresa Frost of CBDC for helpful comments on a draft of this article.

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## The status of the scarce lady's-mantles *Alchemilla monticola* Opiz and *A. glomerulans* Buser along the B6277 (Alston to Ashgill) road

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With the deadline approaching for publication of a rare plant register for Cumbria, I tackled a task I had had in mind for thirty years: attempting to re-find in Cumbria the lady's-mantle *Alchemilla monticola* ('Velvet Lady's-mantle'\*), last recorded in 1952 by Dr Margaret Bradshaw at Ashgill, on the B6277 above Alston (Halliday 1997).

(\* Some vernacular names (in quote-marks '') have been proposed by Dr Margaret Bradshaw for lady's-mantles, but at this time not fully adopted.)

Over the years, a number of people – including myself on a few occasions – had looked unsuccessfully along the verges for this plant, and I felt that the only recourse would be to walk the whole stretch and check any and all patches of *Alchemilla*.

In the event the task took three days in June and July 2013. The length of road sampled was 8.5 kilometres. With both verges being walked, the total length of verge searched was therefore 17 kilometres. (The side-roads were also walked for a variable distance, although no scarce species were detected.) The highest patches of *Alchemilla* were beyond High Ashgill Plantation (NY763392, 480 metres a.s.l.), and, working down-valley, patches became sparse before the outskirts of Alston were reached (NY722457, 350 metres a.s.l.).

### Results

Lady's-mantles made conspicuous patches, sometimes continuous for many metres, along the eastern verge. This verge, always the uphill side of the road, had by far the majority of the *Alchemilla* colonies (see figure 1, page 64). It is not obvious why this should be in all cases, but on most stretches the eastern verge consists of a wide bank above the road above a drainage ditch, with a wall above and rough pasture beyond.

The western verge by contrast is generally a steep and narrow slope down to a wall, the camber perhaps encouraging the drainage of salt and other pollutants in that direction. Along most stretches, the lower verge is dominated by coarse grasses and vigorous herbs, and lady's-mantles are scarce except where there are wider verges and a vegetation approaching that of hay-meadows.

As is typical along higher Pennine roadsides, by far the most abundant species of *Alchemilla* was *A. glabra* (Smooth Lady's-mantle). This species contributed at least 90% of the patches, and many patches were several metres long, and clearly contained numerous plants. *A. xanthochlora* (Intermediate ('Pale') Lady's-mantle) was fairly frequent, with the remaining three species contributing perhaps 5% in combination, there being just three patches of *A. filicaulis* subsp. *vestita* (Hairy Lady's-mantle), six patches of *A. glomerulans* ('Clustered Lady's-mantle') and – the main objective of the exercise – two patches of *A. monticola*. It is pleasing to report

that the last-named species can be reinstated on the Cumbrian list.

### ***Alchemilla monticola***

One patch was on the eastern verge immediately north of Ashgill Bridge (NY75884051, altitude 422 metres a.s.l.), and its presence here suggests strongly continuity at the site since 1952. The patch was small, with only about 25 shoots within a square metre, in short turf. *Alchemilla glabra* was also present, with otherwise only the commoner roadside species, Cock's-foot *Dactylis glomerata*, False Oat-grass *Arrhenatherum elatius*, Bush Vetch *Vicia sepium*, White Clover *Trifolium repens*, and Germander Speedwell *Veronica chamaedrys*.

The second patch (plate 7) was on the western verge two kilometres northward, a short distance to the north of the junction of the B6277 with the Garrigill/Nenthead road (NY74924216, altitude 433 metres a.s.l.). The plant occurred in a more extensive patch here, for about 5 metres along the verge, and up to a metre wide. The vegetation was much taller here, and the leaves (despite leaf-stalks of around 20 cm) were almost submerged by the growths of Cow Parsley *Anthriscus sylvestris*.

A full list of the associates at this site is: Smooth Lady's-mantle *Alchemilla glabra*; Intermediate Lady's-mantle *Alchemilla xanthochlora*; Sweet Vernal-grass *Anthoxanthum odoratum*; Cow Parsley *Anthriscus sylvestris*; False Oat-grass *Arrhenatherum elatius*; Common Knapweed *Centaurea nigra*; Creeping Thistle *Cirsium arvense*; Cock's-foot *Dactylis glomerata*; Crosswort *Galium cruciata*; Wood Crane's-bill *Geranium sylvaticum*; Water Avens *Geum rivale*; Ribwort Plantain *Plantago lanceolata*; Rough Meadow-grass *Poa trivialis*; Dandelion *Taraxacum* agg.; White Clover *Trifolium repens*.

This list contains mostly locally abundant species. These are however elements of hay-meadow species, and *A. monticola* does occur in such communities 'over the border' in upper Teesdale (although as might be anticipated the species does not tolerate agricultural 'improvement' and so has declined markedly where improvement has taken place). An abundance of Cow Parsley, as here, is however an often-unwelcome indicator of nutrient-enrichment. Hard cutting and removal of the cuttings are essential in attempting to maintain floristic diversity on these verges.

### ***Alchemilla glomerulans***

This rare plant was found in six new colonies, and at one site (Bentyfield Mine entrance), the patch was the finest the author has ever seen, in terms both of extent and vigour (plate 7).

For the record, the six sites (all on the northeast side of the road, and along 1.2 kilometres) are:

- NY75154145    two plants a metre apart just above ditch (alt. 429 m a.s.l.)
- NY75134150    patch 1 m × 0.5 m (alt. 431 m a.s.l.)

- NY75114158 one small and one large plant on each side of drainage ditch (alt. 434 m a.s.l.)
- NY75114159 two plants between road and ditch (alt. 434 m a.s.l.)
- NY75074244 south side of entrance track to Bentyfield Mine, through gate, patch *ca.* 0.5 m<sup>2</sup> (alt. 428 m a.s.l.)
- NY75034245 patch *ca.* 4 m<sup>2</sup> by large Goat Willow *Salix caprea* below road, between two entrances to Bentyfield Mine (alt. 425 m a.s.l.)

See also Corner *et al.* (2007) for details of another significant locality for this species on similar verges near Leadgate, found by Linda Robinson and Marie Saag in 2006.

### *Alchemilla mollis*

This large and highly invasive garden escape, Garden ('Soft') Lady's-mantle, is all-too-well established on both sides of the road at High Windy House and Farm. It is certainly capable of colonising beyond the present confines of the properties, the gravel hard-standings, the steep bank opposite (which is planted up with many garden species, and clearly the source of the infestation), and adjoining laybys. Its advance needs to be monitored and action against it might need to be taken if it shows signs of establishing into the communities of the native *Alchemilla* species.

### Identification

*Alchemilla* is regarded as a 'critical' genus, due to the small differences between the species. With experience, the five representatives seen to date along the B6277 are reasonably straightforward to tell when well-grown, and in good light. The species all have quite different general appearances – or 'jizz' – but for brevity the following merely picks out diagnostic differences.

*A. glabra* is largely hairless, but a close view – and a lens might be needed – shows some (or more) hairs closely pressed to the leaf-stalk, and on the outer portions of the veins below the leaf, all very inconspicuous. So it largely lives up to its *glabra* – 'glabrous', or hairless – epithet. *A. glomerulans* looks superficially similar, but a close view shows very fine silky hairs all over the leaf-surfaces lying almost flat on the surface or standing out a little (bend a leaf over a finger to see the hairs more readily). The leaf-stalk also has dense hairs, again closely pressed to the stalk. The epithet *glomerulans* refers to the flowers occurring in rather dense clusters – a subtle pointer.

The common lowland species *A. xanthochlora* again accords with its epithet, meaning 'yellow-green'. It readily develops into a large, often coarse, plant, and is immediately recognisable by having the upper leaf-surface normally completely hairless, but the leaf-stalk extremely hairy, the hairs ascending or standing straight out.

Both *A. filicaulis* subspecies *vestita* and *A. monticola* are obviously hairy, because the hairs stand out from the surfaces of the leaves, leaf-stalks, and flowering-stems.

*A. monticola* has a more rounded and ‘fuller’ leaf than *A. f. vestita*, in that the basal lobes approach or cross one another. The critical difference however is that the density of hairs on the flowering-stem of *monticola* decreases upwards, from being very hairy at the base to completely hairless at the branches of the inflorescence and on the backs of the flowers. In *vestita*, however, although the density decreases somewhat up the stem, there are still some hairs in the inflorescence-branches, and always on the backs of the flowers. These two species have a duller and colder, slightly blueish, colour, than the other species dealt with.

The garden-escape *A. mollis* is more vigorous than any of these, has large rounded leaves with shallow lobing, strongly yellowish in tone, and all parts of the plant are covered in very dense silky hairs. It soon makes tall and dense clumps, and flowers profusely. It is rapidly increasing along road- and track-sides and in waste places.

Note that in rain-wetted plants the crucial density, distribution, and orientation of the hairs are all more awkward to determine than when dry. Hairs may be lost to some extent from older leaves and stems, making identification less straightforward towards autumn.

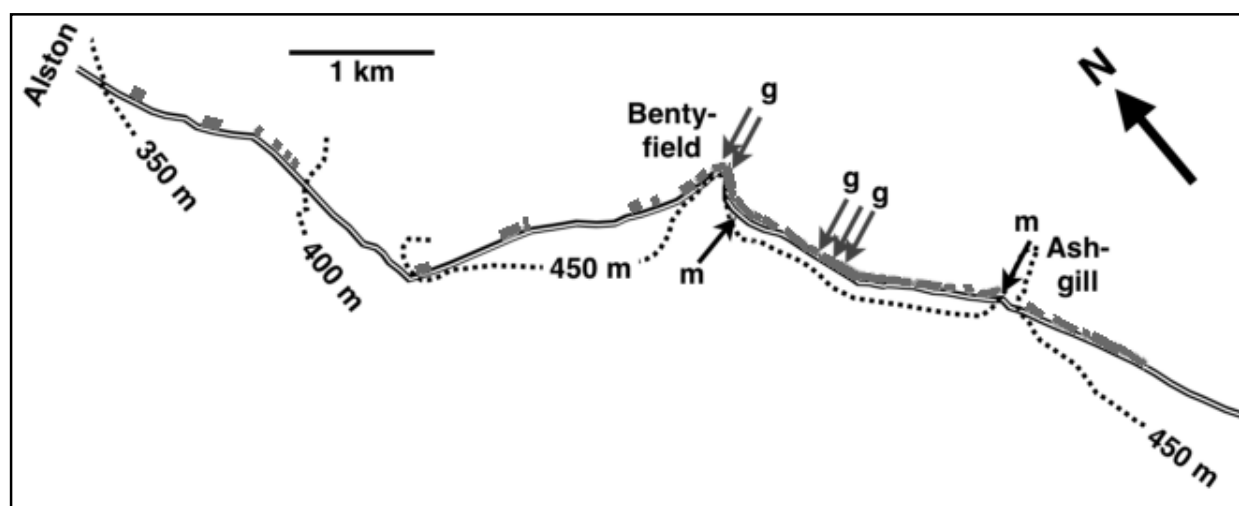
### Acknowledgement

With thanks to Margaret Roberts for acting as chauffeuse on one day.

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**Figure 1.** The B6277 from Alston to south of Ashgill. Arrowed are colonies of *A. glomerulans* (‘g’) and *A. monticola* (‘m’). The grey squares and blocks indicate the main concentrations of *Alchemilla* colonies. Contours are indicated in metres a.s.l.

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## **‘Abmigration’ by Starlings wintering in Cumbria**

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Each autumn large numbers of Common Starlings cross the North Sea to winter in Britain. Many originate from Scandinavia, the Low Countries and Germany, whilst others come from as far afield as the Baltic States, Poland and even Russia (Wernham *et al.*, 2002: the ‘*Migration Atlas*’). Those that breed in Britain are much more sedentary, such movements as do occur being assigned chiefly to dispersal by birds in their first autumn (*op. cit.*). This, however, is not the whole story for, although it does not even get a passing mention in the *Migration Atlas*, some British Starlings undertake quite substantial movements in seasonally inappropriate directions, a very unusual phenomenon sometimes referred to as ‘abmigration’ (typically abmigration involves roughly northward movements in autumn and southward ones in spring). Such movements were first described on the basis of birds ringed in the winter months in the Aberdeen area (Rae & Morris, 1978; Duncan, 1984). At first they were thought to be continental birds returning to their natal/breeding areas by first moving south into England before taking the shorter sea crossing to mainland Europe via the southern North Sea or Straits of Dover. The timings of the recoveries in Southern Scotland and Northern England were not consistent with this however, and it was quickly realised that these must be British-breeding birds (Duncan, 1984). A subsequent, more detailed investigation based on birds ringed in the Scottish Highlands characterised the movements as follows: (i) they were predominantly undertaken by birds in their first year of life; (ii) they mostly (but not exclusively) took place in late winter and early spring; (iii) they were orientated in more or less the same direction (S/SSE); (iv) the distances moved were approximately exponentially distributed with a half distance of *ca.* 200 km and, more tentatively, (v) the number of birds undertaking such movements varied between seasons (Clark & Sellers, 2003). There was insufficient evidence to determine whether these were birds originating in the Highlands making late winter/early spring one way movements in search of new breeding grounds further south, or more southerly birds that had moved north in autumn and were returning to their natal areas to breed.

It had appeared that these movements were unique to north and north-east Scotland, but whilst compiling a list of Cumbrian ringing recoveries a number have come to light which suggest that Starlings wintering in Cumbria also undertake such movements. In view of the importance of such an observation, it seems worthwhile putting these on record. Issue 8 of the *Compendium of Cumbrian Ringing Recoveries* (Sellers, 2013) lists 104 Starling recoveries. Of these 29 concerned birds ringed in the winter months (October–March inclusive) in Cumbria and recovered or re-

trapped in the breeding season (April–August inclusive). Such winter-to-breeding season movements fall conveniently into one of three categories. The most numerous concerns birds recovered within 50 km of where ringed (22 of 29 recoveries or 76%), whilst birds recovered within Britain more than 50 km from where ringed accounted for just three recoveries (10%) and birds recovered abroad the remaining four (14%). The three recoveries in Britain over 50 km are listed in full below, and involve quite long-distance movements (100–300 km), orientated either SE or SSE – results very similar to those found in Starlings wintering in the Highlands and clearly examples of abmigration. The figure of 50 km is somewhat arbitrary but takes into account that even birds wintering in the vicinity of their natal area may move up to 30–40 km in winter from night-time roosts to daytime feeding areas and represents a convenient cut-off between local movements on the one hand and abmigration on the other.

ad	26 Nov 1927	Carlisle, Cumbria
?	1 Jun 1931	near Burton-on-Trent, Staffordshire (243 km SSE)
?	3 Feb 1980	Flimby, Cumbria
x	17 Apr 1980	Horden, Rochdale, Lancashire (145 km SE)
?	3 Feb 1980	Flimby, Cumbria
x	19 Jun 1980	Oldbury, Warley, West Midlands (262 km SSE)

[The first entry in the upper line shows the bird's age on ringing (?, unknown; ad, adult) and the second line the recovery circumstances (?, unknown; x, found dead).]

For comparison the equivalent figures for Starlings marked in Caithness to the end of 2011 were 44 recovered in Britain over 50 km away (*i.e.* were abmigrants), 27 within 50 km and 18 abroad (Sellers, unpublished data). These two sets of data may contain some biases and these may differ between them (recovery rates may be different, for instance, reflecting differences in the geography and topography of the two areas), but, taken at face value and bearing in mind the comparatively small sample sizes especially for Cumbria, they suggest that abmigration is considerably more common among birds wintering in Caithness (44 of 89 recoveries or 49%) than it is in those wintering in Cumbria (3 of 29, or 10%). Even if the analysis is restricted to British breeding birds, Caithness still has a much larger proportion of abmigrants (44 of 71 birds, or 62%) than has Cumbria (3 of 25 birds, or 12%).

Other preliminary data suggest that abmigration occurs in Starlings wintering elsewhere in northern England and in lowland Scotland (Sellers, unpublished data). These new observations from Cumbria and elsewhere may also have some implications for the unresolved question of where these birds begin their lives – near to where they have wintered or in the vicinity of where they have gone to breed? When it seemed that the phenomenon was restricted to the north and north-east of Scotland it appeared possible that they might be the surplus of locally bred birds



moving southward in late winter or early spring in search of new places to breed, but this view is more difficult to sustain if it is widespread, for it would effectively mean that the 'centre of gravity' of the population was continually moving south unless those birds that had moved were a doomed excess that contributed nothing to the population overall, which seems unlikely. The alternative, that these are birds *returning* to their natal areas to breed, looks increasingly to be the case, and is supported by one other piece of information. The *Migration Atlas* gives the median distance moved by birds ringed as nestlings in Britain and recovered the following January as 19.5 km, n = 128 (a figure which presumably includes abmigrants as well as birds wintering close to their natal areas), but this falls to zero by their first breeding season. Although these figures are not absolutely conclusive, it appears that most birds return to their natal areas to breed. Why these birds should adopt the highly unusual strategy of moving roughly north in autumn and south in spring remains something of a mystery, but it seems likely that the interplay between food availability in the non-breeding season and the additional competition for these resources created by the influx of large numbers of continental birds is responsible.

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### Neville Lawn Birkett FRES (1916–2013)

Dr Neville Lawn Birkett died on 23rd April 2013 aged 96 years. Neville Birkett enjoyed a life-long interest in natural history and the Lakeland counties. He was one of the foremost Cumbrian entomologists of his generation and a last link with a former generation of late 19th/early 20th century Cumbrian entomologists. (Plate 9.)

Neville was born in Ulverston on 5 November 1916. His first published contribution to the study of entomology came when still a schoolboy in 1932, in the *Entomologist* – on the occurrence of the Bordered Straw moth (*Heliothis peltigera*) in Ulverston. Over the next seven decades he published over 180 different notes and articles in numerous national and local natural history journals. During the 1940s he published regularly on the Lepidoptera of the Furness and Kendal districts. At this time he got to know the older generation of local entomologists such as Albert Wright in Grange-over-Sands and Frank Littlewood in Kendal. With their passing around 1950, Neville took custodianship of their natural history diaries, archives and some of their collections, including historical specimens of the extinct race of the Silver-studded Blue that once occurred on the Morecambe Bay mosses.

After studying medicine at Emmanuel College, Cambridge, Neville trained at St Bartholomew's Hospital in London and after the war moved to Kendal where he worked as a General Practitioner for nearly thirty years, living first in Kendal and later at New Hutton. The name of his house at New Hutton – 'Kendal Wood' – appears on many data labels for insects in his collection. Neville became active in the Kendal Natural History Society and was Chairman of that Society for many years. At this time he also became Secretary of the Meathop Moss Nature Reserve Committee, and an active member of the regional entomological societies – the Lancashire & Cheshire Entomological Society and the Raven Entomological Society. He became involved in studies on the rare Netted Carpet moth in south Cumbria and in 1951 published a short history of that species. During the 1950s and '60s, he made many contributions on insects to local natural history journals such as the *Field Naturalist* and in 1970 he wrote the chapter on insects for *The Natural History of the Lake District* published by Frederick Warne. Neville was also active in national societies such as the Royal Entomological Society, of which he was a fellow, and the British Entomological and Natural History Society. In 1959 he joined the editorial panel of the *Entomologists Record and Journal of Variation*, a role which he fulfilled for the next thirty years.

Neville's interest in Diptera was perhaps first sparked when he found the spectacular hoverfly *Doros profuges* at the edge of Eggerslack Wood, Grange-over-Sands in 1947. He remains the last person to see this rare fly (now a UK Biodiversity Action Plan species) in Cumbria. He became more and more interested in the flies as well as the moths that were attracted to his light trap. In 1957 he published his first note on a

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Chironomid midge – a group of flies in which he was to become a nationally recognised expert. In 1976 he added the Chironomid *Tanytarsus gracilentus* to the British list from Leighton Moss and in 1984 *Dicrotendipes pallidicornis* new to Britain from Sandscale Haws. His interest in flies broadened and developed to match his fondness for moths and he amassed a significant collection of Cumbrian Diptera. He also collected other insect orders and in 1985 he recorded the stiltbug *Chorosoma schillingi* new to Cumbria – an early example of an insect species spreading north in probable response to climate change.

Neville became the central point of information on the moths and flies of the county. He produced a manuscript account of the Lepidoptera of Westmorland – later expanded to cover all of Cumbria after the creation of the county in 1974. He also maintained card indexes of all Lepidoptera and Diptera records for Cumbria.

Neville took early retirement in 1976 and with his wife, the late Joy Birkett, moved to Grange-over-Sands and latterly to Arnside, before moving down to Devon in 2008. I first got to know Neville in 1991, shortly after I started at Tullie House Museum. His friendly interest and encouragement meant that we soon became good friends and I greatly enjoyed visiting Neville and Joy at their home in Grange where I was always made most welcome. Neville had more or less given up active fieldwork by this time due to arthritis, although he still ran a moth trap at his house and he continued to work on the large insect collections that he had developed over the course of 60 years of collecting. He joined Carlisle Natural History Society in the 1990s and published several notes in the *Carlisle Naturalist* at that time.

Neville donated his entomology collections of over 20,000 specimens and historical archive of Cumbrian entomological diaries, notebooks and record cards to Tullie House Museum in 2004 when failing eyesight prevented him from using them himself. His collection of Chironomidae went to the Liverpool Museum at the same time. Despite increasing ailments, Neville was always cheerful and invariably humorous. He was always interested in the studies of other naturalists and generous with helpful information from his long experience. I will always be grateful for his great kindness and generosity to me.

Neville's other interests included golf, music, fishing and walking in the Lake District. Throughout his career he had been actively connected with the St John Ambulance Brigade and became county surgeon for the Order. He was appointed a JP in 1965 and served as a Deputy Chairman of the Kendal Bench. He is survived by his three children, Hilary, Peter and Anne and his grandsons.

*Stephen Hewitt*

### **Jennifer Newton MBE (1937–2013)**

Jennifer Newton died peacefully on 3rd March just a few months after she was diagnosed with cancer. Jennifer was an outstanding naturalist and made a significant contribution to the study of wildlife in both Lancashire and Cumbria. (Plate 9.)

Jennifer was born in Oxford in 1937 and when the family moved to Sheffield in 1944 the family would visit the countryside every weekend. Her father was working on Clapham, Tutin & Warburg's well-known *Flora*, so not surprisingly Jennifer learnt the British flora and the principles of taxonomy from an early age. She was also interested in invertebrates and became the Grasshopper Recorder for Sheffield and District at the age of 11. She studied Zoology and Botany at Cambridge University and after gaining her teacher's diploma taught Biology at a school in Bromley, Kent. She then embarked on a PhD in the Agriculture Department at Oxford University. Jennifer and David married in 1964 and spent two years in California where she soon developed expertise in its flora. They returned to England in 1968 and Jennifer explored the limestone hills around Morecambe Bay in between bringing up two daughters. They lived in Geneva, Switzerland from 1975 to 1977 and spare time was spent exploring the valleys and mountains for flowers and butterflies.

Returning to Lancaster in 1977, Jennifer became involved with the Lancashire Wildlife Trust and was instrumental in having Aughton Woods declared a Nature Reserve and for getting part of Warton Crag a 99-year lease as another Nature Reserve for the Trust. She became the voluntary reserve manager for Warton Crag, one of Britain's strongholds of the High Brown Fritillary butterfly, and the spectacular and ancient Aughton Woods Nature Reserve. She eventually became a member of the Trust's Scientific and Conservation Committee, providing wildlife records, identifying important wildlife sites and becoming involved in nature reserve management. She became the Honorary Conservation Officer for North Lancashire, actively campaigning on behalf of the Trust against damaging planning proposals and for strongly worded planning policy that protected wildlife. Jennifer was a leading light in the Trust's North Lancashire Naturalists Group and a Trustee of the Trust for over 20 years. She regularly led conservation work parties, guided walks and training courses.

For her services to Nature Conservation she was awarded the MBE in 2007 and in 2009 she was awarded the Conservation Achievement Award by her peers at the Wildlife Trust's Volunteering Conference.

Jennifer provided records of her Cumbrian finds to the database at Tullie House Museum. She joined CNHS in 1996, contributed to the *Carlisle Naturalist* and led a workshop on spider identification for the Society.

Her interest in spiders had started in the 1980s, much to her younger daughter's distress. Her field identification of this difficult group was remarkable: acute

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observations in the field invariably led to correct identifications of specimens in the hand, and her knowledge of the habitat requirements and species ecology was extensive. Every trip with Jennifer was a big learning experience, yet she came over as very modest and unassuming – she was a very accurate worker and would correct anything you said in a very apologetic manner. I always looked forward to a day in the field with Jennifer.

Although she lived ‘over the border’ in Lancashire, she was very keen to increase the level of spider recording in Cumbria, and her own level of recording was huge. The spider maps of West Lancashire are filled with tetrad records, invariably all made by Jennifer. Her expertise with many other taxa (she was a particularly knowledgeable botanist) made for a very interesting day out. Her fitness was notable – I sampled spiders with her on top of Whitbarrow Scar and Lonscale Fell and her interest never waned, always having a last few sweeps in the vegetation and potting the specimens for hand lens examination when the rest of us were glad to head back to the car at the end of a long day.

Plants and insects gave her enormous pleasure, right to the end. At the end of February Jennifer spent many hours outdoors in the garden watching the heather and crocus in flower, in the hope of seeing some visiting insects.

Jennifer was an inspiration to many in her quiet, unassuming way. She was knowledgeable in so many areas, humble and helpful and she gave so much of her time to promoting conservation and protecting wildlife and sites. She was a very special person and we will miss her greatly.

*Dave Blackledge and Steve Priestley*

## Society Announcements & 'Notice-board'

### Recent losses of noted members

The death of Dr Jennifer Newton was briefly reported in the last issue. Since then, the death has occurred of the noted entomologist Dr Neville Birkett of Kendal. Appreciations of both these fine naturalists are in the preceding pages. More immediately has been the death, sadly through a hill-walking accident in Scotland, of John Hamer, long-time CNHS Council member and valued friend and colleague. We will present an account of John's life in Volume 2.1.

### Additions to the Society's library

*Entomologist's Record & Journal of Variation* Vols. 112-121 (Jan 2000 – Dec 2009). Given by David Atty.

*Entomologist's Gazette* Vol. 61 (1-4) (2010). Given by David Atty.

*Britain's Birds in 1989-90 & 1990-91: the conservation monitoring review*, JNCC. Given by Geoff Horne.

*Wildfowl* 43 (1992) Wildfowl & Wetlands Trust. Given by Geoff Horne.

*The Peregrine Falcon in Cumbria - the super recovery: 1963-2012*, Geoff Horne (2013) given by Geoff Horne.

*Journal of Bryology* 33 (2011) (1-4) & 34 (2012) (3-4) given by Peter Harris.

*England's National Nature Reserves*, Peter Marren (1994) Poyser Ltd, London. Given by Matt Grose.

*The Solway*, John Miles (2010) Buckingham Press Ltd. Given by John Miles.

*Scottish Birds*. Vol 31 (1-4) (2011). Given by Geoff Horne.

### CNHS Facebook Group

This is a friendly group for Carlisle Natural History Society members to share photos and discuss natural history topics with fellow members. To join the group go to <http://www.facebook.com/groups/carlislenats> or search Facebook for Carlisle Nats. Then click 'join group' in the top righthand corner of screen.

### Cumbrian butterflies: talk and identification workshop, 3 December 2013

Gary Hedges is giving a free half-hour talk entitled '*The Changing Fortunes of Butterflies in Cumbria*' at 1pm at Tullie House Museum. The talk will be followed by a 2pm-4pm identification workshop. The workshop is free but capacity is limited – please book via Tullie House box office: 01228 618700 (Mon-Sat 10-5, Sun 12-5).

### RODIS online recording workshops

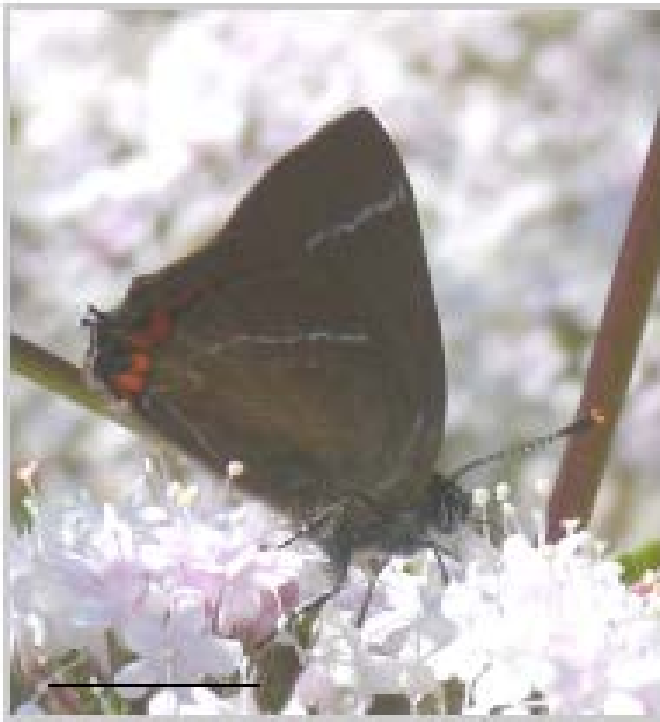
CBDC are delivering two identical free workshops: Thursday 16 and Friday 24 January, 10am – 4pm in the Tullie House meeting room. Each workshop aims to help participants become confident in the use of RODIS online recording software for entering, managing and submitting wildlife sightings. To book a place on one of the workshops please call Tullie House box office 01228 618700 (Mon-Sat 10-5, Sun 12-5).

### Cumbria wildlife recording and events calendar

A calendar of events of interest/relevance to Cumbria wildlife recorders, including Natural History Society and Recording Group meetings, is now available to view on a single calendar viewable on the CBDC website ([www.cbdc.org.uk](http://www.cbdc.org.uk)).

### Fungus Group – the first season

The new Group under the leadership of Paul Nichol has held five field meetings at locations scattered around the north of the county. Future programmes of the group will appear on the CBDC website.



1. (p. 38)

White-letter Hairstreak on *Valeriana pyrenaica*. Heaves, 16 July 2013.

© David Clarke

[scale 10mm]



2. (p. 38)

Broad-bodied Chaser.  
Broadwath, 29 July 2013.

© Rob Shaw

[scale 20mm]



3. (p. 49)

The hoverfly *Rhingia rostrata*. Newto Cumbria at Latterbarrow, 25 May 2013.

© John Reinecke

[scale 5mm]



4. (p. 38)

The hoverfly *Parhelophilus versicolor*. (♂, fresh specimen)  
Cumwhitton, 10 June 2013.

© David Clarke

[scale 5mm]



5. (p. 51) Thrift Clearwing moth (*Synansophecia muscaeformis*).  
St Bees Head, 13 July 2013.

© Gary Hedges

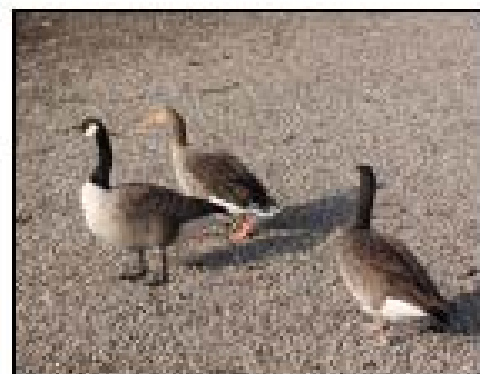


6. (p. 53)

Juvenile hybrid Canada  
Goose x Greylag Goose.

(below): same individual  
with parents. Derwent  
Water, 5 March 2013.

© Robin Sellers







7. (p. 61)

*above: Alchemilla glomerulans* at Bentyfield mine.

*below: Alchemilla monticola* on roadside.

Alston-Ashgill road, July 2013.

© Jeremy Roberts

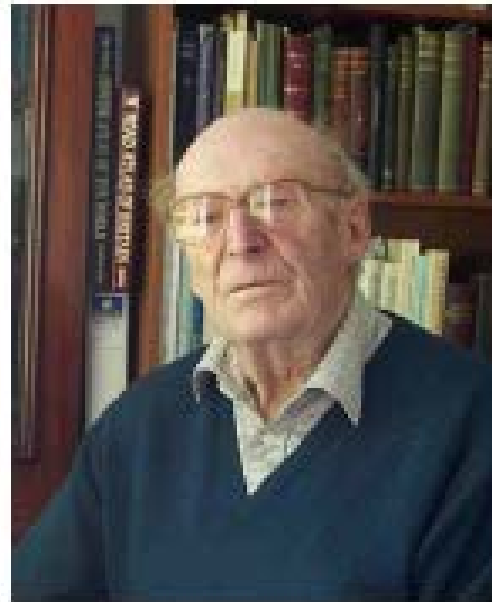


8. (p. 54) Fore-dune habitat of the Northern Dune Tiger Beetle (*Cicindela hybridus*), Drigg Dunes, August 2013. INSET: Adult and burrows  
© Stephen Hewitt



p. 68: Dr Jennifer Newton  
(1937 - 2013)

© Newton family, 2008



p. 69: Dr Neville Birkett FRES  
(1916 - 2013)

© Stephen Hewitt, July 2004

9. Two noted naturalists lost to the county in 2013 – see text

**Carlisle Natural History Society – Winter 2013/14**

check website [www.cnrhs.uk](http://www.cnrhs.uk) for updates

**2<sup>nd</sup> October**

**Giving my right arm – a very unusual conservation initiative**

An illustrated talk by Tristan Reid

**16<sup>th</sup> October**

**A context for recent changes: Late-Quaternary dynamics of species' distribution and abundance patterns.** An illustrated talk by Prof. Brian Huntley (Durham University)

**30<sup>th</sup> October**

**Members' Night**

Contributions from the membership

**13<sup>th</sup> November**

**Cumbrian Reptiles**

An illustrated talk by Sam Griffin

**27<sup>th</sup> November**

**The ecology and conservation of White-clawed Crayfish**

An illustrated talk by Joanne Backshall (Eden Rivers Trust)

**11<sup>th</sup> December**

A double bill from Society members:

**South American travels - Ecuador to Ushuaia.** David Hicks on

**Travels with Cranes.** Keith Clark

**8<sup>th</sup> January**

**Birds on the bench**

An illustrated talk by John Mather (*joint meeting with Cumbria Bird Club*)

**22<sup>nd</sup> January**

**The iron ore mine collapse at Egremont**

An illustrated talk by Dennis Dickens (*joint meeting with Cumberland Geological Society - NB this meeting will start at 7.30pm*)

**5<sup>th</sup> February**

**Young Wood, Mungrisdale: the highest Atlantic oakwood in the world ... probably!**

An illustrated talk by Dr Andrew Wetherall (University of Cumbria)

**15<sup>th</sup> February (Saturday)**

**Field Meeting: Loch Ken, Galloway ('wild goose chase')**

Leader: John Hamer. Depart Carlisle College 9.00 am

**19<sup>th</sup> February**

**Cumbrian Ferns**

An illustrated talk by Mike Porter

**5<sup>th</sup> March**

**AGM & Members' Night**

AGM followed by contributions from the membership

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