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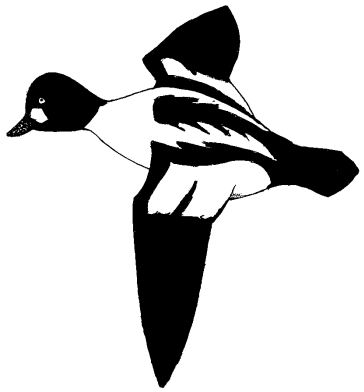

*Goldeneye* *(David Clarke)*

**Contents**

The recent autumn and winter have been extreme in several ways. Exceptional rainfall and damaging floods in November in the parts of the Lake District and West Cumbria have been followed by the coldest conditions in the county for over thirty years, with extended periods of severe frost, and much more than usual snow-lie. It will be interesting to see whether this can be linked to records (or lack thereof) in the coming season.

It is good to be able to feature an article on one of the factors contributing to the decline of the Red Squirrel: a Biodiversity Action Plan species, the Red Squirrel is iconic for the county and hence the focus of various initiatives to halt its decline. The continued revelation of the extent of Cumbria's beetle fauna is also welcome to report: persistence, especially with small and 'unpopular' species, clearly shows that the potential for fresh discoveries is by no means exhausted.

At the Society's AGM on 3rd March 2010 it was agreed to continue a centre colour section in this journal, despite the additional costs. As previously, all images relate to notes or articles in the text, and are cross-referenced accordingly.

23rd March 2010 *David Clarke,* Editor

***Additions to the Society's library***

**Books**:

*A Cumbrian Wildlife Garden*. (Richard Little). Purchased.

*Bats in the garden* (Thompson). Transfer from Tullie House.

*Handbook of British Hepaticae*. (Cooke). Transfer from Tullie House.

*Handbook of British Mammals*. (Corbet & Southern). Transfer from Tullie House.

*Handbook of the British Flora*. (Bentham). Transfer from Tullie House.

*Natural History of the Lake District*. (Hervey). Transfer from Tullie House.

*British Flora Illustrations* parts 1-4. (Clapham et al.). Given by John Parker.

**Periodicals**:

Wildfowl Trust Reports 1948-49, 54-56, 65-66, 1968, 1969, 1970.

*Atropos* (autumn 2009) No. 38. Given by Geoff Naylor.

*Allen Armsby*

***Museum News***

The successful and popular *Freshwater Life* exhibition in the Millennium Gallery has now been removed pending a new permanent development of the gallery (relating to Hadrian's Wall). Key elements of *Freshwater Life* have transferred upstairs to the main Border Galleries and thus enhance the main wildlife displays. We will also take the opportunity to extend interpretation of the period after the end of the Ice Age, showing remains of ancient deer and cattle, and mammals now extinct – such as the Beaver and Wolf. The minerals display has also been demounted and it is hoped to reinstate it in a new form as soon as further changes become possible. Meanwhile, the large open-display mineral and fossil specimens have already been re-located in the galleries.

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## Recent Reports

The period covered by these notes is from October 2009 to mid February 2010. Unsurprisingly, records received during this period were almost entirely of birds. Initials of recorders are used after the first mention.

**Little Egrets** were recorded fairly regularly, mainly in the Port Carlisle – Bowness-on-Solway area, with as many as 5 seen on 8th December (Nick Franklin). Less usual locations were Rockcliffe on 25th December (NF) and Rose Bridge, R. Caldew on 14th November (Ian Armstrong). Also at Port Carlisle, a **Great Northern Diver** was seen on 13th December (NF). Colin Auld was fortunate enough to see a **Bittern** at Siddick Pond on 30th December, but unfortunately it, or another, was found dead on 13th January, and its remains transferred to Tullie House Museum.

Wildfowl, not surprisingly, were a prominent feature of the winter with some unusual species and some exceptional numbers. A **Long-tailed Duck** at Talkin Tarn stayed for most of December and was seen by several members. A **Shoveler** there on 9th December was also unusual (G.Naylor). **Smew** are always attractive and a male was seen at Longtown on 14th December (NF). There was a pair at Talkin Tarn during the first half of January, reported by several members. On the first two days of 2010, a **Black Swan** was seen at Talkin (Alan Armsby and others), but **Whooper Swans** appeared in very large numbers in the Solway area: *e.g.* 380 near Kirkbride on 9th November (Mike & Anne Abbs); 600 near Newton Arlosh on 11th November and a total of 822 counted at 3 localities in the same area on 15th November (both Frank Mawby). There were several other records of flocks of between 100 and 200. **Pink-footed** and **Barnacle Geese** included an impressive 800 and 12,000 respectively at Rockcliffe Marsh on 29th October (NF) and 11,000 of the former with 3,000 of the latter were in the Moricambe Bay area on 18th January. There were also *ca.* 2,000 **Pink-feet** near Bromfield on the same day (FM). More unusual species of goose were a **Brent** at Anthorn on 1st January and a **White-fronted Goose** (race uncertain), at Sandsfield on 29th October, which flew over the observer (both NF).

Grouse were a prominent feature in Geltsdale with a maximum of 15 **Black Grouse** on 24th December, and an amazing total of over 250 **Red Grouse** on 3rd January, rising to 350+ two days later (John Miles). The last-mentioned number consisted of two flocks, one of over 100, flushed by a **Hen Harrier** and another of *ca.* 250 flushed by a **Peregrine**. **Barn Owls** were also regularly observed there and a particularly interesting record is of one hunting in daytime and twice being robbed of its prey by a Kestrel; a **Long-eared Owl** was displaying in the same area on 25th January (all JM). Another **Long-eared Owl** record was provided by Margaret Roberts from near Cumwhinton on 25th December.

Unusual/unseasonable wader records were a **Spotted Redshank** at Port Carlisle between 13th and 29th December (NF); up to 2 **Little Stints** at Grune Point on 18th and 29th December (NF) and a **Long-billed Dowitcher** (a North American rarity), which continued its stay in the Port Carlisle area from 3rd December until at least 4th January (NF, CA and others) – see also Plate 1 of the previous issue.

A **Kingfisher** – a rarity at Talkin Tarn – was seen by many observers through most of December.

The 'big freeze' led to some interesting garden records, such as 28 **Blackbirds** at Dalston on 24th December (David Hickson) and 35 at Wetheral on 3rd January (Bob Jones). The Dalston garden and many others also featured **Fieldfares** and **Redwings**. **Bramblings** turned up in Penrith (Stephen Hewitt), Wetheral (Jeremy Roberts) and Stanwix (Dorothy Iveson). They were scarce in the more usual sites, with maximum numbers reported being 25 at Talkin Tarn on 22nd December and 50+ at Hallbankgate on 7th November (both NF). By far the most surprising garden visitor was a juvenile **Rose-coloured Starling** (Plate 1), an Asiatic species, which was seen in Kendal from 1st February (Tristan Reid and others). This appears to be only the sixth Cumbrian occurrence. **Twite** reached a maximum of 140 at Grune Point during November and December but **Tree Sparrows** belied their near-rarity status with 140 at Red Hall Farm near Wigton on 15th December where they were joined by an impressive 54 **Reed Buntings** (FM). However, returning to the garden bird theme, FM's garden in Kirkbride held 30 **Tree Sparrows** on 15th December that became an unprecedented 89 on 24th January. **Snow Buntings** are always an attraction and there was one near Renwick (Thack Moor) on 17th November (JM); 20+ at nearby Hartside on 3rd December and two on Talkin Fell on 20th December (both reported to JM). Another was at Grune Point on 30th November (NF). A most unusual sighting was a **Hooded Crow** at Petteril Bank, Carlisle on 12th December (reported to SH). A **Black Redstart** was another very unusual visitor. Believed a juvenile, it frequented waste ground in Penrith from 16th January, where it was seen by several observers, and photographed by SH on 23rd January (Plate 2). Finally, as records close, FM reports a **Water Rail** at the edge of Wedholme Flow and *ca*. 150 **Twite** on Border/Calvo Marsh, both 14th February.

Amongst mammals an unusual garden record was of **Roe Deer** feeding on apples at Jockey Shield, Geltsdale, with as many as 5 present on 5th January (JM). 75 **Red Deer,** hinds and calves, were in Wet Sleddale on 6th February (SH) and a silver-grey phase **Mink** (now much scarcer than formerly) on the R. Caldew near Blackhall Wood, 4th January (Geoff Horne). A dead **Water Shrew** was on the path beside the R. Eden at Rockcliffe, 16th February (Jeremy Roberts). The only insects reported were the so-called **Snow Flea** *(Boreus hyemalis)* – on snow: two





on Watermillock Common, 26th December and one on Robinson, 23rd January (both SH).

Early spring flowers in sheltered locations include naturalised **Snowdrops** by the R. Eden, Coombs Wood, 17th January (David Clarke), **Lesser Celandines** in mid-January at Burgh-by-Sands (Sara & Russell Gomm) and **Marsh Marigolds** by a streamside at Caldbeck, on 10th February (DI).

*Geoff Naylor (CNHS Recorder)*

## Field Meeting

**6th February 2010: North Solway coast & Loch Ken** **Leader: Geoff Horne**

A core of twelve members joined Geoff on the now traditional 'Wild Goose Chase', with a few others joining/leaving along the route. It proved a day of fine weather, with good sunshine and light wind resulting in 58 bird species seen, plus a Salmon and several Roe Deer.

The first venue was on the Solway at Newbie. The tide was out, but nevertheless plenty of waders, gulls and ducks were to be seen, most notably Grey Plover, Scaup, Goldeneye and Pintail – all in small numbers in the residual open water. Curlew, Oystercatcher and Lapwing were plentiful in nearby fields, together with about 300 Pink-footed Geese.

Then along the coast road towards Priestside, where 14 Reed Buntings were perched on the roadside hedge. Stops were made en route for flocks of Whooper Swans, Barnacle and Pink-footed Geese. At one point just near Caerlaverock we had nice, near views of about 150 Barnacles feeding in a field (that is until one enthusiastic photographer got a little too close and put them to flight!)

On the river by the Nith Hotel at Glencaple, Goldeneye, Goosander and Teal were plentiful, but the most noteworthy bird was a leucistic Redshank: quite white apart from the legs. It was expertly identified by a couple of members and would have had many of the less-experienced fruitlessly searching the pictures of rarities for its identification! Just in front of the dock in six inches of water was a Salmon of about 2ft in length. It looked somewhat exhausted and was presumed to be a fish returning to the sea after spawning. Also visible in the fields on the opposite bank were several Roe Deer.

The lunch stop was beside Loch Auchenreoch, unfortunately mostly frozen and with the open water dominated by two people on jet skis!

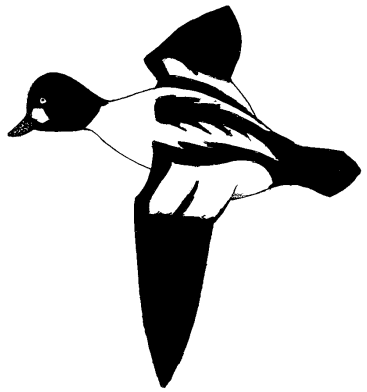
We moved on to Loch Ken, which also had significant areas of ice. Moving on up the loch from Glenlochar, good numbers of Teal, Wigeon and a single Pintail were

on the open water in good sunlight. In the usual field near Finniness a large flock of Canada Geese was grazing, together with Greylag Geese and Wigeon. Some 60 Greenland White-fronted Geese were finally located in a distant field across the Loch, but the excellent light enabled satisfactory views through the 'scopes and gave several of the party their first glimpse of this scarce species. There were good views of three Red Kites, and of a female Peregrine, perched on a dead tree stump across the water. Two of our party also had a very brief glimpse of a male Hen Harrier flying over a reed bed.

At the penultimate stop, a spectacular display of around 40 Red Kites was seen in good afternoon sun at the Laurieston feeding station, together with several Common Buzzards.

The day was completed with a stop at Gretna for the Starling roost. The sun setting in a clear sky made a perfect backdrop to an awe-inspiring display. None of us felt capable of estimating just how many birds gathered: 'a lot' was the unresolved consensus! The 'cloud' enthralled us with its complex swirlings, and the supper intentions of three Buzzards, two Sparrowhawks and two Peregrines made for some exciting aerobatics.

*Trevor Merrington*



*Goldeneye* *(David Clarke)*





## New sites for Bog Bilberry (*Vaccinium uliginosum* L.) in the northern Pennines

The Bog Bilberry *(Vaccinium uliginosum)* is a familiar plant of montane heaths in Scotland, and further north into sub-arctic regions. In England, somewhat anomalously, by far the best representation of the species is in the north Cumbrian lowlands, on basin mires in the Eden and Gelt catchments, where the plant grows in several sites as part of the shrub layer, associated with Bilberry *(V. myrtillus)* and often under a thin canopy of birch.

In the hills, the plant has been recorded in the past from a few sites in the Lake District, but is currently only known as four patches on the cliffs and buttresses of Rampsgill Head, and one on Skiddaw, at both of which sites it was discovered, or re-discovered, only recently. In the blanket peat of the north Pennine uplands – where one might expect the species to mirror its Scottish preferences for high damp heaths – there are hardly more records. It has been found over the years in at least four sites on Cold Fell at the extreme north of the range. (Although none of these could be located in recent visits by FJR, it probably still survives, as the vegetation is in generally good condition on the hill, with healthy dwarf-shrub growth). A 'single twig' was found by Ron Groom on Knock Fell in the mid-1970s, but this has not been recently confirmed in searches by FJR and LR.

It was therefore a great surprise in July 2009 to hear news that the plant had been found on peat-hags at 700 m a.s.l. on the summit plateau of Great Shunner Fell (v.c. 65; SD849.972) by Mark Owen and Richard Dimon of Natural England. The two patches, in both cases consisting of scattered shoots covering a few square metres, are on the tops and edges of two adjacent eroding peat-hags, and are at risk of extinction when these finally disappear, unless restitution of the edges can be achieved.

SH visited Great Shunner Fell on 28th October 2009, particularly to check the calcareous flushes on the western flanks in his study of montane crane-flies. Whilst traversing the western slopes of the plateau, he found Bog Bilberry in a second site (SD843.969), consisting of a few shoots over an area of *ca.* 0.5 × 0.5 metres. Most unusually this patch is not in heath vegetation but acid mire, and unfortunately in an area damaged by caterpillar-tracked vehicles used by shooters.

Whilst descending from Little Fell into Scordale on 4th October 2009, the authors crossed an area of peat-hags at 695 m a.s.l. on the western flanks, at NY777.227. On the top of a single hag we found the plant covering an area of *ca.* 4 $m^2$, of which 1 $m^2$ was a dense patch, the rest of the colony being of more scattered shoots (Plate 3). Being late in the day, there was not the opportunity for a thorough search to see if the plant occurred more widely. Surprisingly there appear to have been no previous records for this area.

Bog Bilberry may have been a frequent species in the original blanket bog and wet heaths of the high moors but been progressively lost through grazing and burning. The sight of this very scarce plant on the tops of eroding peat-hags makes it tempting to wonder if the plant has been at greater chance of surviving to the present in such situations because of reduced sheep-grazing and less frequent, or no, burning on the tops of peat-hags.

With thanks to Linda Robinson for information on Great Shunner Fell and Knock Fell.

*Jeremy Roberts, Eden Croft, 2 Wetheral Pasture, Carlisle CA4 8HU*

*Stephen Hewitt, Tullie House Museum, Carlisle*

### A new site for the Collared Earthstar fungus (*Geastrum triplex* Jungh) in the Eden Valley, Cumbria

I found a small troop of six earthstar fruit-bodies at Melmerby village (NY53) in late January 2010. By then they had already survived winter snow and ice, having no doubt erupted in late 2009. Photographs of the specimens were forwarded via Tullie House to Dr Brian Spooner of the Royal Botanic Gardens at Kew, who was able to identify them as the Collared Earthstar *(Geastrum triplex)* (Plate 4).

The site at Melmerby is a small deciduous woodland on the Green. It is mainly Sycamore and *Acer platanoides* with under-story of Hawthorn and immature Ash. The area used to be a bit of a dumping ground for garden waste, so is well-covered with Ground-elder, good patches of Honesty, a garden *Symphytum* and many Snowdrops. The earthstars were on the soil and remains of a dead elm stump which was carted from the village green about 20 metres away. The soil is sandy (derived from the Penrith Sandstones which are literally a few feet under the ground surface) and with a good ground cover of dead leaves.

Two voucher specimens have been deposited at Tullie House Museum.

*Linda Robinson, The Cottage, Melmerby, Penrith CA10 1HN*

*[Dr B. Spooner is a co-author of the standard work on the gasteroid fungi, which include the earthstars. The maps in that book (publ. 1995) show no Cumbrian records. Previous issues of this journal have subsequently reported them from a few other Eden Valley sites (in NY55, 44, & 53), making this by far the most frequent species of the genus to be found in the county. As earthstars are erratic in occurrence they may often go undetected and thus all reports are of interest. Ed.]*





### The alga *Trentepohlia jolithus* (Linnaeus) Wallroth on Cross Fell

On several occasions over the years I have seen the gritstone screes skirting the plateau of Cross Fell (NY73) covered in a red-coloured alga. These particular screes are composed of very hard and quartz-rich sandstone at an altitude of 820-840 metres a.s.l., the outcroppings of which have almost completely collapsed into mantling screes.

On 17th October 2007 I followed the screes from the Pennine Way on the southeast flanks around the southwest and west flanks, and found the alga making spectacular sheets of a red-lead colour, associated with various crustose lichens, and the Wooly Hair-moss *(Racomitrium uliginosum)*. The alga was abundant and indeed dominant over large stretches, and apparently indifferent to aspect, although the finest stretches were on the southwest-facing slopes (Plate 7), and the plant was more sparse on the north slopes. However, the plant does not appear on the boulder-fields of the summit plateau itself, although these are evidently of the same rock-type.

Through various contacts established via the internet, I was put in touch with Dr Fabio Rindi, of the Martin Ryan Institute, National University of Ireland, Galway, Ireland, to whom I sent a collection gathered on the northern flank of the hill on 2nd May 2009. Dr Rindi replied that: "It is a beautiful sample of *Trentepohlia jolithus*. It is a 'textbook' specimen; I would say the perfect representation of the typical form of this species ... This is definitely the largest population of *Trentepohlia jolithus* I have ever seen. In particular it is very unusual to see such large populations of *T. jolithus* on natural substrata: here in Ireland, all the largest patches are observed on old concrete walls". Dr Rindi took photomicrographs from the specimens, many of which can be seen on the AlgaeBase website (*www.algaebase.org*), and one is shown on Plate 7 (inset).

(On a taxonomic note, *Trentepohlia* is actually a member of the Green Algae (Chlorophyta), the red colour being due to the masking effect of carotenoid pigments, which may possibly serve to protect it from exposure to strong sunlight.)

I am very grateful to Dr Rindi for his identification and further correspondence, and for allowing the use of his photomicrograph here.

*Jeremy Roberts, Eden Croft, 2 Wetheral Pasture, Carlisle CA4 8HU*

### Disappearance of shoots of Green-flowered Helleborines (*Epipactis phyllanthes* G.E. Smith) at a Brampton site (NY56)

In the last issue (Vol. 17, no. 2, page 40) I mentioned that only 19 shoots of

Green-flowered Helleborine were counted on 5th August 2009 at a site near Brampton (NY56), compared with 30 in 2008. This was attributed to the general reduction in vigour of this colony compared with the previous season (which had been particularly notable for the numbers and vigour of several helleborine species).

However, I am grateful to Colin Auld for informing me that on 24th June he had counted 41 shoots. There are three subgroups to this population, and the three sets of counts of shoots are summarised below.

| | 2008 | 2009 | |
|---|---|---|---|
| | 17 August | 24 June | 5 August |
| Group 1 | 2 | 2* | 2* |
| Group 2 | 16 | 16 | 13 |
| Group 3 | 14 | 23 | 4 |

(* different plants in 2009 from those in 2008)

So there was a striking reduction in the numbers of shoots in Group 3 in 2009 in the interval between late June and early August. If there had been only the single August count for 2009 we might have imagined (as had I) that the small number reflected either poor emergence or actual plant mortality between the two seasons.

Now we know that in fact there was a good emergence of shoots, and some unknown factor (perhaps browsing by deer or other animal) was responsible for the observed reduction.

*Jeremy Roberts, Eden Croft, 2 Wetheral Pasture, Carlisle CA4 8HU*

### Further records of the dog-lichen *Peltigera leucophlebia* (Nyl.) Gyeln.

The Cumbria records of this species collected by the Society were mapped on page 53 of the previous issue of this journal (vol. 17(2), 2009) with the prediction that further sites would be found, limestone areas being especially promising. Stephen Hewitt duly found it to be present in a new 10 km grid square in gently sloping sheep-grazed limestone grassland on Knipe Scar (NY51) on 6th December 2009, where it occurs in at least two adjacent 2 × 2 km tetrads at about 330 metres a.s.l. Also on limestone, Peter Wilde has since reported (15th March 2010) at least ten patches along the exposed bedding planes of the limestone on the N.W.-facing side of Birkrigg, Dalton-in-Furness (SD2874), a welcome south-westerly record and yet another new hectad. Searches I made on 29th January 2010 in the 10 km





square to the south of Stephen Hewitt's record revealed yet another completely new area – and a very different habitat: a single colony was in a near-vertical seepage on southwest-facing rotten rock at Greenside Crag, High Borrow Bridge (NY5504) at about 380 m. altitude. The rocks here are mudstones and siltstones. Accompanying calcicoles included several mosses, the liverwort *Preissia quadrata* and the Yellow Mountain Saxifrage (which appears unrecorded here in the Cumbria *Flora*). Although not a new 10 km square, *P. leucophlebia* also proved to be present in some quantity on riverside mine-spoil deposits, presumably heavy metal-polluted, downstream of one of the mines on the Shield Burn, Hartside (NY684.412) on 22nd February this year – a habitat-type not listed in the above-mentioned account.

*David Clarke, Burnfoot, Cumwhitton, Brampton, CA8 9EX*

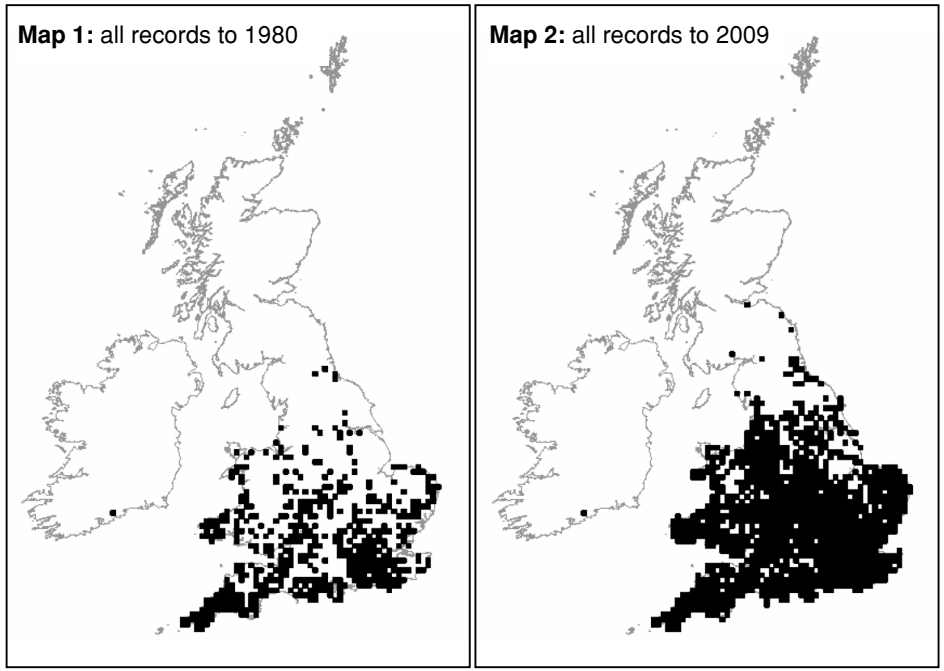
### Notes on Broad-bodied Chasers (*Libellula depressa* L.) in Cumbria

Despite the distinct lack of good 'dragonfly weather' in 2009, that year yielded more Cumbrian records of this species than any year preceding – involving at least seven individuals. This was also the first year as far as I know in which multiple individuals occurred at the same site at the same time. This looks slightly more impressive when viewed in the context of the past 10 years (i.e. 2000 to 2009 inclusive), in which there have probably been under twenty individuals recorded in total. Only one other year (2006) seems to have produced more than one record. The sex of individuals involved is not always recorded, but neither seems to have been preponderant. Several individuals were photographed, a testament to the species' approachability.

Most Broad–bodied Chasers seem to have occurred transiently, the insects rapidly disappearing, sometimes within an hour or so or less, suggesting migratory behaviour. This was the case with the fine mature male seen at Ruckcroft in the Eden Valley (NY54) in late May 2009 (Plate 5). The three seen at Soddy Gap (NY03) also did not linger long, but is the largest number so far to have been seen at once.

The species emerges quite early in the year, and individuals seen within May are likely to have emerged not far away. (Four records have been in mid to late May, others have ranged to 7th August). Mature males with the powder blue abdomens are probably about a week old, having undergone a dramatic change from yellowish immature colouring. Broad-bodied Chasers will show interest in larger garden ponds and tolerate newly created and even bare-margined sites. They could therefore occur almost anywhere in the lowlands, though many Cumbrian records are from sites at or near to the coast.

Distribution of Broad-bodied Chaser *(Libellula depressa)*




The two maps from the NBN Gateway show the UK situation thirty years apart. Map 1 shows records up to 1980, from which it is clear that the species was until then mainly to be found well south of the Humber-Mersey line. The northwards advance is clearly evident from Map 2, which shows the situation in 2009. Apparent 'infilling' of the existing range may reflect greater recording activity, but the coastal areas east and west of the Pennines show more certainly the real gains and the northern edge now seems to lie roughly from Morecambe Bay to Flamborough Head. The species was recorded in S-W Scotland for the first time in 2006. Significantly for Cumbria it is regularly found near its southern border, in north Lancashire, and this will surely be the springboard for more records in the future: in 2009 a male was holding territory and another male and a female present at a pool near Silverdale Golf Course, less than a mile from the county boundary. Along with the Black-tailed Skimmer, it may now perhaps be poised to join the Emperor and Ruddy Darter – two other 'generalist' dragonflies which have established in Cumbria since the mid 1990s.

I am grateful to the following for their records: Mary Broomfield; Trish Chadwick; Mike Gardner; Tony Kendall; Tony Marshall; Colin Raven; John Read; Tristan Reid; Mike Robinson; Alastair Servante; Craig Shaw; Bob Wright. The maps were created interactively from *http://data.nbn.org.uk* in March 2010 and are Crown Copyright.

*David Clarke, Burnfoot, Cumwhitton, Brampton, Cumbria CA8 9EX*





## Opportunistic predation of Schelly (*Coregonus lavaretus* (L.)) by Otters (*Lutra lutra* (L.))

Skelly (now more usually written Schelly) is the Cumbrian name for the Whitefish *(Coregonus lavaretus),* which is also known as the Powan in Scotland or Gwyniad in Wales. The name Skelly is said to derive from the relatively large scales that this fish possesses (Macpherson, 1892), in common with other members of the family Coregonidae. Rather confusingly the presently accepted 'official' common name for the species – Whitefish (chosen to avoid argument between the English, Welsh and Scots over which name to use?) – is also used generically to refer to all coregonid species. There are two other *Coregonus* species found in the British Isles, the Pollan *(C. autumnalis)* of Ireland and the Vendace *(C. albula)* of Derwent Water and Bassenthwaite Lake. However, the population in the latter lake has recently been declared extinct, leaving Derwent Water the only natural Vendace population surviving *in situ* in the UK (Winfield *et al*., 2008).

Coregonids are closely related to the Salmonidae (Trout, Salmon and Charr) and like members of that family they are northern, cold-water, species that are anadromous (migrate to sea) at least in the more northerly parts of their range. All three coregonid species now survive in Britain as isolated, relict populations at the southern margins of their present world range. In Britain, as sea temperatures have risen since the last glacial period, these fish have ceased migrating to sea and now survive in a few well-oxygenated, cold-water lakes. In Cumbria the Schelly occurs in Haweswater, Ullswater, Brotherswater, Red Tarn and, as a conservation measure, has recently been introduced to Small Water and Blea Water using Haweswater stock (Winfield *et al*, 2002). These Cumbrian populations are the only ones in England and, like the Vendace, the Schelly is protected under both UK and European legislation and is a Priority Species of the UK Biodiversity Action Plan. The status of the UK populations of Schelly are assessed as 'inadequate and deteriorating' (JNCC, 2007).

Schelly spend much of their lives in deep water but between late December and early February they gather after dusk in shallows less than 4m deep to spawn over clean gravel (Davies *et al.,* 2004). In former times they were netted in their thousands at spawning time on Ullswater and Haweswater (Macpherson, *op. cit.*). Skelly Nab was a famed location for netting the spawning Schelly on Ullswater.

Schelly do also come inshore at night to feed throughout the year, but these are likely to be 'diluted' individuals and nothing like as abundant as the spawning aggregations (I. Winfield, pers. comm.).

On 1st February this year I visited Skelly Nab, having obtained permission from Outward Bound and the adjacent landowner who own this stretch of the lake shore. I was interested to see if there was any evidence of the spawning Schelly, since in some years examples of these fish can apparently be found washed up on the shore of the lake after January storms (Maitland & Campbell, 1992). This January has not been stormy and I did not find any stranded fish. I was however interested to find signs of intense Otter activity on the point of Nab itself. The area here was heavily trampled by Otters and there were many spraints (50+). These spraints were full of fish bones and scales. There were also many fish scales and one or two pieces of fin scattered in this small area, indicating where fish had been brought ashore to eat. I was immediately struck by the similarity to concentrated seasonal Otter activity and sprainting noted previously at Common Toad spawning sites, when the Otters were implicated in the mass predation of the spawning toads (Duff & Hewitt, 1998). I collected some of the spraints and also some of the scales scattered on the lake shore. Later examination showed the scales in the spraints and on the ground to belong to the same species and they were identifiable as coregonid scales using the key in Maitland (2004).

Otter spraints were also collected on the lake shore around Waterfoot Bay near Pooley Bridge on 7th February. However there was no indication of particularly intense Otter activity. Here four out of the eight spraints found contained Schelly scales, although in small quantities, and there was no evidence of fish having been brought ashore to eat. Whether the Schelly remains in these spraints relate to the feeding area at Skelly Nab, over four kilometres distant, or to a more local area is unclear. Otters will pass remains of prey in spraints as soon as one hour after consumption (Chanin, 1985), but also presumably for some time after that. Whilst feeding Otters do not move far or fast, they are capable of travelling some distance in a few hours and dog Otters can regularly travel up to 10 km overnight (Chanin, *op. cit.*). Investigation of the boundaries of Otter territories on the lake might help establish whether the animal(s) at Pooley Bridge could have been feeding at Skelly Nab.

On 13th February I returned to Skelly Nab and collected *ca.* 50 recent spraints and numerous older ones (Plate 6). Again coregonid scales were apparent within many of the spraints and scales were also aggregated on the ground where fish had been brought ashore to eat. A search of the lake shore for 100 m east of the Nab and around the bay to the west yielded another 90 spraints, although nowhere in the same concentration as on the Nab. Moving east from the Nab the incidence of





loose scales, indicating fish brought ashore, quickly declined and ceased. Around the bay to the west the incidence of loose scales was also much reduced away from the Nab, but clusters occurred sporadically around the whole bay and on one occasion an accumulation of salmonid scales was also found.

It appears that large numbers of Schelly congregating to spawn in the shallow waters off Skelly Nab in January have provided the ever-resourceful Otter with another opportunity to exploit a temporarily abundant food supply. Otters generally hunt in water to a depth of 2 to 4 metres (Chanin, *op. cit.*). This is just the depth at which Winfield *et al.* (1994) caught spawning Schelly in gill nets, and also found their eggs, on the lake bed at Skelly Nab. Otters will eat small prey in the water but bring larger items ashore to consume. Otters favour prominent rocks and promontories as sprainting sites. Personal observations on the Scottish coast indicate that on catching a large prey item an Otter will make for the nearest bit of shore to eat its catch, rather than necessarily making for a preferred feeding area. The fact that Otters were bringing most Schelly ashore to eat at Skelly Nab and that there had been so much Otter activity at this site suggests that this is the closest point of land to the main Schelly spawning grounds. Alternatively, the fact that this is a promontory and such a favoured sprainting site may add to its 'pulling power' to the Otters, accounting for the concentration of feeding signs at this point. Elsewhere around the bay the occasional clusters of Schelly scales on the shore were as often as not found away from sprainting sites, supporting the suggestion that the Otters are bringing the fish to the nearest land rather than to favoured feeding sites. This also supports the theory that the main Schelly spawing ground is off Skelly Nab but that the fish also use the remainder of this shallow bay in lower numbers.

Since it is known that Schelly will come inshore at night to feed throughout the year, further study of spraints around these lakes is planned to determine whether the Otters are truly taking seasonal advantage of dense spawning Schelly shoals. Further survey may also reveal additional foci of Otter predation of Schelly, which may indicate other spawning grounds of the fish. If this should prove to be the case then mapping the occurrence of Otter-predated coregonid scales on the lake shores has the potential to provide new insight on the location of the spawning sites of the endangered Schelly in the Lake District (and possibly for coregonid populations in other lakes, such as the Vendace in Derwent Water).

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## Red Squirrel adenovirus enteritis – a new disease threat to the remaining mainland populations of the Red Squirrel in Cumbria and England?

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**The threatened extirpation of a Red Squirrel metapopulation**

The perceived wisdom is that the significant decline in Red Squirrel (*Sciurus vulgaris*) populations in mainland England and Wales over the last 100 years has been caused by a combination of competition from the introduced Grey Squirrel (*Sciurus carolinensis*) and from the effects of squirrel pox virus (SQPV) infection. Grey Squirrels carry the squirrel pox virus without showing clinical disease and they are almost certainly the source of virus infection for the Red. Studies to see if Greys are infected with the adenovirus are in progress.

Disease modelling work has shown that the rates of replacement of Red Squirrels by Grey Squirrels will be 17–25 times greater when this occurs in the presence of the squirrel pox disease as opposed to areas which do not have the disease. The map (colour section, Plate 8) shows actual diagnosed cases of squirrel pox disease since 1999 as a band of dots across the north of England. We have been very fortunate in that all organisations involved in squirrel pox disease investigation in the UK (University of Liverpool, Veterinary Laboratories Agency Diseases of Wildlife Scheme, University of Edinburgh, Institute of Zoology, Moredun Research Institute, *Save our Squirrels* and the Wildlife Trusts) have contributed the data for this map. The shaded areas are more theoretical but give an up to date indication of where Red, Grey and mixed Red/Grey Squirrel populations occur.

It can be seen that the squirrel pox cases form an epidemic front which is 'rolling' (that is, 'pushed' by the range expansion of the Grey Squirrels) steadily northward over the Penrith/ Carlisle and North England areas, into Scotland. There have now been approximately 40 squirrel pox disease cases in Scotland. To the south of this epidemic front, with the exception of a small, pox-embattled population of Red Squirrels around Sefton near Liverpool, there are no viable populations of Red Squirrels in mainland England. It is important to note that it is increasingly recognised that squirrel pox disease plays a significant role in the replacement of Reds by Greys. It is also interesting to describe what is occurring in England as the extirpation (the extermination, but not to the point of species extinction) of a metapopulation (a numerically large population or populations spread over a wide

geographical area) by an infectious disease. There are many reasons to explain why this occurs with squirrel pox disease; however it is unusual for an infectious disease to be this efficient in population removal. We are not referring to species extinction here, as the Red Squirrel is found throughout mainland Europe and into Asia.

**Red Squirrel adenovirus enteritis**

The VLA Diseases of Wildlife Scheme (VLADoWS) has examined wild Red Squirrels in Cumbria since 1998 and has noted that undiagnosed cases of diarrhoea occur in this species. In 2006, two dead squirrels with diarrhoea from the Penruddock area of Cumbria were examined and found to have adenoviruses in their intestinal contents. In more than half of the subsequently diagnosed cases the animals died before they developed this diarrhoeic staining and in these cases there were no external signs of disease, just an animal found dead. This disease, provisionally known as Red Squirrel adenovirus enteritis, was described by Duff *et al*. (2007).

Since then there have been approximately 25 cases of adenovirus enteritis diagnosed in wild Red Squirrels from central and north Cumbria; however, we consider that the disease has a much wider distribution. Since that time, examinations at VLA have found increasing evidence to support the theory that the virus actually causes specific damage to the intestinal cells.

There have now been four outbreaks of adenovirus enteritis in captive Red Squirrels, each associated with significant mortality in England and Wales. Meanwhile in wild Reds in Cumbria we have identified several cases over a short period of time from the same locality. On this limited basis, and with the evidence from the captive colonies, we believe that local outbreaks of the disease do occur and probably have a negative impact on wild populations, at least over a short period. Red Squirrel adenovirus enteritis is occurring in areas where Red Squirrels are already under threat and so the effect will probably be compounded.

**Red Squirrel conservation initiatives**

In summary, the circumstantial evidence, particularly from captive populations, makes us consider that this disease may be significant in Red Squirrels at least at the local population level. It is highly unlikely to be as devastating as squirrel pox disease but it may be contributing to the decline of the Red Squirrel in Cumbria. This decline is being countered by conservation initiatives. The *Save our Squirrels* project, hosted by the three Wildlife Trusts in Cumbria, Northumberland, and Lancashire & Merseyside, continues to deliver conservation, education and Grey





Squirrel control. This focuses on the Red Squirrel Reserves and buffer zones, but also recognises the need for awareness-raising and practical action to safeguard Reds across the wider landscape. There is also a stong community interest in their conservation – which has led to the formation of *Northern Red Squirrels*, an umbrella organisation that helps coordinate local action. The recent creation of the *Red Squirrel Survival Trust*, a grant-making body that aims to help deliver practical conservation, is also a timely boost for the species.

Interest in and awareness of 'Red' and 'Grey' issues in northern England has never been so prominent: this is a real positive factor, bringing ever more evidence to highlight the threats of disease to the long term survival of Red Squirrel populations in our area and the UK generally.

**Wildlife disease surveillance in Great Britain**

The work described is part of a wider context: as a result of the *Defra* (England) Wildlife Health Strategy, wildlife disease surveillance in this country is now the responsibility of the GB Wildlife Disease Surveillance Scheme Partnership (GBWDSSP). The Partnership comprises several of the organisations mentioned above.

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## Some new and notable beetles in Cumbria

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Records of some noteworthy Coleoptera in Cumbria, including eight new to the county, were published recently (Atty, 2009), and others earlier (e.g. Atty, 1996 & 2007). In the last few years I have turned up many other species here which are of local rather than national interest. This article summarises them: there are 53 species in all, of which 17 are new to the county and 11 new to either v.c. 69 or 70, whilst others have not been seen here for a hundred years or so. (References to earlier records by F.H. Day, H. Britten or G.B. Routledge from Cumberland, may generally be found in Day, 1909 *et seq*.)

The grand total of Coleoptera recorded for Cumbria now stands at 2255 species – well over half the British list. I have not quoted any of the national status ratings of uncommon species as I find they hardly apply to our county, near the extremities of both England and Scotland. Few even of the new county species have any rating at all, or at best are *Notable b*, however scarce they may actually be in the north of England. It is difficult to hazard a guess as to whether any of the 'new' species are recent arrivals due to range expansions in a period of climate change, particularly as some are tiny, black and easily overlooked rove-beetles: the long-awaited atlas of their national distribution has yet to appear.

New county records are prefixed with an asterisk (*); records new to one of the two vice-counties are given a plus sign (+). Most of the latter relate to v.c. 69 (Westmorland), for which there are fewer published accounts than for Cumberland, v.c. 70.

***Chlaenius nigricornis*** F. (Carabidae). This metallic-green and coppery ground-beetle had only been seen twice in Cumberland: by Talkin Tarn in 1848 and dead on a pavement at Moresby in 2007 (Read, 2007). One was found in its typical habitat, on the vegetated sandy bank of the R. Greta at Wescoe (NY305.245) on 11.vi.2009.

* ***Hydroglyphus geminus*** F. (Dytiscidae). One example of this small water-beetle in a weedy gravel pool at North Walney NNR (SD1771) on 30.viii.2007 was the first record for Cumbria (v.c. 69). Garth Foster (in litt.) has subsequently reported a second, in a garden pond at High Hay Bridge, also v.c. 69 (SD3387) on 26.iv.2008. This species has been expanding northwards in recent years.

\+ ***Helophorus arvernicus*** Muls. (Hydrophilidae). There are many records of this sluggish scavenger water-beetle for Cumberland, but one in refuse by the River Rothay at Waterhead (SD3703) on 2.iv.2009 is apparently the first for v.c. 69.



***Hister neglectus*** Germar (Histeridae). This genus of round shiny black beetles usually occurs in dung or carrion. There were a few old records for Cumbria for this species, before two flying in my garden at Beckhouse (NY165.289) on 23.iv.2000 and 1.v.2000.

\+ ***Ptinella cavelli*** Broun (Ptiliidae). A family of tiny beetles (mostly 0.5 to 0.9 mm long) avoided by most coleopterists except Colin Johnson, the international authority. He described this New Zealand species in 1975, with records from England (mainly northern) and up into Scotland. It is yellow, parthenogenetic and easily distinguished by its "great size" – up to 1.33 mm! Recorded by Keith Alexander at Rydal and Claife (v.c. 69) in 1989-90, I found it (but unconfirmed) near Ambleside in 1999, and more recently new to Cumberland: four under fungoid bark of felled Scots pine at High Abbey, Embleton (NY1729) on 4.iii.2008; two under tight bark of a beech log in Castlehead Wood (NY2722) on 9.iii.08; and two under tight bark of a large oak log at Long How, Buttermere, (NY1717) on 22.iv.2008.

*+ ***Ptinella errabunda*** Johnson. Another immigrant species, but now by far the commonest *Ptinella* in the whole country. Two under tight moist bark of an oak log in Castlehead Wood (NY2722) on 30.vii.2008, were the first record for Cumberland, and one similarly in a birch log in Stockghyll Park (NY3804) on 17.viii.08 the first for v.c. 69. I had searched, sporadically, for this genus for many years, in vain. Perhaps these records were a happy consequence of my post-cataract implant in 2007!

\+ ***Anisotoma orbicularis*** Hbst. (Leiodidae). A small shiny black fungus-beetle. Two under bark of a blasted *Sequoiadendron* trunk, near *Phaeolus* fungus, at Loughrigg Brow, Ambleside (NY3604) on 16.viii.2008 provided the first record for v.c. 69.

***Choleva oblonga*** Latr. (Leiodidae). These elongate beetles are found in nests of rabbits and moles, so are rarely encountered. Previously recorded by Britten at Great Salkeld in 1903-1907. I found a female in a mossy bank, near a rabbit hole in Edwards' Wood, Ling Fell (NY1729) on 25.ii.2009.

***Coryphium angusticolle*** Steph. (Staphylinidae – as are the following 30 species). A rove-beetle living under bark, with four modern records in Cumberland. One in a Scots Pine stump on Whitbarrow (SD4485) on 25.viii.2009 was only the second for v.c. 69.

***Hadrognathus longipalpus*** Muls. This distinctive species was recorded for the first time in Britain in 1987, at Clints Quarry. Later inland records were listed by Atty (2009). Since that publication I have found it again: in dry moss under heather with no trees anywhere near, at 1000 ft on Ling Fell (NY176.288) on 12.v.2009. Though not far from the Beckhouse site, this upland locality reinforces my suspicion that the species (montane in Europe) was established in Cumbria before it spread down to the Egremont area.

* ***Acrulia inflata*** Gyll. A small bark-beetle which is widespread in Britain, as far north as Inverness-shire, but had not been recorded in Cumbria until 26 viii.2009, when I found one on a small fungus on a wet log in Crag Wood, Meathop (SD457.806).

* ***Proteinus laevigatus*** Hochhuth (= *macropterus* Gyll.). Several species of this genus are often abundant in rotting fungi, but *laevigatus* prefers other material. Two at Beckhouse

were the first for Cumbria: one in mouldy silage bales in an orchard on 10.xi.2007, another in a rotten turnip on 27.xi.09.

***Mycetoporus punctus*** Gyll. 11 species of these carrot-shaped rove-beetles occur in Cumbria in various habitats, none of them are common. One swept off pignuts *(Conopodium majus)* by a pond at Beckhouse on 3.vi.2009 is only the second for Cumberland since *ca*. 1910.

***Habrocerus capillaricornis*** Gr. As its name suggests, this small species has distinctively thin antennae with long setae on the joints. It is usually found in leaf-litter, especially beech. One in moss on the open summit of Castle Head, Keswick (NY2622), but just above the beech wood, on 18.iii.2008 was the first for Cumberland since *ca*. 1910, though recorded twice in v.c. 69 – in 1971 and 1982.

***Aleochara brevipennis*** Gr. A large genus of medium-sized rove-beetles, unusual for beetles in that their larvae are semi-parasitic on fly puparia, usually in dung or carrion. This species is scattered throughout Britain in marshy places or riversides. One in deep moss on a rock in Edwards' Wood, Ling Fell (NY1729) on 15.ix.2009 is the only record for Cumbria apart from Day's singleton in 1908. In recent years it has been most frequently encountered on upland moorland in Scotland and northern England (Welch, 1997).

***Aleochara moerens*** Gyll. A female in the rotten stem of a large agaric fungus in pasture on Ling Fell (NY1728) on 19.x.1997 is the only Cumbrian record since Britten's two in an agaric in 1907.

***Atheta pilicornis*** Th. A small, chiefly subcortical, member of this huge genus, now subdivided. There are five old records in Day *(op. cit.)* for Cumberland, before mine from a rotten birch log in Powterhow Wood (NY2226) on 16.iii.2009.

\+ ***Atheta (Dimetrota) setiqera*** Sharp. Another small black rove-beetle, widely distributed and not uncommon in dung. Rather surprisingly, one in sheep dung on Latrigg (NY2724) on 11.vi.2009 was the first record for Cumberland, with one for Moor House in 1985 being the only one for v.c. 69.

\+ ***Atheta (Microdota) amicula*** Steph. Yet another small black species. There are numerous records, old and recent, usually from grass-heaps, from Cumberland, but two in a fallen fungus, *Phaeolus schweinitzii*, in a woodland on Loughrigg Brow (SD3604) on 2.iv.2009 are apparently the first for v.c. 69.

* ***Atheta (Philhyqra) hyqrobia*** Thoms. As the name suggests, this large subgenus likes damp places. A female in *Sphagnum* by a tarn at 2250 ft on Grey Knotts (NY2112) on 12.x.2009 is the first record for Cumbria.

***Atheta (Traumoecia) picipes*** Th. A male under firm bark of a large beech log in Castlehead Wood (NY2722) on 9.iii.2008 is the only record for Cumbria apart from that of Britten in a beech stump at Great Salkeld in 1909.

* ***Leptusa pulchella*** *Mann.* An uncommon, small, reddish rove-beetle, living under bark. One in a small felled larch log at Sosgill (NY3120) on 17.iv.2009 is the first record for Cumbria.





***Encephalus complicans*** West. Not a rare species but hard to find as it is only 2 mm long and rolls itself up into a tight seed-like ball when disturbed. There are a few old records (up to 1915, 1960), so I was pleased to extract one from moss on a rock in Edwards' Wood on 4.xi.2007.

* ***Oligota parva*** Kr. This genus of tiny rove-beetles is mostly found in vegetable refuse. *O. parva* is 0.7-0.9 mm long, black and yellow, and well established in warm mouldy layers of my grass-heap at Beckhouse (three on 19.vii.2008), and also occurs in the large heaps in Embleton churchyard (NY1629).

* ***Oligota punctulata*** Heer is larger than the last (1-1.2 mm). One in a dry layer of a grass-heap at Beckhouse on 28.vi.2009 was another first for Cumbria. It prefers fairly dry conditions and is, or was, commoner in the south of England, though recorded from the Isle of Man in 1969.

***Oxypoda annularis*** Mann. An uncommon but widespread (to Inverness and Raasay) species with a few old records in Cumberland and one at Hutton Roof Crags in 2001 (Liverpool Museum). I found one dead in leaf litter at Rydal Park (NY3606) on 9.xi.2006 and one off a *Russula* mushroom in a hedgerow at Beckhouse on 1.xi.2008.

* ***Oxypoda nigricornis*** Mots. First recognised as a British species distinct from *O. opaca* by Colin Johnson in 1968, and expected to be probably widespread in northern mountains, especially the high Pennines, in dung. It is now recorded from Derbyshire, Cheshire, Yorkshire and Inverness-shire. I was pleased to find one in *Sphagnum* by a runnel amongst sheep, at 1200ft below Skiddaw, on Doups (NY2526) on 23.iii.2007.

***Oxypoda tirolensis*** Gred. A montane species, recorded on Skiddaw and Scafell by Day, and at Moor House in 1984. On a cold and misty summer day, 24.vi.2003, it was the only beetle I could find at 2600ft on Broad End, Skiddaw (NY261.301) – two examples under stones on scree. In the same area on 13.viii.2009 there were only the commoner species there. Perhaps not cold enough for it on that occasion?

***Placusa depressa*** Maek. A small dark beetle, a predator of scolytid bark-beetles in northern conifer woods in England and Scotland, with a few records around Carlisle and Salkeld in 1900 to 1906 (its larvae may be fungivorous). I found one under bark of a large beech log by conifer plantations near Thirlmere dam (NY3018) on 16.v.2008.

\+ ***Stenus ochropus*** Kies. Most beetles of this large, huge-eyed genus are found in damp places, but this is a species of calcareous grassland. Routledge's at Tarn Lodge (as *erichsoni*) is the only record for Cumberland, apart from a dubious early 19th century one. I swept a single example in Latterbarrow NR (SD4482) on 24.viii.2009, the first record for v.c. 69.

\+ ***Medon brunneus*** Er. Crowson's singleton in oak litter at Roudsea Wood in 1971 is the only previous record in Cumbria. One in ground moss under rowan at Beckhouse on 21.ix.2008 is the first for Cumberland.

****Sunius propinquus*** Bris. Closely related to the last species, and in similar habitats; one in moss under pines and oak in Skelghyll Wood (NY3803), in v.c. 69, on 23.ix.2008 is the

first record for Cumbria.

***Erichsonius cinerascens*** Gr. A larger (5 mm!) species of wet places, with several records in Cumberland by Day and Britten, and once in v.c. 69 in 2000. I found one in *Sphagnum* at 1330ft by The Bog, Wyth Burn (NY3011) on 2.iii.2007.

* ***Philonthus atratus*** Gr. An uncommon, 8 mm long, species with greenish elytra, of wet places in England and Wales (up to S.E. Yorkshire). One in damp flood refuse on the shore of Derwentwater at The Isthmus (NY2622) on 17.iv.2008 is the only record for Cumbria.

***Heterothops praevius*** Er. Britten's 'nice series' amongst decaying straw in a cowshed at Salkeld in April 1906 was, rather surprisingly, the only record for Cumbria until it turned up in an old silage bale at Beckhouse on 29.iii.2008. Oddly, the same bale later had four examples on 31.x.09, and two more on 23.xi.09, whereas numerous bales nearby contained none.

* ***Heterothops minutus*** Woll. Closely related to the previous species and likewise found in haystacks, this 5 mm rove-beetle is not uncommon in the Midlands, with an isolated record in Scotland. It was formerly known as *H. dissimilis* but that is actually a much rarer species of southern England. One in a large old grass-heap in Embleton churchyard (NY1629) on 13.iii.10 is new to Cumbria.

* ***Staphylinus (Tasgius) winkleri*** Bern. The large black rove-beetle *Staphylinus globulifer* (now called *melanarius*) was split into three species in 1930, and re-described in detail by Steel (1948). At 17 mm, *S. winkleri* is much the largest rove-beetle in this article, widely distributed in Britain and not uncommon in the Midlands. In Cumbria, however, it is much rarer than *S. melanarius* (which I have seen here fifteen times since 1989), the first and only record being a male under the bark of a conifer (? *Thuja*) log on Penrith Beacon (NY5231) on 27.vii.1996.

***Brachygluta haematica*** Leach. Bold's 'banks of Irthing' was the only record of this 2 mm long entirely red species until I found one in moss under Heather at the edge of Wythop Moss (NY1828) on 9.ii.2009.

* ***Euplectus signatus*** Reich. A species of manure heaps, and also ants' nests; at 1.3 mm rather smaller than its much commoner congener *E. sanguineus* in such places. One in a hot grass-heap at Beckhouse on 28.vi.2009 is the first for Cumbria.

***Aphodius plagiatus*** L. (Scarabaeidae). This uncommon dung-beetle is restricted to coastal dunes in England and Ireland. John Read's Drigg record from 1992 is the only one from Cumberland, with two earlier in v.c. 69 – at Walney and Sandscale Haws *ca.* 1960. I found one dead in tidal refuse on the sandy shore of North Walney NNR (SD1773) on 30.viii.2007.

***Necrobia violacea*** L. (Cleridae). This greenish-blue species is nowadays much the commonest of the three carrion-beetles in the genus, but to find more than 40 together in old silage bales at Beckhouse on 25.ii.2007 was rather surprising. There were probably some sheep bones in the heap.





***Glischrochilus quadripunctatus*** L. (Nitidulidae). Black with four yellowish marks, this scarce species feeds on anamorphic fungi under conifer bark, in northern England and Scotland. I first encountered it in a *Sequoiadendron* log at Tulloch, Inverness-shire, on 18.vi.2009. Apart from a record for Scaleby Moss in 1988, one under tight thick bark of a felled conifer log (? Douglas fir) at Ladies Table in Wythop Woods (NY2128) on 6.ii.2010 is the only recent record for Cumbria.

***Mycetaea hirta*** Marsh. (Endomychidae). A tiny 1.5 mm yellow beetle with long pubescence; it feeds on moulds, fungoid wood such as dry rot in floorboards, old nests, haystacks and manure-heaps. It was known to the Victorians as 'Tippling Tommy' because its larvae bored through wine-corks. Day gives several records from haystacks, up to 1928. More recently, I have found it in exceptionally large numbers in old silage bales and one large old churchyard grass-heap at Beckhouse contained 28 on 23.vi.2008 and at least 50 on 9.i.2009.

* ***Sericoderus lateralis*** Gyll. (Corylophidae). A distinctively-shaped reddish species, only 1 mm long, which feeds on small fungi in mouldy vegetable refuse. One in moss at the base of a birch tree in woodland below The Bishop, Thornthwaite (NY2126) on 2.xi.2008 was the first seen in Cumbria.

* ***Enicmus rugosus*** Hbst. (Lathridiidae). This rare 1.7 mm long black species lives in fungi on trees. Two in *Lenzites betulina* in carr at Newton Reigny Moss (NY4730) on 20.ix.2005 provide the only record for Cumbria.

* ***Cis vestitus*** Mell. (Cisidae) All members of this family feed on fungi on old wood. This rarish species is found in southern England and the Midlands, usually on oaks and more recently in northern Scotland on pines. A male under bark of a fallen oak bough in Ivy Crag Wood NR (NY2426) on 28.iv.2009 is a first for Cumbria.

\+ ***Phaleria cadaverina*** F. (Tenebrionidae). A colourful (yellow with black marks) and larger (7 mm) species, frequently recorded in small numbers along the Cumberland coast, especially at Drigg and also Seascale and Ravenglass, where it lives mainly on carrion. I found 25 together under dry seaweed at Drigg Point (SD0795) on 2.ix.1993. A singleton under tidal refuse at high water mark on North Walney NNR (SD1773) on 30.viii.2007 may be a new record for v.c. 69.

\+ ***Aromia moschata*** L. (Cerambycidae), the Musk Beetle. Metallic green and up to 30 mm long, this species was only seen in Cumberland at Keswick in 1898 and Portinscale in 1906. I noted four large 'Longhorn' larvae under willow bark by R. Rothay at Waterhead (SD3703), the typical habitat for the species, on 2.iv.2009, but no adults were to be seen in the area that summer. If my suspicions are correct, this would be a new vice-county for this beautiful beetle.

\+ ***Psylliodes chrysocephala*** L. (Chrysomelidae). A blue-green flea-beetle which feeds on the leaves of wild or cultivated members of the cabbage family *(Brassicaceae)*. There are several records, old and recent, for Cumberland, usually on the coast, but four swept on Biggar Bank, Walney (SD1866) on 31.viii.2007 were the first for v.c. 69.

***Lema puncticollis*** Curt. (Chrysomelidae). This bright blue thistle-feeder is larger than its much commoner congener *L. lichenis* (the names have been much confused). The only records we have are one at Rusland Moss on 31.v.1971 (J.Thomas) and one at Strudda Bank, 21.viii.2004 (Read, 2005). It was common enough in Gloucestershire when I lived there, but I was pleased to find one at last on Creeping Thistle *(Cirsium arvense)* in my garden at Beckhouse on 17.ix.2009, the second record for Cumberland.

***Euophryum confine*** Broun (Curculionidae). This weevil from New Zealand became established in England *ca*. 1946 and is now found everywhere in damp rotten wood, at first indoors and later in the open. There are indoor records for Carlisle, Hensingham and Beckhouse, and last year I came across it in woodland away from any habitation: three in dry white wood of a dead birch trunk in Powterhow Wood (NY2226) on 16.iii.2009, and two under a small rotten flake in Ivy Crag Wood NR (NY2426) on 28.iv.2009.

***Ips acuminatus*** Gyll. (Scolytidae). Day says this was locally common under 'pine' bark, up to 1945. The only later record seems to be a dead one under bark of a conifer (? larch) log in a plantation near Thornthwaite (NY2125) on 12.iii.2009.

***Trypodendron signatum*** F. (Scolytidae). I listed the four Cumbrian occurrences (three in v.c. 69 and one in v.c. 70) of this rare bark-beetle from 1964 to 2006 (Atty, 2007). Unusually large numbers in beech logs in Castlehead Wood (NY2722) provided a second record for Cumberland: at least 30 around a white fungus in one, five and four elsewhere, on 18.iii.2008.

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### The Carlisle Naturalist

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### Information for Authors

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

Material should be clearly legible – if type-written, then double-spaced on one side of white A4 paper. Material by post should be sent to David Clarke, Burnfoot, Cumwhitton, Brampton, Cumbria CA8 9EX.

Computer files should be in rich text format or Microsoft Word and e-mailed to david.clarke19@virgin.net, or submitted on CD/DVD accompanied by a paper copy. Authority names should be given in full.

References should be given in full at the end of the article or note.

Illustrations should be in black ink; they must be originals and not photocopies. Whilst every care will be taken of original artwork, the editor can not be held responsible for any loss or damage.

Authors of papers two or more pages in length will be provided with 10 reprints. Papers may be submitted to a referee.

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

Standard abbreviations used in this issue:

NR: Nature Reserve; NNR: National Nature Reserve

For Conservation status definitions (e.g. Nationally Scarce, etc) consult: *www.jncc.gov.uk/species/Species_Status_Assessment/hierarchyoflists.htm*

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### Summer Field Meetings and Workshops 2010

(Saturdays, except where stated. Depart from Carlisle College, Victoria Place, Carlisle.)

**14th May (Friday evening): Greystoke Forest, bat boxes**
Leader: Robin Hodgson. Depart 7.00pm. Meet by road at end of forest track south of Millfield Lodge (NY382338) at 7.30pm.

**22nd May: Gait Barrows NNR, butterflies**
Leader: Steve Doyle. Depart 9.00am. Meet Gait Barrows NNR car park (SD478775) at 10.30am.

**5th June: Nenthead/Alston: mine-dump flowers**
Leaders: Jeremy Roberts & David Clarke. Depart 9.30am. Meet Nenthead Mine car park (NY781436) at 10.30am.

**19th June: Borrowdale woods**
Leaders: Maurice Pankhurst (David Clarke & Stephen Hewitt). Depart 9.30am. Meet Great Wood car park (NY271214) at 10.30am.

**26th June: St. Bees Head, seabirds etc**
Leader: Stephen Hewitt. Depart 9.30am. Meet Tarnflat Hall (NX948145) at 10.30am.

**17th July: South Lakes, dragonflies etc**
Leader: David Clarke. Depart 9.30am. Meet at Hodge Close (NY317018) (free parking) at 11.00am. Check weather prospects with David (01228-560117) on Friday evening if in doubt.

**23rd July (Friday evening): Fingland Rigg NNR, Purple Hairstreak butterflies**
Leader: Anne Abbs. Depart 6.30pm. Meet Fingland Rigg NNR (NY281571) at 7.00pm.

**14th August: Watchtree Nature Reserve**
Leader: Frank Mawby. Depart 9.30am. Meet at Watchtree (NY303539) at 10.00am.

**20th August (Friday evening): Moth evening at Wan Fell**
Leader: Mike Clementson. Depart 8.15pm. Meet at entrance to Brownrigg Quarry (NY515373) at 8.45pm.

**Website: www.carlislenats.org.uk**