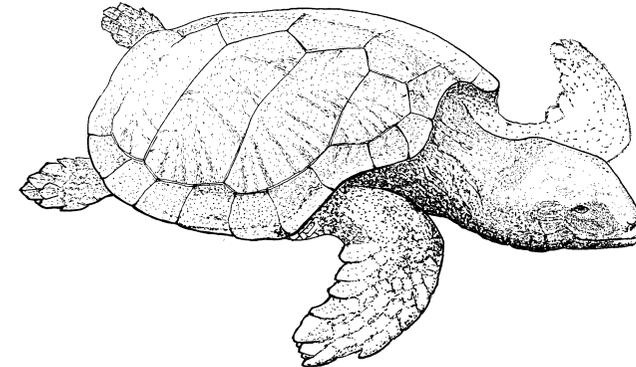

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Loggerhead Turtle, juvenile

(David Clarke; based on Solway specimen)

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From the Editor

This issue has enabled us to catch up on contributions submitted last year, as well as including more recent news. Hopefully the coming season will be a significant improvement on 2008 and will stimulate new articles and observations for inclusion in the autumn issue. As ever, we are always pleased to welcome 'first-time' contributions or to discuss these with anyone who is uncertain about whether to submit something.

David Clarke

Society News

We are delighted to welcome Russell Gomm and Robin Hodgson as new members of the Society's Council, bringing us up to full strength once more. In addition, Tristan Reid has been co-opted to help us develop our website, which will enable a major step forward in promoting our activities and developing membership.

Additions to the Society's Library:

The Glasgow Naturalist, **25** (2): exchange from Glasgow Natural History Society, *Journal of Bryology*, **20** (1998) — **29** (2007): given by Peter Harris.

Museum News

On advice from a recent review of the Natural Sciences collections, Tullie House has submitted an application to the Museums Libraries & Archives Council for these collections to receive Designated status. Designation is recognition of the national importance of collections in non-National museums, and is limited to a select few. Cumbria is arguably one of the most important and diverse areas for wildlife and landscapes in the UK, and our application is built around the quality and continuity of the unique record of its wildlife and geology that the museum's collections represent. Local naturalists and Society members have made a large contribution to this state of affairs over many years. While it is by no means certain that the Tullie House collections will receive this important accolade, the mere fact that we have been allowed to apply indicates that we are considered a serious contender. The outcome will be known by July and will certainly be reported in the next issue.

Workshops and Field Meetings

27th September: Wood-decaying Fungi Workshop

Leader: Paul Nichol

Seventeen people attended the workshop. Paul began the 'classroom' session in the Museum with a presentation introducing fungi in general and lignicolous, or wood-decaying, fungi in particular. Fungi are now recognised as forming their own kingdom in the taxonomic classification system. They are split into micro-fungi – moulds, smuts and rusts etc. and the macro-fungi – mushrooms and toadstools. There are some 3,500 species of macro-fungi presently recognised in the UK. Macro-fungi can be further divided into three broad groups: the lignicoles – living on dead wood, terrestrial – living freely in the soil and mycorrhizal – living in close, mutual association with the roots of woody plants. Mushrooms and toadstools are fruit-bodies developed by the mycelium – the main mass of the fungus consisting of thread-like hyphae that form an extensive network through the substrate.

Fungi are a very important component of ecosystems, performing a vital role in recycling nutrients. There are two types of wood-rotting fungi – white rot fungi which decay both the cellulose and the lignin in wood to leave a soft white pulp; and red rot (or brown rot) fungi which decay only the cellulose and leave a blocky mass of red-brown cubic fragments. Very few lignicolous fungi are parasitic and although fruiting brackets may appear on living trees, the mycelium will generally be developing in the dead heartwood of the tree and so are actually saprotrophic (feeding on dead matter). Indeed, by removing the weight of the dead wood and recycling the nutrients, these fungi are probably very important in extending the life of the tree into maturity. Such veteran trees with dead wood and associated fungi are a very important habitat for many rare and specialised invertebrates. There are a few parasitic species, such as Honey Fungus (*Armillaria mellea*) which attacks a wide variety of trees and shrubs, Root Rot (*Heterobasidion annosum*) and Dyer's Mazegill (*Phaeolus schweintzii*) which develop brackets just above ground on the roots of coniferous trees, and Shaggy Bracket (*Inonotus hispidus*), which attacks Ash and other deciduous trees.

Paul showed pictures and passed around dried specimens of a number of lignicolous fungi. Some species can be identified by their mycelium alone, such as Green Elfcup (*Chlorociboria aeruginascens*) which stains dead wood green. The black, bootlace-like cords (rhizomorphs) of Honey Fungus under the bark of dead wood are also distinctive. Spalted Beech or Ash, prized by wood turners, has black lines through the grain caused by the mycelium of saprotrophic species such as Candlesnuff Fungus (*Xylaria hypoxylon*). Most species however can only be identified physically by their fruit-bodies.

Among the samples discussed were Beefsteak Fungus (*Fistulina hepatica*),

which breaks down the dead heartwood of oak and also Sweet Chestnut. It is one of the few species able to tolerate the tannins and acids in oak wood. Hoof Fungus (*Fomes fomentarius*) is an interesting species that is restricted to birch in northern Britain, but occurs on Beech and birch in southern Britain and is restricted to Beech further south in continental Europe. This species was first reported in Cumbria as recently as 1978 when it was found on birch at High Stand by W.F. (Bill) Davidson. Since then it has been found fairly widely on birch but also occasionally on Beech in Cumbria. The Birch Polypore (*Piptoporus betulina*) is the common creamy-white bracket on birch. It has a leathery texture and was once used to sharpen blades, providing it with the alternative name of Razorstrop Fungus. Pieces of this fungus were found on the person of the 5,300-year-old 'Ice Man' found in the Alps in 1991. Chicken-of-the-Woods (*Laetiporus sulphureus*) grows particularly on oak and willow as well as Yew and produces bright yellow brackets in late summer. Although considered good to eat when fresh it can cause stomach upset in around 10% of diners and should not be collected for the pot off Yew as it could accumulate toxins from that tree.

After breaking for lunch the party reconvened at Fingland Rigg NNR to hunt for fungi in the 'wild'. Over 50 species were identified including many woodland mycorrhizal toadstools as well as lignicolous fungi. Among the bracket fungi on dead wood were Birch Polypore, small brackets of Bitter Bracket (*Postia stiptica*) and Purplepore Bracket (*Trichaptum abietinum*) on fallen conifer branches, Blushing Bracket (*Daedaleopsis confragosa*) whose pores turn pink on bruising and the concentrically-patterned Turkeytail or Many-zoned Polypore (*Trametes versicolor*). Other lignicolous fungi included clusters of yellow Sulphur Tuft (*Hypholoma fasciculare*), black boot-lace rhizomorphs and golden fruit-bodies of Honey Fungus, as well as cinnamon-coloured clusters of Velvet Toughshank (*Kuehneromyces mutabilis*) on stumps. Brown Rollrim (*Paxillus involutus*) and Stinkhorn (*Phallus impudicus*), both of which grow on buried dead wood were among the many other species also seen.

Our heads spinning with many new names and much new information, this very useful and enjoyable day was concluded around 4.30.

Stephen Hewitt

11th October: Martindale

Leader: Geoff Horne

Blessed with a delightful warm and dry day in a spell of generally cold and wet weather, an excellent attendance of 30 old and new members and friends – including many first- and some second-year Newton Rigg students – set off up Martindale from the Old Church along the road to Bannerdale for what has

become our 'annual' trip to see the Red Deer rut.

Most frustratingly, when we reached the track-end in Bannerdale, we found two hikers crossing the valley-bottom in the very areas where we usually hope to see the best herds and most activity from the stags. Although several small herds of deer were visible up the valley-sides, there seemed to be fewer than in past years, and we were unsure whether they had simply moved up and out of the valley with the disturbance, or were indeed in smaller numbers. There were plenty of signs of activity, with many muddy wallows where the stags enjoy making themselves filthy to attract the hinds, but there was much less 'belling' (or roaring) than we are used to, and that only distantly, and further up the valley.

Luckily there were good views of deer to be had more closely on the slopes above us on the walk to and from the viewpoint, mainly hinds and young in small family groups, often quite well-camouflaged in the bracken until they moved, but then showing well through our telescopes. One or two stags with fine 'heads' of antlers showed picturesquely on the skyline, with their harems.

Geoff pointed out a nest of Raven and nest-ledge of Peregrine on one set of cliffs, but neither bird was seen. Kestrels and Buzzards showed well at times, the latter including a bird of the year which was squalling noisily, apparently still in hope of a free meal from its parents.

There was rather a dearth of other birdlife. We usually expect to see those winter thrushes, Redwings and Fieldfares, at this stage of the autumn, but not this year.

However, there were a few pairs and singles of Stonechats along the walltops and fences, and loosely associating with one pair was perhaps the most interesting observation of the day, a Black Redstart, a rare passage-migrant or winter visitor to the county, with – for instance – only two records for 2007 mentioned in *Birds and Wildlife in Cumbria*. This bird was in smoky-grey female or immature plumage, and so not very striking, but its rufous tail, constantly 'shivered' up-and-down, showed as a flash of colour against the sombre grey stones and brown-green rushes.

Stephen Hewitt identified several types of waxcap fungi in the grassy verges and short turf: Scarlet (*Hygrocybe coccinea*), Snowy (*H. virginea*), Heath (*H. laeta*), Blackening (*H. conica*), Butter (*H. ceracea*), and Parrot (*H. psittacina*) Waxcaps.

A very rotten stump, too far rotted to identify the species, had, besides a mass of honey-fungus (*Armillaria mellea*), a fine show of the semi-circular white 'brackets' of the laughably-named 'Lumpy Bracket' (*Trametes gibbosa*), and the splendidly-named Dead Man's Fingers (*Xylaria polymorpha*).

Stephen also showed us Scarlet Caterpillarclub (*Cordyceps militaris*), a club-shaped fungus, the spores of which attack caterpillars or pupae underground, and eventually kill and consume them.

With grateful thanks to Geoff for leading yet again, and for arranging such benign weather for the day.

Jeremy Roberts

7th February: 'Wild Goose chase', Solway and Loch Ken Leader: Geoff Horne

The Society's trip to southern Scotland was a great success. Nine members, one junior and one dog turned up along the way. We started at Newbie where the high tide roost showed a spectacular mix of Oystercatcher, Bar-tailed Godwit, Knot, Dunlin, Redshank, Curlew, Turnstone and Lapwing. An immature male Peregrine flew over the roost without flushing the birds, only for a local birdwatcher to walk up the beach to do the job himself. When asked why he wanted to flush the roost he replied that he had the right to walk up the beach and carried on towards the Point, flushing the remainder of the birds!

We carried on to Cummertrees Loop where we added Pink-footed Geese, and Golden Plover with the other mixed waders. The finch flock at Priestside had grown to around 700 birds with Chaffinch being predominant, but Tree Sparrow, Dunnock, Yellowhammer, Reed Bunting and Greenfinch were all present. An adult female Sparrowhawk was 'hedge hopping' down the road, stopping to look back at us – as Kestrels also do. Fieldfares were in many fields along the way with Barnacle Geese behind the farm, dropping out of view. A flock of 200+ Skylarks was an amazing find here. 80+ Whooper Swans were in fields by Ruthwell.

We carried on to Caerlaverock Castle, where around 2000 Barnacle Geese were found below the castle and a further 1000 above the road along with about 200 Pink-feet. Latonside held 200+ Shelduck but there was no sign of the reported Little Egret, perhaps because the tide had now moved out. At Glencaple there were 4 Roe Deer and distant Barnacle Geese; Wigeon and Goldeneye were on the River Nith.

We drove on through Dumfries to Auchenreoch for a lunch-break. Despite much ice, there were many Tufted Duck and Goldeneye on patches of open water. We carried on to the Bridge of Dee and took the minor road along the river, but there icy conditions were keeping birds away: Fieldfares again and several Grey Herons, but no harriers. Turning towards Loch Ken brought our first Red Kite. Using the numerous lay-bys we managed views of Pintail, Wigeon, Teal and Goosander on the loch. Two dog Otters were fighting furiously by a reed bed, giving great views until the loser 'porpoised' away with the winner in pursuit. Greylag, Canada and Greenland White-fronted Geese were added, along with Raven.

Returning via the Kite feeding station at Belymack, we had excellent views of some twenty Kites. Milton Loch held Pochard, and Long-tailed Tits in the trees, but then it was time to head for Gretna, where at least ten cars were present with many people (as well as us) watching the now famous Starling roost.

The day had produced 75 species of birds, and more. The highlights could have been the Otters, or the Red Kites or the Starlings, but then there were all the amazing locations we visited, the sheer numbers of birds and the good company we kept.

John Miles

14th February: Siddick Pond and area Leaders: Roy Atkins and Geoff Naylor

Siddick Pond was a good start to the day with an astounding forty Goosander present. These birds are always a nice sight, but to see so many was a real treat. We also noted two Pochard, a vocalising Water Rail, good numbers of Teal, and singles of Reed Bunting and Goldcrest, with a nice selection of the commoner species of gull all putting in an appearance. A Grey Heron also gave us good views on the edge of one of the pools.

Next we made our way to Workington Harbour. Here we had nice views of Purple Sandpipers. Roy managed to pick them out despite their effective camouflage against the rocks on the break-water. The sandpipers made frequent flights from the breakwater as the tide rose; we counted a minimum of 30 birds. Offshore, we located three Red-throated Divers and several Guillemots. Rock Pipits were also in evidence on the shoreline. There was also a good selection of gull species, including a rather early adult Lesser Black-backed Gull returning from its wintering grounds in the south.

We had a brief look at Maryport, but could not locate the long-staying Iceland Gull, so made our way to Silloth for lunch. There was a good selection of gulls off the lifeboat station, but no sign of the previous day's Iceland Gull here either.

We finished the day at Grune Point, which was bustling with bird activity. Both Red-breasted Mergansers and Greater Scaup were showing very well in the channel. There was also a single Tufted Duck amongst the Scaup.

The immature male and female Long-tailed Ducks that had been present most of the winter were showing nicely on the outer edge of the channel. There was a good selection of waders present, including Bar-tailed Godwit, Greenshank, Redshank, Curlew, Dunlin, Knot, Turnstone, Ringed Plover, Golden and Grey Plover. Local birder Phil Evans was on site and he told us of three wintering Little Stints, of which we later got nice views. Although Little Stint occur annually as a passage migrant in this area, winter records are very rare. Phil also kindly alerted

us of the presence of the wintering Snow Bunting. This delightful first-winter male gave us all superb views.

A huge gathering of Pink-footed Geese and Barnacle Geese over Skinburness Marsh was an atmospheric end to what had been a really exciting day.

Tristan Reid

Recent Reports

These notes are based mainly on members' record cards received during the period October 2008 to March 2009. Judging by the number of cards received, there was a lot of interest during this period, but mainly restricted to birds. Winter weather reversed recent trends, with longish periods of frosts, and snow-lie in the hills, and was the coldest nationally for at least eighteen years.

In general, there seemed to be increased reports of garden sightings of three species, not all of which have been regular garden visitors in recent times – namely **Siskin** (often seen), and **Redpoll** and **Long-tailed Tit** (neither frequent). Perhaps the most notable of these were 25 **Long-tailed Tits** caught and ringed at Broadwath on 6th January (R Shaw) and a flock of 39 on Warwick Road on 4th February (R Hodgson): the 9 together on my peanut feeder on 14th December seemed remarkable to me at the time! A more remarkable garden observation was a total of 14 **Reed Buntings** in a Heads Nook garden on 22nd February (A Armsby).

Away from gardens, it was a very poor season for **Brambling** with only 3 records, but some consolation was provided by **Waxwings**. There were many reports of this irregular winter migrant in mid-November to early December 2008 and two in February 2009 – some flocks being quite sizeable. These included (larger numbers shown in brackets): 15th November, Carlisle; 24th November, Dalston (107, D Hickson); 25th November, West Walls, Carlisle (70-80, A Robinson); 27th Penrith; 30th Kirkoswald (40, O Nevin). There were also reports from Heads Nook, Longtown and Anthorn. In 2009 there were small numbers in February: at Wetheral on 3rd and at Tullie House, Carlisle on 16th.

A selection of other species follows, approximately in date order. In 2008 a **Barnacle Goose** at Talkin Tarn on 3rd October was, unusually, on the water and not passing overhead (G Naylor). 18th October saw Cumbria's second only **Cattle Egret** at Lanercost (M Gardner). On 22nd October 2 **Green Sandpipers** were seen by the R. Petteril south of the city (C & A Robinson), and another at Grinsdale (R Hodgson). 152 **Whooper Swans** were counted near Kirkbride on 6th November and 93 at Beaumont on the 19th (D Hickson). **Scaup** (50) and **Twite** (51) were a

feature at Port Carlisle on 17th and 28th November respectively (P Quinn). A **Red Kite** was seen near Stonybeck on 22nd November (C & A Robinson) and at Talkin Tarn 6 **Gadwall** on 8th December was a good number (J & M Roberts). The first report of interest in 2009, apart from those already mentioned, was a **Goshawk** in the Bewcastle area on 3rd January (H Kay). The first of 3 **Jack Snipe** records was at the unusual location of Warwick Bridge on 4th January (R Shaw). It was followed by others on 7th February at Border Marsh (F Mawby) and 23rd February at Carr Beds, Rockcliffe (R Hodgson).

The much-publicised male **Smew** frequented both Talkin and Tindale Tarns during January and February. **Little Egrets**, now increasingly observed, were at Burgh Marsh on 14th January (R Hodgson) and 2 at Whitrigg on 4th February (A Abbs). **Snow Buntings** were seen at High Pike on 21st January (J Hamer) and Grune Point in February (see Field Meeting report for 14th February). **Whooper Swans** were reported in good numbers, *e.g.* 190 at Port Carlisle on 16th January, 107 at Bowness-on-Solway on 25th January and 250 near Kirkbride on 4th March. **Green Sandpipers** were at Whitrigg on 2nd January (P Quinn) and Burgh-by-Sands on 26th January (R Gomm).

February produced a small flurry of **Short-eared Owl** records, with birds at Campfield on 3rd (R & S Gomm), Border Marsh on 7th (F Mawby) and Blaze Fell on 14th (C & A Robinson). Border Marsh also had a **Merlin** on 7th (F Mawby) and there was another at Stonyholme on 14th (B Spencer). Talkin Tarn had two unusual visitors in the shape of a **Pintail** on 21st February and a **Goshawk** on 11th March (G Naylor). Two male **Wheatears** were seen at Campfield Marsh on 19th March (N Franklin).

Interesting observations of other groups include a black **Red Squirrel** in Borrowdale on 24th October (D Hickson). Several **Grey Squirrels** were trapped at Finglandrigg, along with a **Polecat** or two: the latter were released. There were also at least three sightings of **Otters** fishing: on the Eden at Carr Beds (1st December: R Hodgson) and Winton (29th December: S Hewitt/J Parker), and on the Wampool near Laythes (24th January, A Abbs). On 24th December a **Loggerhead Turtle** was found dead just south of Silloth. (A note about the stranding appears on page 9 of this issue.) Also on the Solway, hundreds of **Common Toads** were spawning at Bowness Gravel Pits (N Franklin). The earliest **Frog** spawn was recorded at Kirkbride on 21st February.

On the botanical front, it has been good to hear of the continuing presence of two scarce plants of the Eden and its tributary valleys. The **Yellow Star-of-Bethlehem** (*Gagea lutea*) has been reported flowering in good numbers at several sites. On the Lowther at Eamont Bridge 50 flower spikes were counted on the left bank, with c.100 on the right bank further upstream (28th March, S Hewitt);

hundreds were noted on the east bank of the river Lyvennet near Crosby Ravensworth (26th March, R Speirs) and there were unusually good numbers at known sites at Coombs Wood, Armathwaite, and at Wetheral (25th March, J Roberts). On the same date, the latter observer also counted some 36 plants of the **Bird's-foot Sedge** (*Carex ornithopoda*) at Coombs Wood – an anomalous site at which it has maintained status since first discovery there by Rod Corner over twenty years ago, having survived bank-side changes and ‘the great flood’ of 2005.

Now, at the very end of March, the first **Chiffchaffs** and **Sand Martins** have already appeared in the area, an **Iceland Gull** that has reached the Solway still roosts in urban Carlisle (27th, N Franklin) and 35 **Whooper Swans** linger in a wet field at Walby just east of the city*. An early **Swallow** at Heads Nook on 30th (A Jewel) would have found that winter was not yet over!

Geoff Naylor

* The flock briefly became 55 on 30th March and had left by the following morning (D Clarke).



Bird's-foot Sedge

(Jeremy Roberts)

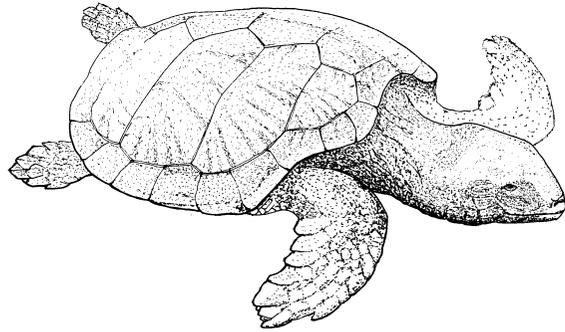
Loggerhead Turtle (*Caretta caretta* (L.)) stranding at Silloth

Returning to work after the Christmas break I had a message waiting for me to say that a dead turtle had been found washed up on the beach at Silloth Golf Course (NY095.512) on 26th December. Unfortunately by the time I got the message the animal had gone, possibly washed back out to sea. Further investigation revealed that it had actually been first spotted on 24th December by David Jackson, whose father Tom is a volunteer with Solway AONB. The animal, which was about 80cm long, was photographed and identified as a Loggerhead. On 19th February I was alerted, by Catherine Hooper at Cumbria Wildlife Trust, that another dead turtle had been reported at the same place. David Clarke and I drove to Silloth that day and recovered the carcass of a fairly well-decayed, although still largely intact, Loggerhead Turtle. Looking at photographs of both strandings, they appear to be of the same animal.

So far as I am aware this is the first report of a Loggerhead stranding on the Cumbrian coast, although the species has been occasionally sighted offshore. Loggerhead Turtles are an endangered species with important breeding populations on the Cape Verde Islands and in the Southern United States, the Gulf of Mexico and the Caribbean. Juvenile Loggerheads spend several years circulating in the Atlantic before moving to warm, shallow seas where they mature into adults. During their oceanic phase, they are carried north-east towards Europe with the Gulf Stream. Most animals will then follow the continental shelf southwards to North Africa and back across the Atlantic. However, young, weak or injured turtles may be carried into UK waters where, in the cooler temperatures, they become torpid and unable to feed. Helpless, they drift with the current and either starve to death, fall prey to a predator or are washed ashore. Strandings of live, but torpid, Loggerheads have occurred annually in recent years on the British coast. Adult Loggerheads can measure over 1 metre in length, but the majority of strandings on the UK coast are of young turtles averaging 30cm long, which were making their first crossing of the Atlantic. Strandings are most frequent in the winter months when sea temperatures are at their lowest.

The larger Leatherback Turtle is a more usual visitor to our seas and they are most frequently seen in the summer months when they follow their jellyfish prey into UK waters.

Apparently 2008 was a bumper year for Loggerhead Turtles in British waters with 23 other strandings over the course of the year, from Cornwall to the Western Isles of Scotland. The total number of sightings and strandings of Loggerheads in 2008 was 30 (Penrose & Gander, 2009). This compares with just 7 reports in 2007 and 8 in 2006. It has been suggested that the rise in the number



Loggerhead Turtle, juvenile

(David Clarke; based on Solway specimen)

of strandings may be due to increases in population due to better protection on their breeding beaches. Another theory is that increased storminess caused by climate change is blowing weaker animals north into cold waters.

Material from the specimen that we recovered is being preserved for the Museum and we hope to get a cast of the turtle made to display in Tullie House.

Reference

Penrose, R.S. & Gander, L.R. (2009) UK & Republic of Ireland Marine Turtle Strandings & Sightings, Annual Report 2008. Marine Environmental Monitoring, Cardigan.

Stephen Hewitt

A second record of *Hydnobius punctatus* (Sturm) (Col., Leiodidae) in Cumbria

Hydnobius punctatus is a beetle belonging to the family Leiodidae, many of whose members feed as larvae on what are known as hypogeous fungi, that is species of fungi such as truffles that have subterranean fruiting bodies. Adult beetles of many species within this group emerge from below ground for only a fairly brief period and are traditionally taken by sweeping in evenings, but 'have never been one of the more 'popular' families with coleopterists. This is doubtless due to a combination of their scarcity and unpredictable occurrence and difficulties with identification.' (Cooter, 1996).

Somewhat atypically, I discovered a specimen of *H. punctatus* in the sand beneath the remains of a dead magpie on Drigg Dunes (SD061.966) on 14th October 2008. This appears to be only the second record of the species within Cumbria: there is a specimen (male) in the Manchester Museum collection labelled Great Salkeld and collected there by the late Harry Britten in 1903. My specimen is also a male and has the very distinctive and rather massive tooth at the middle of the hind margin of the hind femur typical of the genus (Joy, 1932). It is completely black in colour though the species varies from reddish-yellow to black.

Hyman & Parsons (1994) list the species as Notable, mentioning the discovery of adults in May and June and from August to November.

Most of the specimens of *H. punctatus* examined by Cooter in the course of writing his paper were taken from coastal sites, particularly the Lancashire coast, so that the discovery of the species at this Cumbrian locality is not surprising. In fact, it adds to the number of species recorded from these two areas but from nowhere in between, such as the Northern Dune Tiger Beetle (*Cicindela hybrida*) and the darkling beetle *Cylindronotus pallidus*.

Thanks are due to Don Stenhouse for confirming my identification and to Dmitri Lugunov who confirmed the presence of Britten's specimen in the Manchester Museum collection and allowed me access to that collection.

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Jim Thomas, Bridge House, Borwick, Carnforth, LA6 1JU

Males of the Common Blue Damselfly (*Enallagma cyathigerum*) targeting an ovipositing female Emperor Dragonfly (*Anax imperator*)

On the calm sunny afternoon of 4th July 2008 a female Emperor Dragonfly was ovipositing near the edge of one of the pools on Scaleby Moss, Carlisle. Whilst watching her I noticed that she was being 'harassed' by several males of the Common Blue Damselfly, which were frequent, though not in 'swarming'

numbers. I took some photographs, and two in particular confirm what I saw. In one shot, two Common Blue males are apparently ‘buzzing’ her (from in front and behind) and in the other a male is actually perched on her arched abdomen, facing forwards, his head just behind her wing bases, whilst she is laying eggs into vegetation just below the water surface. The Emperor showed no apparent response to this attention.

At first glance this behaviour looked rather like aggression, but the biological advantage to a small weak predator of attacking a very much larger and aggressive one would seem limited, to say the least – and insects don’t act like small birds mobbing raptors. My preferred explanation was that the coloration of this female Emperor – a typical greenish form with dark dorsal abdominal strip – was sufficiently similar to that of the normal colour phase of a female Common Blue as to present a ‘super-stimulus’ to males of that species, releasing a mating behavioural response. The alternative – which I am very reluctant to concede – is that what I saw was purely coincidental: the ‘buzzing’ Blues were *just* going about their business; the Emperor *just happened* to be a convenient perch for one of them. As opportunities to watch Emperors up here are still relatively few (though increasing), I had submitted this note to the Newsletter of the British Dragonfly Society. It appears in issue No. 54, along with a couple of very good images of the same behaviour taken in southern England, so this may actually be a frequent phenomenon.

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

Some interesting beetles from West Cumbria in 2008

The following are some of the more notable beetles I encountered during the course of fieldwork last season – amongst them being two additions to the Cumbrian fauna. There are some 4,125 species of beetle known from Britain, of which about 2,250 (55%) are recorded for the county, making it of great importance for the study and conservation of this group of insects in the UK.

DYTISCIDAE

Agabus melanarius Aube (Nb): one male specimen was found in a small, shallow muddy stream pool by the side of an access road through the large conifer plantation in the Uldale Valley near Egremont (NY04.12) on 11th June. This quite large, jet-black water beetle has previously been recorded from only a small number of localities in Cumbria. F.H. Day (Day, 1933 and 1943) recorded the

beetle from Cumwhinton (NY45.52). His single specimen in the Tullie House Museum F. H. Day collection is dated 8.5.1909. *A. melanarius* is usually found in seepages in woodland and in pools with accumulations of dead leaves and *Sphagnum*. Interestingly, the beetle has also been recorded from deer-wallow pools.

SCYDMANENIDAE

Cephennium gallicum Ganglebauer: two specimens of this minute, dull red and black-coloured beetle were found in leaf litter and deep humus in a small mixed wood near Muncaster Mill (SD09.98) on 16th April. There are just over thirty species of Scydmanenidae in Britain, and nearly all are exceedingly small, measuring just over two millimetres in length. The adults live mainly in moss and humus, but can also be found in rotting wood, dung and under bark and stones. A few species are known to inhabit ant and mammal nests. This would appear to be a new record for Cumbria and the first for v.c. 70.

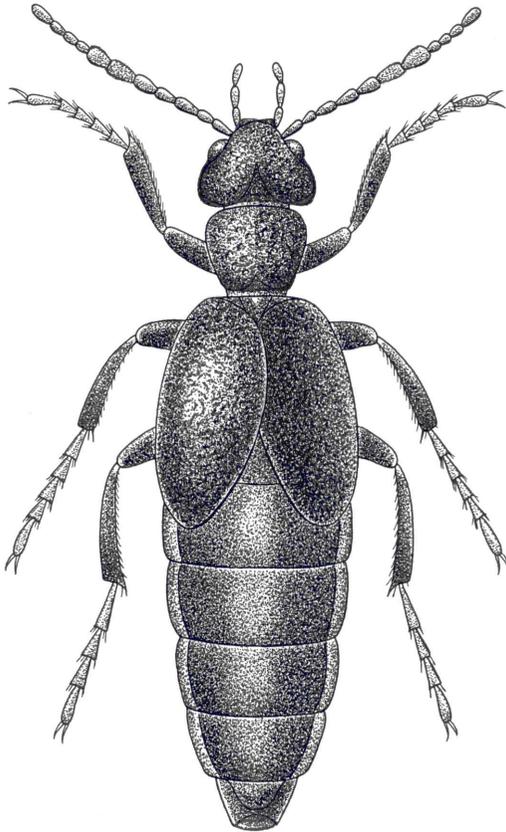
Microscydms nanus (Schaum) (N): this all-brown scydmanenid measures just over 0.7 millimetres and is one of the smallest members of the family in Britain. One adult male was found in humus, beneath a large fallen conifer trunk in a small area of mixed woodland by Dub Beck (NY01.17) on 19th March. This is yet another addition to the ever-growing list of Cumbrian Coleoptera.

STAPHYLINIDAE

Hadrognathus brevipalpis (Mulsant & Rey): this small, distinctive rove beetle was first discovered in Cumbria in 1987 (Lott, 1989). The three specimens were in thick moss in an area of scrub at Clints Quarry near Egremont. Not only was this a new record for v.c. 70, it also turned out to be a new species for Britain. Over the years the beetle has been found at various sites in NX91, NY00 and NY01. I found one specimen in humus beneath some stunted gorse bushes by a sandy shore track, south of Braystones (NY01.04) on 27th September.

SCARABAEIDAE

Aphodius porcus (Fabricius) (Nb): one dead female specimen of this medium-sized, dull red dung beetle was found in a small water-filled plastic container by the upper shore south of Braystones (NY01.04) on 27th September. The beetle has previously been recorded from v.c. 70, and Day (1923) gives two localities – Cairn Bridge and Great Salkeld. *A. porcus* is known to be a ‘cuckoo parasite’ and lives in the nest burrows of the large and common Dumble Dor beetle *Geotrupes stercorarius* (Linnaeus). It is possible that my specimen of *A. porcus* may have originated from the nearby marshes by the River Ehen, which at the time were

*Meloe violaceus*

(R.W.J.R.)

being grazed by a large herd of cows.

MELOIDAE

Meloe violaceus Marsham (Nb): one dead female of this large, brilliant-blue oil beetle was found on a sandy cliff top footpath by the edge of St Bees golf course (NX96.11) on 12th April. Oil beetles get their name from the oily fluid which the adults exude through their leg joints, and which acts as a deterrent to predators. These beetles are now in sharp decline and becoming very scarce. Of the nine species known from Britain, four have already become extinct. All oil beetles are associated with various species of solitary bees and the larval development takes place within their brood cells. An excellent illustrated account of all the

British species is provided by Ramsay (2002). *M. violaceus* is a BAP species and information regarding its present status, and all the Cumbrian parish records, can be accessed from the Virtual Fauna website www.lakelandwildlife.co.uk

CHRYSOMELIDAE

Bruchidius villosus (Fabricius): several adults of this all-black seed beetle were beaten from large flowering broom bushes growing on a former colliery waste site on the edge of Flimby Great Wood (NY03.34) on 4th July. The beetle was recorded for the first time from Cumbria by David Atty. He discovered it at two separate sites in 2004: Campfield Marsh and The Isthmus, Derwent Water (Atty 2004). On both occasions the beetle was found on its main host plant *Cytisus scoparius*.

Galeruca tanacetii (Linnaeus): several gravid females of this large all-black leaf beetle were observed crawling over the coastal cycle track just to the north of Bransty Station, Whitehaven (NX97.19) on 26th September. A small number of dead adults were also present on the track. On closer inspection they appeared to have been squashed, as the egg masses of the females could clearly be seen protruding from their split abdomens. This could have been the result of passing bicycles, or people accidentally treading on them. *G. tanacetii* is widely distributed in Britain and Ireland (Cox, 2007). The beetle has been recorded from a few localities in Cumbria, mainly in the west. The adult beetles are polyphagous and feed on the leaves of a number of low-growing plants. The eggs are laid in a large ootheca formed by the female while ovipositing. This case eventually hardens and protects the eggs during the winter months. The adults emerge from June to early August and then aestivate. They become active again in late August, and can still be found in early November.

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An inland record of the coastal Sand-hill Screw-moss *Syntrichia ruralis* var. *ruraliformis* (Besch.) Delogne in Cumbria

During a Cumbrian Flora Group field meeting to the SSSI on Wan Fell, Plumpton on July 18th 2008 I collected a *Syntrichia* species from the old sand-pit area south of the Plumpton to Lazonby road at NY525.371 in v.c. 70. On checking the material later I was surprised to find it was the calcicolous *S. ruralis* var. *ruraliformis* which differs from all other members of the genus in having leaves that taper only gradually (rather than abruptly) into the long-exserted silvery hair-point. It is a common moss of sand dunes and relatively easy to identify. The Bryophyte Atlas (Hill, Preston & Smith 1992) gives no inland records for northern England or southern Scotland, apart from a single record not far from the coast in NU02 in north-east Northumberland made by Miss E.M. Lobleby in 1969. The nearest coastal locality appears to be at Ravenglass on the south-west Cumbrian coast, some 60km (38 miles) distant.

A re-examination of the site on November 12th 2008 revealed this characteristic yellow moss present as scattered plants and small cushions within an area of 9m by 4.5m in an open habitat on a gentle slope below rabbit burrows, with another very small colony about 70m distant. This slope faced north-west at an altitude of 170 m. and appeared to have been unaffected by sand extraction. Among the scattered associated plant species of the open habitat were Early Hair-grass (*Aira praecox*), Parsley-piert (*Aphanes arvensis* agg.), Thyme-leaved Sandwort (*Arenaria serpyllifolia*), Common Mouse-ear (*Cerastium fontanum*), Common Stork's-bill (*Erodium cicutarium*), Small Cudweed (*Filago minima*), Dove's-foot Crane's-bill (*Geranium molle*), Sheep's Sorrel (*Rumex acetosella*), Germander Speedwell (*Veronica chamaedrys*) and small tufts of Yorkshire-fog (*Holcus lanatus*). *Brachythecium albicans* and a sterile *Barbula* sp. were associated mosses.

The *Syntrichia* is a member of the sub-oceanic/southern-temperate element of the bryophyte flora, not known to extend further north than southern Scandinavia. Blockeel in Hill, *et al.* (1992) states it is a characteristic colonist of loose sand on unstable dunes and persists on the stabilised sand. It is less common inland, occurring on open sandy ground and old sandpits. The inland Atlas records are concentrated on the South Downs and the Breckland in Norfolk. The Permian Penrith Sandstone, on which Wan Fell is based, supports important lowland acid heath communities – hence its SSSI status. However, mildly basic areas occur locally, supporting species such as Common Centaury (*Centaureum erythraea*), Field Mouse-ear (*Cerastium arvense*), Little Mouse-ear (*C. semidecandrum*), Field Gentian (*Gentianella campestris*), Lesser Hawkbit (*Leontodon saxatilis*),

Early Forget-me-not (*Myosotis ramosissima*) and Heath Violet (*Viola canina*). The base-status requirement (pH) of the moss given is given as 7 (Hill, *et al.*, 2007) which is higher than that for any of the other species mentioned above, apart from Thyme-leaved Sandwort (Hill *et al.* 2004). Large areas of the sand quarry are dominated by dense mats of the common moss *Rhytidiadelphus squarrosus* which suppress other bryophytes. However, this species is absent from the area around rabbit burrows where fresh sandy soil is brought to the surface. The *Syntrichia* is present on the older stabilised sand not far from the actual burrows. Rabbits therefore are important in the maintenance of the open habitat, together with sheep grazing.

Although Lawley (2009) states that the moss is becoming increasingly frequent inland in south-east England, there is no evidence that this is happening elsewhere. The *Syntrichia* is almost certainly an old-established member of the Wan Fell flora, which has affinities with that of the East Anglian Breckland where the moss is a well-known component. It is less likely to be a recent arrival by long range dispersal of spores from the coast, since capsules are rarely produced (Smith, 2004). It should be kept in mind when other inland sandy areas in Cumbria are examined. Like many mosses, it is really only conspicuous when wet and expanded. Voucher material is kept in the author's herbarium.

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The cup-fungus *Peziza ampliata* Pers. from Carlisle

An unfamiliar (to me at least) large brown cup-fungus erupting in some quantity in the prepared flower bed of a Carlisle business address (in Shaddongate, NY395.557) on 25th April 2008 has been identified as this species. The cups, 30-40mm across and rather 'scurfy' on the outside, some fused side-by-side, were on a wood-chippings mulch. The genus is a notoriously tricky one and I elicited the help of Peter Wilberforce (now at Oban) who tends to specialise in ascomycete fungi. He was able to section the material and confirm my initial guess by microscopic examination and micro-photography. The species is not mapped on the current national database for English counties north of southern Yorkshire, and has records in two places in Scotland. Nationally it is presumably being spread with horticultural products and practices, which to some extent mimic its normal habitat on rotten wood in north European woodlands. If still present, it should presumably appear round about the time of this journal.

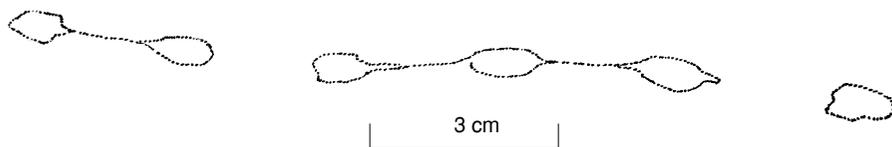
David Clarke, Burnfoot, Cumwhitton, Brampton, Cumbria, CA8 9EX

The mystery of the 'hopping' slug

On 29th October 2006, I happened to notice an unusual slime-trail of a slug, or perhaps snail, crossing a concrete slab near my house at Wetheral Pasture. The trail consisted of roughly oblong 'blobs' of mucus about 10 mm long, and about 6 mm wide, quite regularly spaced, with gaps of 15-20 mm between the blobs, in which no mucus had been deposited.

It seemed very likely that the highly porous nature and perhaps rough surface of the concrete had been unpleasant for the creature, which had probably 'hurried' to cross the surface, but I was at a loss to explain how it had managed to leave an interrupted trail like this, producing such a regular pattern – hence the puzzle of the 'hopping' slug.

Neither David Clarke nor Stephen Hewitt could remember noticing this phenomenon, and it remained a puzzle, although – having had my eyes opened – I began to see similar trails more often, always in situations where a mollusc had



had to cross an absorbent surface.

I saw a particularly striking example in Whitby on the dry wooden planks of a summerhouse floor in September of 2008, and took photos which show clearly a fine thread of mucus stretched between many of the 'blobs' (see drawing, from a photograph). Horizontal sandstone gravestones and monuments in the cemetery of Cleckheaton Whitechapel, in West Yorkshire, in April 2009, had both the interrupted traces as described here, and also broader 'weaving' traces where a mollusc had grazed alga.

Eventually I spotted a small slug (unfortunately not identified, but thought to be a *Deroceras* species), about 4 cm long when expanded, actually in the process of creating an intermittent trail, again on a concrete slab. By getting down to slug-level, I could see that the animal was indeed making good speed – for a slug – across the porous surface, but there was no apparent raising of the slug's foot from the substrate when a gap was made. Instead, a mass of thick mucus would appear at the animal's tail, whilst the rest of the foot was pushed forward, although it was not possible to see whether there was exudation at this stage until the next thick mucus blob emerged a little later.

What is still a mystery – and what it would be most interesting to know – is whether the interrupted nature of the trail is a deliberate response of the slug to the porous surface: *i.e.* forming a 'pad' of thick mucus, and using this as a 'launch-pad' to push itself forward – perhaps on thinner or reduced mucus – until it becomes necessary to form another (which might minimise the loss of essential fluid into the substrate); or whether the nature of the substrate somehow causes the effect that we see, to an originally uniform trail. Suggestions or elucidations are welcomed!

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

The Northern Deergrass (*Trichophorum cespitosum* (L.) Hartm.) in upper Teesdale

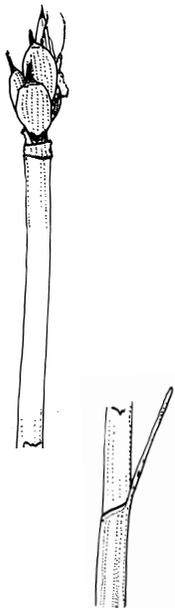
F. Jeremy Roberts, Eden Croft, 2 Wetheral Pasture, Carlisle CA4 8HU

On 7th June 2008, on the society's outing to upper Teesdale, the group explored (with permission) some springs and damp 'flushed' habitats at the top of a hayfield close to the Natural England local office at Widdybank Farm. This is a botanically-rich area of calcareous flushes and runnels, noted for several very rare or highly localised 'relict' montane species, which the writer has looked at on several previous occasions.

We found several rather stunted plants of deergrass (*Trichophorum*) growing on peaty ground just above the springs. Deergrass is that plant of upland moors, often known to hill-walkers for making very dense and tough tussocks which form useful 'stepping-stones' across boggy ground. 'Deer-sedge' would be a better name since it belongs in the sedge family Cyperaceae. Besides these plants on peat – its usual habitat – we also noted with some surprise that a few plants also grew a short distance below in a highly calcareous flush with several of the special plants of the area, so-called 'Teesdale Rarities'.

In one runnel, the plant's stems were hardly 10 cm tall, and growing as a very loose patch, completely different from the normal dense and vigorous tussock-forming plant of the acid moors. Indeed, I had picked one short and slender stem, believing it – rather casually – to be the Few-flowered Spike-rush (*Eleocharis quinqueflora*) which I anticipated would be present in that habitat, and it was only when Harry Kay pointed out that this specimen had a short blade on its upper sheath, such as I had just demonstrated on the deergrass, that I looked more closely and had to admit that it was indeed a deergrass, although (I hastened to suggest) in a very peculiar form and in a very odd habitat.

It was only later that it struck me that this odd find might actually be a very much rarer plant, until recently treated as a subspecies of deergrass, but given full species rank in the newly published *Sedges of the British Isles* Edition 3 (Jermy *et al.*, 2007, referred to hereafter as '*Sedges...*') as 'Northern Deergrass' (*Trichophorum cespitosum* L. Hartm.), the familiar robust plant of acidic



ground being treated therein as *T. germanicum* Palla, but called – with rather confusing ambiguity – simply 'Deergrass'. Having read (*ibid.*, p. 94) that this rarer plant is known from Perthshire in what sounded like very similar calcareous assemblages, I felt that our plant was very likely to be the rare species.

There was a real puzzle here: the flora of upper Teesdale is very well known indeed, and the whole valley has been pored over by generations of botanists and ecologists. Yet there was no dot on the map for the plant in the *Sedges...* handbook. Had no-one previously seen this plant and made the connection with the newly-recognised species? The nearest sites mapped in *Sedges...* were those in the Northumberland mires, where the perplexing situation of **three** subtly different forms of deergrass, now regarded as representing the two species with their sterile hybrid, was elucidated by Professor G.A. Swan (Swan, 1999; Hollingsworth & Swan, 1999).

Several later visits – and much poring over microscopic stem cross-sections (see figures overleaf) – revealed that the plants seen on the peaty ground above the calcareous runnels were referable to the hybrid between the two species, called *T. × foersteri* (G.A. Swan) D.A. Simpson, whilst the runnel plants were indeed the rarer Northern Deergrass, *T. cespitosum sensu stricto*. Specimens were kindly confirmed by the BSBI referee for the genus, Michael Braithwaite.

Interestingly, the hybrid is evidently very much more widespread in northern Britain than its rarer parent (see the map 'M6x5' in *Sedges...*, p. 96), and may indeed possibly be responsible for the present restricted range of the latter through direct competition (Swan, 1999, p. 220). As is believed to be the case with many of upper Teesdale's plant specialities, the Northern Deergrass may have been a widespread post-glacial plant in Britain on richer soils left by the glaciers (as it is today in central and northern Europe), but have since become more and more restricted by climate change, general acidification of soils through leaching, development of smothering peat, and competition. Certainly it occupies only the more open communities in the runnels, and appears to give way when more closed communities develop, whilst the hybrid can tolerate, and even become common, in such situations.

By August, the two forms were readily separable in the field, since each tussock of the Northern Deergrass sported many stems crowned with tiny clusters of minute blackish nutlets, their protective glumes having been shed, whilst the tussocks of the hybrid were completely sterile, the stems with bare tops and already beginning to wither.

Several days were spent checking many suitable flushes for the plant, and the final picture was of just five colonies located – only two of them of any size – consisting of 45 plants (the original colony); 76 plants (in a complex of flushes

about 1 km to the east, a short distance beyond where our CNHS group had reached on 7th June); 4 plants; 2 plants; and 1 plant.

The common deergrass species (which looks so much grosser and more vigorous when seen after a day looking at the Northern Deergrass!) was found nowhere close to these colonies, which are all situated in cattle-grazed, fenced and walled pastures at an altitude of 380-430 metres a.s.l., but it appeared further westward on higher peaty slopes towards Widdybank Fell, where it is abundant on the blanket peat of the fell-top.

In each colony, the hybrid was present nearby, but the latter also occurred in many areas of marsh where the rarer parent was not found, and working westward up the slopes towards Widdybank Fell, it also occurred close to the common species. Most interestingly, the vegetative vigour of the hybrid was seen to vary from small and 'wispy' plants in the calcareous runnels, to much more vigorous plants when growing on the more acidic soils in association with the commoner parent. Whether this is the expression of genetic variability in the hybrid (which might imply 'backcrossing' of hybrids with the parents), or whether it is a response to the soil conditions, is not known.

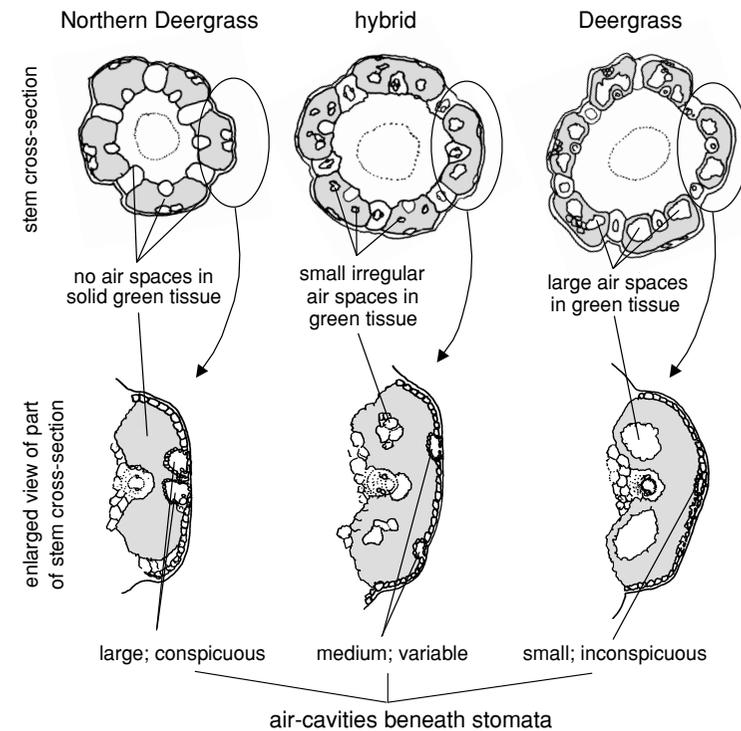
Typical associates of Northern Deergrass at the first colony included:

- Alpine Bartsia (*Bartsia alpina*)
- Bird's-eye Primrose (*Primula farinosa*)
- Broad-leaved Cottongrass (*Eriophorum latifolium*)
- Butterwort (*Pinguicula vulgaris*)
- Early Marsh-orchid (*Dactylorhiza incarnata*)
- False Sedge (*Kobresia simpliciuscula*)
- Few-flowered Spike-rush (*Eleocharis quinqueflora*)
- Fragrant Orchid (*Gymnadenia* sp.)
- Quaking-grass (*Briza media*)
- Scottish Asphodel (*Tofieldia pusilla*)
- Sedges (*Carex capillaris*, *C. flacca*, *C. hostiana*,
C. panicea, *C. pulicaris*, *C. viridula*)

Such vegetation fits the National Vegetation Classification 'M10' of Rodwell *et al.* (1991), with the Northern Deergrass being particularly associated with the '*Briza media-Primula farinosa* sub-community'. This community also occurs in Cumbria, particularly in the limestone districts above the village of Orton, near Sunbiggin Tarn and Tarn Sike, and in Crosby Gill at the headwaters of the Lyvennet Beck above Crosby Ravensworth.

So is the species awaiting discovery in Cumbria? Preliminary searches in suitable-looking sites in both of these areas have not yet revealed the plant, but it

cont. p. 24



Identification

Horizontal sections cut at the midpoint of the stem provide the best confirmatory characters separating the two species and the hybrid. The Northern Deergrass has its green photosynthetic tissue (chlorenchyma) as solid masses, whereas the common Deergrass species has this tissue punctured with large and obvious open gas-filled spaces (aerenchyma). Beneath the stomata are air-filled cavities, which in Northern Deergrass are often large and conspicuous, and often rounded in section, whilst Deergrass has these much reduced, flattened, and inconspicuous. The hybrid is variable and intermediate in both these characters. The most distinctive field character for the hybrid is that it is evidently completely sterile, so that by July its spikelets have become bare, whilst the parent species will normally be carrying ripening fruits (per spikelet, usually 5 fruits or less in Northern Deergrass, and 8 or more in Deergrass). (For more details, see Jermy, *et al.*, 2007.)

will be worth looking out for. Professor Swan's original finds in Northumberland occur on the fringes of raised mires, where rather more nutrient-rich water sources enter the mires. Such habitats certainly occur in upland Pennine sites in Cumbria, and the plant may well be there undiscovered, although it would probably be less easy to detect than it was in its distinctive M10-type vegetation as found on our field-trip.

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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 – ideally type-written double-spaced on one side of white A4 paper, with species and genera names underlined. Files in rich text format or Microsoft Word may be e-mailed to david.clarke19@virgin.net, or submitted on CD/DVD accompanied by a paper copy. Authority names should be given in full. 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. References should be given in full at the end of the article or note. Authors are responsible for checking citations.

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

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Standard abbreviations used in this issue:

AONB: Area of Outstanding Natural Beauty; BAP: Biodiversity Action Plan; B.S.B.I.: Botanical Society of the British Isles; NNR: National Nature Reserve; SSSI: Site of Special Scientific Interest; v.c.: vice-county.

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 & Workshops 2009

(Saturdays except where noted. Departure from Carlisle College.)

23rd May: Miltonrigg Wood, Spring Birdsong

Leader: Geoff Naylor. Depart 9.00 am. Meet at layby on south side of road through
Milton (NY545605) at 9.30 am

13th June: Tarn Syke, Sunbiggin Tarn

Leader: Jeremy Roberts. Depart 9.30 am. Meet west of cattle grid on minor road by
Sunbiggin Tarn (NY675078) 10.15 am

27th June: Thornhill Moss and Meadows

Leader: Frank Mawby. Depart 9.30 am. Meet layby on B5302 (NY191490) 10.00 am

11th July: Bowness Gravel Pits CWT Reserve, Water Beetles

Leader: Steve Routledge (Stephen Hewitt). Depart 9.30 am. Meet at Bowness Gravel
Pits (NY206617) at 10.00 am

1st August: Workshop, Hoverflies

Leader: Stephen Hewitt. Meet Tullie House 10.00 am. Field trip in afternoon. Lunch
not provided. Please book in advance with Tullie House Box Office (01228 618700)

21st August (Friday): Moth evening at Talkin Tarn

Leader: Mike Clementson. Depart 8.00 pm. Meet at Talkin Tarn car park (NY545590)
at 8.30 pm

5th September: Workshop, Grasshoppers and Crickets

Leader: Russell Gomm. Meet Tullie House 10.00 am. Field trip in the afternoon.
Lunch not provided. Please book in advance with the Tullie House Box Office (01228
618700)

10th October: Red Deer Rut at Martindale

Leader: Geoff Horne. Depart 12.30 pm. Meet Martindale Old Church (NY434184)
1.30 pm