

Society announcements

Additions to the Library

Council is very pleased to gratefully acknowledge the generous gifts of the following publications:

Martin Lister's English Spiders. Edited by John Parker and Basil Harley. Harley Books, 1992.

Given by John R. Parker, his inscription in the front of the book reads: "*For the library of Carlisle Natural History Society to commemorate 68 years of membership and those meetings which first encouraged me to take up the study of spiders*".

The book, which is the first-ever English edition of the original *Tractatus de Araneis* written in Latin by the naturalist Martin Lister and published in 1678, was the concept of John Parker. He inspired this translation and, as well as editing the book together with Basil Harley, he undertook the detailed research into Lister's life and studies which he details in the introductory chapter.

British Birds. Vol. 67 No. 9 (Sept. 1974) - ***Vol. 88 No. 9*** (Sept. 1995)

From the library of the late David Bailey, kindly given by Joan Bailey. This series compliments the earlier run of volumes bequested to the Society by the late Robbie Brown (Vol. 61. 1968 - Vol. 71. 1978)

Cumbrian wildlife in the 20th Century - to be published November 1996

This publication – our 12th volume of *Transactions* – commemorates the centenary of the Society in 1993. Based on the papers given at the Centenary Conference at Tullie House Museum on 23 September 1993, it has been updated to include the latest developments during the intervening years of preparation.

As David Bellamy says in the Foreword: "*This is an amazingly important book...a natural history of our times . . . buy it, read it, cherish it.*"

Members of the Society have the opportunity of acquiring the book at £ 4.50 (a substantial discount on the retail price of £ 6.50). A subscription form is enclosed with this newsletter. The offer is only available to fully paid up members who return their subscription form to the Secretary before 5 March 1997.

Reports on field meetings & workshops

21st April: Borrowdale

Leader: Geoff Horne

Members and friends met in the car park at Great Wood, Borrowdale on a wet Sunday morning. There was a reasonable attendance despite the weather, which eventually cleared up in the afternoon as we progressed up the valley.

With Geoff Horne as guide the main topic of the day was birds. The morning walk encompassed a circuit through the oak and larch woodland below the impressive Walla and Falcon Crags, before crossing the road and returning via the lake shore. The morning's tally included Peregrine Falcon, Raven, Nuthatch, Tree Pipit, Pied Flycatcher, Chaffinch and Brambling together as well as good sightings of Red Squirrels in the conifer woodland.

The Peregrine and Raven were both nesting on the crags and Geoff confirmed that the Peregrine had switched its nest site to Walla Crag – pushing the Raven off onto Falcon Crag.

Following lunch in the car park, we made our way to the head of the lake and over the bridge into Grange village. Our afternoon excursion was a longer, steeper and brisker walk around Castle Crag and back along the valley bottom.

Less wildlife was on view as the weather cleared, but long distance views were had of Kestrel and Peregrine, and a Green Woodpecker was heard in the woods. We descended the steep grassy slope with good views of the valley and Johnny Wood. Talk of a recent corvid census was interrupted by the site of a molehill “erupting” silently in the path in front of us.

As we returned along the valley floor, encountering numerous groups of walkers and ramblers, we had good views of Redstart and Willow Warbler as well as a pair of Goosanders on a shingle bar in the river.

We returned wet and tired, but thanked Geoff for what was after all an enjoyable day.

John Kerr

27th April: Aquatic invertebrates workshop

Leaders: Jane & Roy Atkins

Some 23 members and friends (including several children) attended this very successful day. After giving us an introduction to the major groups of animals found in freshwater, Jane and Roy took us to the Cairn Beck at Warwick Bridge. Here, a very productive session using nets, sorting trays and assorted jars and bottles, produced an excellent range of invertebrates, as well as some small fish – trout fry and a Miller's Thumb.

Back in the activities Room at Tullie House, we worked in small groups, helping each

other to make sense of the very diverse “catch”. This turned into quite a scene of industry, using microscopes, hand-lenses, museum specimens, simple identification keys and other literature.

After this Jane gave some background to the work of her employers, the Environment Agency – recently formed from the merger of several Government bodies, including the National Rivers Authority. We looked at the process of monitoring and assessing water quality, and tried this for ourselves using a simple scoring sheet and samples of catches from polluted and non-polluted water.

All in all a most enjoyable and well-prepared day.

David Clarke

2nd June: Sandscale Haws

Leader: Peter Burton

The small party of eight making the long journey from Carlisle were met by the National Trust Warden, Peter Burton, and treated to a guided tour of this extensive area of sand dunes, hollows (slacks), grassland and sea shore. There was something to suit most tastes: a wide variety of invertebrates and numerous flowering plants, but disappointment for the ornithologists when the resident Garganey did not show.

For most people, the main ‘target species’ was probably Coralroot Orchid which has its second largest British colony here – numbering several thousand plants. We did not count them, but by the end of the day had probably seen a few hundred. Other orchid specialities of the site are Dune and Marsh Helleborines. Both were identified, although not yet in flower. Common Twayblade and Early Marsh Orchid were also of added interest.

There were many other flowering plants, some of which were of considerable interest and included Early Forget-me-not, Spring Vetch, Hound’s-tongue, Portland Spurge and two special plants for the area – Perennial Wall-rocket (*Diplotaxis tenuifolia*), and Sticky Stork’s-bill (*Erodium lebelii*) which was probably new to all of us. Added to these were such unfamiliar grasses as Sand Cat’s-tail and Dune Fescue and, along the shore, Sea Club-rush.

Of particular interest was the hybrid Willow *Salix* × *friesiana*, which is a hybrid between *S. repens* and *S. viminalis* and only previously known from a single plant in Sutherland and, more commonly, on the dunes near Southport.

Natterjack Toads are another species for which this area is noted – we were shown their tracks in the sand and later saw strings of spawn in a small pond. At the same pond were the damselflies *Ischnura elegans* and *Pyrrhosoma nymphula*.

Lepidoptera were abundant and twelve species of butterfly made a good list. Of these, Dingy Skipper and Small Copper were the pick and numerous Painted Ladies marked the beginning of a very large nationwide invasion. Several moths were also seen,

notably Burnet Companion and, the local, Silver Hook. Other unusual insects included Negro Bug (*Thyreocoris scarabaeoides*), Sloe Bug (*Dolycoris baccarum*) and the stilt bug, *Gampsocoris punctipes*.

Some members were particularly pleased with some of the flies netted. These proved to be the stiletto flies, *Thereva annulata* (local) and *Dialineura anilis* (RDB3) and the large robber-fly *Pamponerus germanicus* (also RDB3).

Before returning north, the party made a visit to a pitch and putt golf course just outside Barrow, where there was a remarkably large colony of Green-winged Orchids.

Geoff Naylor

23rd June: St Bees Head

Leader: Roy Atkins

The day began at the car park on the sea front at St Bees village. Following the path up to the cliff top, Lepidoptera were abundant – Painted Ladies were everywhere, accompanied by large numbers of Silver Y moths. These two species were encountered in their thousands along the length of the walk. There were also a few Rush Veneers – another migrant moth. Other butterflies included Wall, Common Blue, Small Copper, Large Skipper, Red Admiral and a single Dingy Skipper. Cinnabar Moth, Angle Shades and Yellow Shell were also noted. Here, the more interesting plants included Sheep's-bit, Bloody Crane's-bill and Burnet-saxifrage.

Shortly after reaching the cliff top Roy was persuaded to descend a steep gully where a colony of bush-crickets is known. All but one of the party declined the invitation to join him. They eventually returned with two immature Dark Bush-crickets, but on opening the container found that unwittingly they had caught a (very) immature Speckled Bush-cricket as well. These insects were much admired and photographed. This is the only Cumbrian site for the Speckled Bush-cricket – discovered by Roy himself in 1991.

A few Gannets were seen offshore and, as we continued along the cliff top, there were good views of a Peregrine before we eventually started to see the cliff-nesting birds for which the headland is famous. Black Guillemots have their only breeding site in England here and two or three were seen. Unfortunately, the few Puffins which still breed here proved more elusive. One was seen briefly, but only by one person.

Passing through the steep ravine leading down to Fleswick Bay, some interesting plants included English Stonecrop, Sea Spleenwort, and Dyer's Greenweed. John Parker found a clearwing moth, but it escaped and wasn't seen again. It will almost certainly have been a Thrift Clearwing.

Between the ravine and the lighthouse are the main seabird colonies. Large numbers of Guillemots, fewer Razorbills, Kittiwakes and Fulmars provided a spectacular sight. There were also numerous Herring Gulls with half grown chicks.

It had been a warm and sunny day and much ice cream was consumed on our return to the car park, before about half the party departed for a visit to Maryport Harbour. The objectives of this visit were the Small Blue butterfly and Purple Broomrape, both of which were well seen and photographed. Two unusual moths (Mother Shipton and Grass Rivulet) provided additional interest.

Geoff Naylor

13th July: Ants workshop

Leader: Gary Skinner

Around a dozen members attended this workshop on finding and identifying ants. We were fortunate to have Dr. Gary Skinner (joint author of the recently published *Ants in the Naturalists' Handbook* series) as our tutor for the day. Under his expert guidance we spent the morning in the Museum going through the identification characters and habits of the different genera of ants in Britain and focusing particularly on the species occurring in Cumbria. The survey of wood ants in Cumbria, being conducted by Society member Neil Robinson, gave additional weight of interest to Gary's explanation of the ecology and identification of these ants. Using microscopes and specimens from the Museum collection as well as some of Gary's own material, we were able to familiarise ourselves with the main differences between the different ant genera and species to be expected in Cumbria.

The afternoon field trip was to Borrowdale, where Ashness Woods support many nests of the wood ant *Formica lugubris*. Despite particularly dismal weather (the only surprise at Surprise View was the complete lack of a view!) we did find a number of active *F. lugubris* nests, which as Gary explained, were inter-linked to form "super-colonies". Gary also provided an informative commentary on the foraging behaviour of the ants as we watched them marching to and from the nests and up and down trees. Although the poor weather meant that most insects were not active, we did find nest of other ants such as the Yellow Meadow Ant *Lasius flavus*, *Myrmica* sp. and a single specimen of *Formica lemni*.

The day provided a good introduction to the group and Gary's many insights into the behaviour and ecology of ants were an inspiration to further study.

Stephen Hewitt

19th July: Naddle (light trapping for moths)

Leader: Mike Clementson

There was a beautiful sunset as we drove south towards Haweswater Reservoir and Naddle Wood where permission had been obtained to run the lights. Dusk was falling as we arrived just before ten o'clock.

The meeting was well supported by over 20 members and friends, and approximately ten million midges! I discovered that if I kept my head below the level of the light I

remained relatively midge-free – and so I remained at the first of the two lights which were operating. One member, who had borrowed a tiny torch which only lit up when pressed, wandered between the two traps like a demented glow-worm (*I resemble that remark!* – Ed.).

After a fairly quiet first hour, moths began homing in from all directions. These were feverishly “potted” in an assortment of containers to enable more detailed examination and identification before release. A list of species was kept with the most notable, for me at least, being some superb specimens of Green Arches and Peach Blossom moths.

There were the usual “little brown jobs”, “difficult to identify” specimens and the odd “UFO.”, but between the books and the brains practically all were identified and recorded, with only two or three being taken home for more serious investigation.

Among the larger and more spectacular moths were several Poplar Hawk and Garden Tiger moths. Scalloped Hook-tip, Muslin Footman, and Light Brocade were among the more interesting finds. Moths were not the only insects to be attracted by the light – a Meadow Brown butterfly and a Cockchafer beetle were among many others seen, and two members were fortunate to see Glow-worms elsewhere in the wood.

Finally, just as the apparatus was being dismantled at 2 am, Mike spotted a Chinese Character clinging to the tripod on which the lamp was suspended – bringing the total for the evening to 58 moth species. A thoroughly interesting night was enjoyed by all. Thanks to Mike and Betty Clementson and John Taylor, and also to Brian Spencer for kindly providing the second generator.

Dorothy Iveson

11th August: Sowerby Wood

Leader: Barry Marrs

A warm, sunny Sunday afternoon welcomed nine members and a guest to Sowerby Wood. Although very close to Carlisle, none but the leader had visited this site before. Sowerby Wood is a long-established conifer plantation dating back probably almost a century. It is close to Newby Cross which is a locality mentioned by some of the late 19th century naturalists, notably George Dawson – a pioneering lepidopterist.

Insects proved to be a dominant feature throughout the afternoon. Two quite large ponds support a population of dragonflies numbering ten regular species. An 11th had been added earlier this year when Barry found a wandering Banded Demoiselle (*Calopteryx splendens*), but we didn't expect to see that. It was only some 4 or 5 years ago that Southern Hawker (*Aeshna cyanea*) was found here and we had very close views of several at various points along the route, including the car park. Its close relative, the Common Hawker (*A. juncea*) seemed to be less common, with only two or three sightings. Common Darter (*Sympetrum striolatum*) and Common Blue Damselfly (*Enallagma cyathigerum*) were netted and examined in the hand, but the

commonest species on the day was Emerald Damselfly (*Lestes sponsa*). A single Four-spotted Chaser (*Libellula quadrimaculata*) brought the total to six species. The only disappointment was the absence of Black Darter (*Sympetrum danae*).

Butterflies were numerous – Large Skippers, two or three Painted Ladies and a lone Peacock were noteworthy, but the highlight of the meeting were the Purple Hairstreaks. Several were seen in flight around oak trees on the edge of the wood before, eventually, everyone had perfect views (through binoculars) of a single specimen.

The borders of the main ride through the centre of the wood were lined with flowers of Wild Angelica. Every flower was covered with a selection of insects, particularly hoverflies, other flies, ichneumons, sawflies and the beetle *Rhagonycha fulva*, sometimes called Bloodsucker. Also noteworthy were the very large, fearsome looking, *Tachina grossa* (an almost inch-long fly which parasitises the caterpillars of some of the larger moths) and the sawfly *Zaraea fasciata*, which has only rarely been recorded in Cumbria. Silver Y moths were abundant everywhere. Bugs, grasshoppers, spiders and scorpion flies were also of interest.

Fourteen species of fungi were an added attraction, hopefully forerunners of a more productive season than 1995.

Finally, a mystery. In the first pond we visited, some particularly tall and robust plants of Sea Club Rush (*Bolboschoenus maritimus*) were found. Why is it here, so far from the coast?

At the end of the afternoon, great admiration was expressed for the leader, particularly for his skill at finding Purple Hairstreaks and making them show off for visitors.

Geoff Naylor

7th September: Minerals workshop

Leader: Tony Rigby

This proved a popular subject, with over 16 members and friends booking for the day. It was particularly nice to see a number of youngsters attending. The morning was spent in the Museum's Activities Room where Tony briefly outlined the geology of Cumbria and discussed the various areas of mineralisation in the county.

Using a close up video camera linked to a television monitor, Tony was able to detail the various mineral species commonly found in the county, illustrated with some of the prize specimens from the Tullie House Museum collections. With the afternoon field trip planned to visit the mines at Roughton Gill, Caldbeck, special reference was made to the minerals of the Caldbeck Fells – a classic locality of worldwide renown.

For the latter part of the morning we used microscopes and magnifying lenses to examine and identify a selection of mineral samples. Tony moved from group to group offering useful help and information, and answering questions.

After lunch we regrouped at Fell Side, Caldbeck to commence the two mile walk up the valley to Roughton Gill. It was a glorious sunny afternoon and with Tony stopping on occasion to point out subtle features in the landscape providing evidence of the mining industry of the past, the walk was most enjoyable. On reaching the mine dumps Tony pointed out some of the mineral types which could be seen among the dumps and soon everyone in the party was engrossed in scouring the dumps for samples. Tony ably fielded a constant stream of identification queries from the now thoroughly "hooked" party members. Minerals seen included Malachite, Linarite, Chrysocolla, Chalcopyrite, Galena and of course Quartz.

Finally Tony led a quick trot further up the gill to examine the entrance to one of the so called "coffin levels". These are thought to have been excavated by hand in Elizabethan times and were hewn out of the rock to be broadest at shoulder level and tapering to head height. This gave easy access for the minimum amount of work. Hence, in section, the tunnel is coffin-shaped.

After dragging some reluctant members away from the dumps, we made the return walk to the cars and thanked Tony for a most enjoyable and informative day.

Stephen Hewitt

Notes & records

Bird's-nesting off-season

The Bird's-nest Orchid (*Neottia nidus-avis* (L.) Rich.) has always attracted my attention. A saprophytic species, essentially without leaves or green chlorophyll, its honey-coloured 'life-in-death' stem and flowers give the plant a distinctive and somewhat unearthly 'presence'. Although widespread it is quite uncommon in northern Britain with rarely more than a few plants at any one site. As it is colourless and usually grows in fairly deep shade under trees it is easily overlooked.

More than other orchids of its habitat, the stems and fruit capsules of the Bird's-nest are tough and fibrous persisting long after the plant has set seed. (Indeed, I think they may often last for a couple of years, disintegrating only gradually.)

The chance discovery of a group of three such old spikes at Lanercost (NY56) in March 1996 reminded me that it might actually be easiest to look for this species in winter when leafless trees allow more light to the woodland floor and there is less undergrowth as well.

So it proved to be. Within the next few weeks I managed to find the orchid at four other (known) sites from Gilsland to Castle Carrock – at three of which I had never encountered it before. A single large specimen at Miltonrigg Wood (NY56) was some 35cm tall with about three dozen mature fruit capsules and a very stout and tough stem – and all the more impressive for being solitary. It clearly would have persisted for many months more. The Lanercost locality may be a new one, though I believe there must be more of the species somewhere in that general area.

In early September whilst exploring the ground between my find at Miltonrigg and another which Geoff Naylor had found some 300 metres away, I came across a loose group of some 25 fruiting spikes – clearly not all from the current season but nonetheless the largest 'colony' of this species I have so far seen in Cumbria.

In better seasons the Bird's-nest can sometimes start flowering in late April, but this year there were no shoots to be seen above ground until the second half of May. Flowers have usually 'gone over' by early July.

Under favourable circumstances a few fruiting spikes of commoner orchids of woodland/wood edge may survive for one winter. These are most often Early-purple Orchids, but Common Spotted is another possibility. The fruiting capsules of these two are easily recognisable by their rather smooth fusiform shape, tapering evenly to a symmetrical apex. In contrast, those of *Neottia* are much more robust and angular in section, projecting stiffly on stout stalks. The capsule has an obliquely flattened apex bearing several claw-like vestiges of the flower.

The species seems always to prefer the richer soils – three of the above sites are on limestone and the others may be lime-enriched glacial drift. 'Classic' habitat in

southern England is the deep shade of beechwoods but none of the above were under beech – the woods being mixed, with oak, hazel, sycamore, birch and other species.

Hopefully, the 'extended season' will produce more records of this species. I will be pleased to look at single capsules detached from spikes suspected to be *Neottia*. (The spikes themselves should be left *in situ* in case the capsules still contain seed.)

David Clarke

Bird notes

These casual notes are drawn from my own observations, with a few additions from friends.

Perhaps because of the hard winter there were several interesting winter visitors in the area. Talkin Tarn had two Smew among the Goosanders, and over 1000 Bramblings in the woods. Another fine drake Smew was on the River Caldw between Cummersdale and Holme Head Bay for the later part of the winter. There were several Slavonian Grebes, with one unusually on the River Eden at Wetheral. There were a least two Green Sandpipers at Carr Beds, and Shovelers at Smalmstown Pond on 17 January.

Waxwings appeared from early January (see Roy Atkins in Vol.4 No.1), while an Arctic Redpoll was found at the Cumberland Infirmary and attracted many people. A group of birders from Kendal who arrived at 6 am. one morning must have given the hospital security staff something to think about!

In February Pink-footed Goose flocks of about 500 were common around the Solway basin, including one at Calvo on 10 February which included a White-fronted Goose. Similarly, flocks of Pink-feet and Greylags of about 250 occurred in the M6/Eden area. Black-tailed Godwits were commonly at Grune and Bowness from February – the maximum seen being ten.

March was cold, but on 12 March a Song Thrush was singing at Etterby. The similarity to a Woodlark song was remarkable, although by 19 March it had lost some of the phrasing. Perhaps it had wintered in company of Woodlarks in North Africa? Siskins were late (3 March) and passerine migrants were a bit irregular, perhaps because of the continuing inclement weather – Chiffchaff 1 April (late); Swallow 10 April; Willow Warbler 11 April; Blackcap 18 April (late); Swift 24 April (early – and even earlier at Edenside on 18 April) and Garden Warbler 30 April.

The weather was much better in May and Whimbrel were commonly seen on the Solway. 2000 Sanderling at Bowness on 29 May included a partially piebald bird, plus a near-albino Dunlin which had been photographed by Keith Temple the previous year. A Little Egret was spotted nearby on the same day.

On 12 June I had a lone singing Corn Bunting near Micklethwaite. This is the

remnant of a former loose colony in an area of organic cereal fields. Better still, on 14 June I discovered a churring Nightjar at Spadeadam Forest – the first for 30 years. This was seen and heard by several people before it eventually disappeared. Apparently it was tape-lured during the day, which can't have helped!

It was about this time that Derek West (who had originally found the Arctic Redpoll at the Infirmary) turned up a Rosefinch which visited his garden at Waverton. This bird became locally famous and I went to see it early one Sunday morning to find the Kendal birders lined up with their telescopes trained on a rye field. The object of their search was not the Rosefinch, but a male Spanish Sparrow! This bird was well documented, including TV coverage on both BBC and ITV. In Europe, the Spanish Sparrow is restricted to the Estremadura region of central Spain and neighbouring regions of Portugal where it is rather rare. However, the species is common in North Africa and is known to be more migratory in the east of its range. This rarity (only the sixth British record) attracted twitchers from far and wide, forming crowds of over 300 at times!

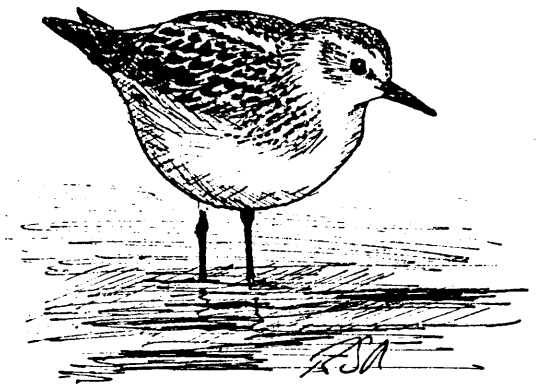
On 4 August Swift numbers reached a peak of 30 at Etterby. Twenty years ago this would have been nearer to 100. Typically they had all gone by 9 August. On 30 August Peter Wilson confirmed the identity of an unusual marsh tern at Oakbank Gravel Pits, Longtown. It was an immature White-winged Black Tern and gave the numerous watchers excellent views of its clean and well-marked plumage, at rest and in flight.

Early September was notable for an obvious lack of Little Stints* and Curlew Sandpipers. My last notes on 11 September are of 40 Black-tailed Godwits at the Bowness railings and 1000 Bar-tailed Godwits west of the viaduct among 13 wader species seen between the railings and Campfield.

[* *Stop Press:*

late September has been notable for the unprecedented numbers of Little Stints on the River Eden around Rockcliffe – 127 were on the Solway estuary below Sandsfield on 25 September!]

Mike Tulloch



Little Stint (Roy Atkins)

Plants and insects at How Mill Quarry

Following a request to the Society for a survey of the wildlife interest of How Mill Quarry, a few members arranged to visit on the evening of 24 July.

How Mill Quarry (NY 501.567) is a disused sandpit which has subsequently been used as a land-fill site. The land-fill operations have now ceased and a covering of top-soil added. Two ponds have been left in the centre of the quarry.

Between us we recorded 141 species of plant, 19 birds and 51 insects. Many of the plants recorded consisted of single plants only, being presumably derived from single seeds brought in accidentally on top-soil or during operations, and not established.

Some of the typical plants of sandy soils for which the Eden Valley sandpits are well known were present, such as the Small and Common Cudweeds, but other "indicator" plants known in nearby pits, such as Shepherd's Cress and Annual Knawel, were not found. A single plant of Maiden Pink (*Dianthus deltoides*) was interesting: this plant is not native in Cumbria, but it remains a rare escape from cultivation in the north of the county.

Perhaps the most significant find was that of Flattened Meadow-grass (*Poa compressus*), which occurred in great quantity over the upper parts of the pit on recently spread sand. This is quite a scarce plant in the north of the county, and not associated with sandpits – it is usually a plant of walls or dampish bare limestone habitats.

The ponds had not yet developed an aquatic flora apart from algae, and marginal plants were restricted to large patches of Reedmace and some rushes. Two species of common damselfly were recorded (both more tolerant of enriched water): the Blue-tailed (*Ischnura elegans*) and the Common Blue (*Enallagma cyathigerum*), while a single nymph of the bug *Chilacis typhae* was found on its host-plant, Reedmace. *C. typhae* appears to be rather local in Cumbria, requiring good stands of its food plant.

The most interesting insect found was undoubtedly the diminutive robber-fly *Leptogaster guttiventris* – this species is widespread but local in Britain and has apparently not been found in Cumbria before. It is associated with grassland habitats. The larva lives in sandy soils, while the adult is a predator of other small, flying insects.

Two other insects were of note: the locally distributed lacewing *Wesmaelius concinnus* was swept off Scots Pine and the discovery of the 11-spot Ladybird (*Coccinella 11-punctata*) away from the coastal zone was also of interest. Finally, in this exceptional year for Painted Lady butterflies, it was no great surprise to find many caterpillars of this species feeding on Spear Thistles.

Jeremy Roberts & Stephen Hewitt

The 14-spot Ladybird (*Propylea quattuordecimpunctata* (L.)) in Cumbria

The beetle section of the *Birds and Wildlife in Cumbria* report for 1995 (Read, 1996) reports three specimens of 14-spot Ladybird, found by David Atty at Smardale reserve in July. These were the first which he had found in Cumbria, despite having recorded beetles in the county for many years (Atty, 1996).

Our own interest was aroused as one of us (GRN) believed that he had found this ladybird earlier in 1995 but, because of the species' apparent rarity in the county and in the absence of voucher specimens, it was decided that these records required confirmation. Further investigation and revisiting sites to seek confirmatory specimens in 1996 has revealed that the ladybird was indeed found earlier in 1995 at High Gelt (NY55), Midgeholme (NY65) and Kingmoor Nature Reserve (NY35) (GRN). Subsequently an even earlier specimen was discovered in material collected at Cowraik Quarry (NY53) in August 1994 (SMH).

Maps produced by the Cambridge Ladybird Survey (Majerus, 1995) show this ladybird to be common throughout southern England and East Anglia. It becomes slightly less common in Wales and the Midlands and its northernmost stronghold is in N.W. Yorkshire. Apart from the central Scottish lowlands it is rare in the north, but with isolated records as far north as Aberdeen.

The only previous Cumbrian records were "Cumberland" c.1830 and "Westmorland" 1964 (Atty, 1996), Foxfield (SD28) 1965 and Grange-over-Sands (SD47) 1990 (Tullie House Museum records). In addition Majerus (1995) records the species from eight 10 km. squares in south Cumbria between 1984 and 1994.

1996 has produced many additional records: Wreay Woods (NY45), near Walton (NY56), Gowk Bank (NY67) (GRN); Unity Bog (NY55), Wan Fell (NY53) (GRN & SMH); Langwathby (NY53), Winskill (NY53), Whitbarrow (SD48) and Cumwhitton Moss (NY55) (SMH). It has also been found this year for the first time in the Bassenthwaite area (NY23, NY13 and NY12) (DBA). In the west of the county, single specimens were seen at Hensingham (NX91) (RWJR) and Irton Park (NY10) (SMH & RWJR).

It seems certain that the 14-spot Ladybird is a recent colonist of Cumbria. Having been scattered in the south of the county in low numbers over the last few years it appears to have colonised north Cumbria only in the last two or three years. The exceptional summer of 1995 may well account for the sudden surge in numbers in 1996. The preponderance of records from the south and east of Cumbria, with a recent expansion north-west to Bassenthwaite, suggests that colonisation has been from the nearest concentration of these ladybirds – in north west Yorkshire.

The ladybird is easy enough to identify. It is one of only two species which are predominantly yellow with black spots. The 22-spot ladybird obviously has more spots, but is also smaller. The 14-spot (at least in almost all of the recent Cumbrian

finds) rarely has 14 obvious spots; usually some of the spots are joined together to form the distinctive “smiling face” or anchor-shaped pattern.

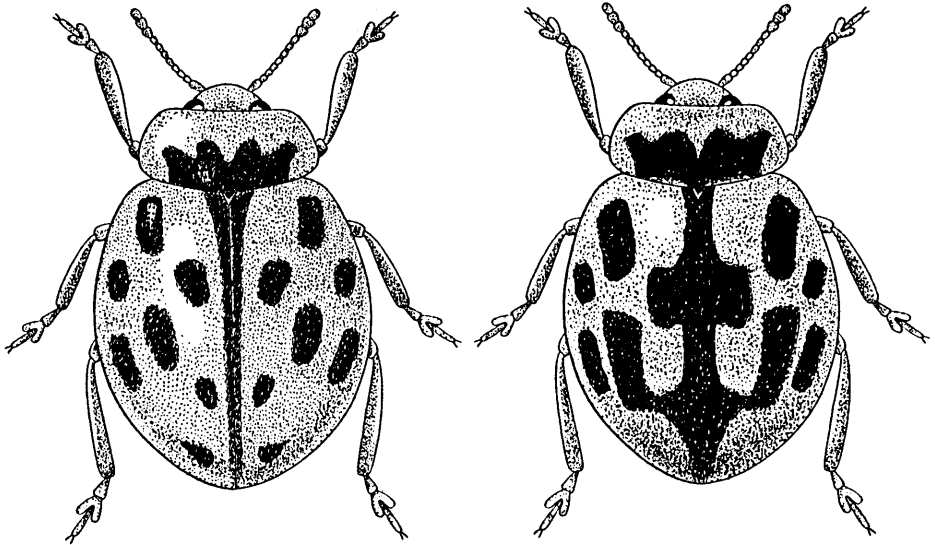
Acknowledgements

We thank David Atty for permission to publish his records and for further information and comments on the species’ distribution. Also John Read for very kindly providing the illustrations and his own records.

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Geoff Naylor & Stephen Hewitt



14-spot Ladybird – the right-hand form is the most frequent in Cumbria

(John Read)

Butterflies in my garden

The Buddleia bushes in my garden at Jockey Shield, Castle Carrock have attracted a bonanza of butterflies this year. Having been away, I returned to see around 30 Red Admirals on the bushes on 4 September. There were as many as 50 Painted Ladies in the garden but the great thrill was that Peacocks were more numerous than in recent years.

In 1994 there was a single Peacock in the garden; five was the maximum count in 1995 and on 4 September 1996 there were over ten. For the next few days the weather remained mild and sunny, and I concentrated on counting the Peacock butterflies. (I had over 100 Red Admirals in the garden on one occasion in 1995 and I was sure I couldn't beat that this year!) The Peacock numbers increased quickly and by 8 September there were over 20 in the garden. An even greater surprise was a Comma sitting with the Painted Ladies. The Comma disappeared for a few days but returned on 15 September when I was able to photograph it. In the meantime the number of Peacocks in the garden had increased to 30! Following a piece in the *Cumberland News* about the Comma, I heard of three Commas together at Kirkby Stephen and another single at Great Corby.

With the fine weather about to break it will be interesting to see whether the Peacocks and Comma continue to use the garden. Who knows what to expect in 1997!

John Miles

[Stop Press: A further Comma siting has been reported by Dave and Wendy Walker in their garden at Burnbanks (NY51) on 27 September.]

A dispersal of the Banded Demoiselle (*Calopteryx splendens* (Harris)) in the Solway area in 1996.

This large and colourful damselfly is at the north west edge of its British range in Cumbria and the small Solway populations are very much an outpost. The species is rarely seen far from its main breeding habitat – the vegetated margins of sluggish lowland rivers.

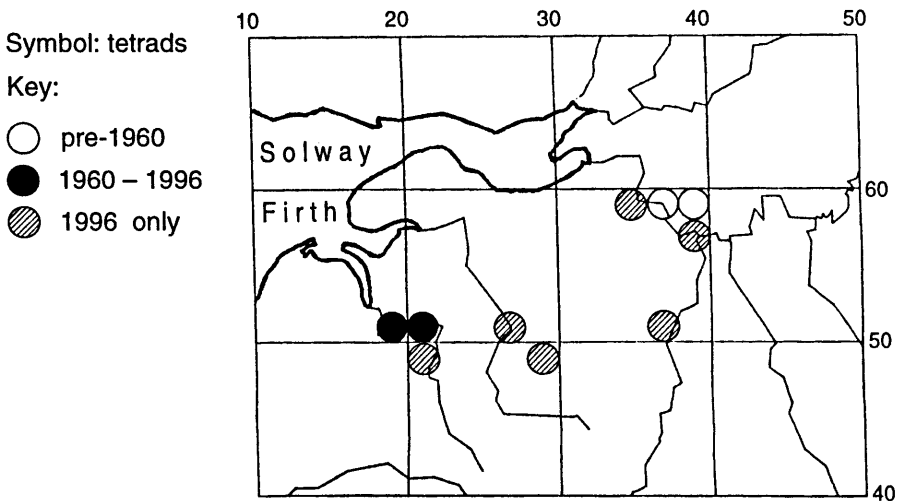
It was therefore encouraging to have a number of reports this year from sites at some distance from its existing breeding stations. The first of these (from CNHS members Dorothy Iveson and Barry Marrs) referred to non-breeding habitats. Single males were seen on bush on Kingmoor Sidings Reserve Carlisle (16 June) and at a pond in Sowerby Wood plantation Dalston (23 June). Both these records were more than 0.5 km from nearest potentially suitable breeding sites and more than 15 km east of the presently known populations. Interestingly this was quite early in the species' flight period. (Within the established breeding area on the Waver the Environment Agency had noted "hundreds" of the Demoiselles downstream of Ellercarr Bridge (NY2051) on c.12 June).

This suggested that some sort of dispersal was under way and prompted spot-checks at possible breeding areas on the Wampool system, from which there are no recent records. Males (again single examples) were duly found near Micklethwaite (NY2750) and near Moorhouse (NY2651) on 21 June (DJC). These appear to be the first definite records of this species from the Wampool (a note of the species from "Wigton" in 1937 by F.H. Day could have referred to the Wampool catchment but this must remain unproven).

There was a period of poor weather in early July which may have either interrupted the dispersal or possibly curtailed it altogether. Checking on the Wampool by Stephen Hewitt and one of us (DJC) on 12 July included various crossings from Wampool farm downstream to The Laythes, as well as repeat visits to the reaches already mentioned, without further sitings. Results on the Waver at Waverbridge and Waverton on 16 July were similarly negative despite good weather. Thereafter another single male was noted near Micklethwaite (NY2849) on 21 July.

A systematic survey staff of the Environment Agency (EA) extended these records with sitings of 3 males on the banks of the Eden near Kirkandrews on 25 July. (The most recent previous records from the Eden were in the 1960's). Also on 25 July, the EA added new records from the Waver, with 11 males and a female in the sector just downstream of Waverton Bridge (NY2149 etc.). The last sitings of the season from the 'new' areas were two males on the Wampool near Micklethwaite (NY2750) during the EA survey on 30 July (no more were found anywhere downstream of this site).

Whether any breeding occurred at "new" sites is unknown and there were no reports of females from either the Wampool or the Eden.



Distribution of the Banded Demoiselle on the Solway Plain.

Discussion:

There appear to be no previous reports of dispersals or more casual movements of this species in the Solway area. The numbers of individuals involved on this occasion appear to have been relatively modest. The behaviour of males inevitably makes them more conspicuous than females, which could therefore have simply been overlooked. What may have prompted this event is a matter of speculation. Prevailing weather conditions, low water levels (and thus higher water temperatures) and low frequencies of flood scouring could all have helped to promote high population densities. Certainly the weather of the last two years is beginning to imitate the more usual climatic regime experienced by this species over the main parts of its British range. Improvements in the breeding habitat of the Banded Demoiselle on the Solway made by the EA in recent years through changes in the timing of flail-mowing of the channel banks in the known breeding areas could also be a factor.

As yet it remains to be seen whether this attractive insect has made any real gains. Routine monitoring programmes by the Environment Agency over the coming months will hopefully reveal whether there are any larvae in the areas to which adults have spread this season.

David Clarke & Steve Garner

The ecology of Red Squirrels in Cumbrian conifer forest

Dr. Peter Lurz, Banks House, Banks, Brampton, Cumbria

Background

Last December the main part of a four year conservation project on Red Squirrels at Spadeadam Forest, Cumbria came to an end. It all began in 1991 when the RED ALERT initiative was conceived in the north east of England as a joint venture by the Museums North; the Wildlife Trusts of Durham, Cleveland and Northumberland; Forest Authority and the University of Newcastle. The initiative consisted of a public awareness campaign (and associated Red and Grey Squirrel distribution survey), and also my research project on the ecology of the Red Squirrel in upland conifer plantations.

The idea was to see how far the Grey Squirrel had already spread and what could be done to save the Red Squirrel. The only places where the Red Squirrel had so far survived once Greys had colonised, were large areas of conifer forest such as Thetford Forest in East Anglia or parts of North Wales and Scotland (Lurz and Garson, 1992; Gurnell and Pepper, 1993). It is thought that originally our Red Squirrel evolved in the mainly coniferous boreal forest and is therefore more adapted to life in conifers rather than deciduous trees. However, in the absence of a competitor, Red Squirrels in Britain thrived in both deciduous and coniferous forests until the competing Grey Squirrel, a broadleaf specialist, was introduced.

The biggest conifer forest in this area is Kielder Forest which covers an area of about 50,000 ha. At present over 90% of Kielder consists of conifers and it was thought that the forest could be a sanctuary for the Red Squirrel. However, over 70% of the forest is made up of Sitka Spruce and about another 10% is made up of Lodgepole Pine. Both of these tree species are North American in origin and nobody knew how well the European Red Squirrel was doing in this artificial, non-native habitat.

My job was to determine population densities by trapping, and to follow Red Squirrels by radio-tracking to see how they use and live in this type of forest. Ultimately our aim was to use the findings of my work to advise forest managers on how to best help the Red Squirrel. The work took place at Spadeadam Forest, Cumbria, which is part of Kielder Forest District. This part of the forest is made up of a patchwork of plantations of mainly Sitka Spruce, Norway Spruce and Lodgepole Pine. There were only very small areas of Larch, Scots Pine and an experimental plot of Serbian Spruce. There were however, lots of ditches, bogs, midges and low flying jets, all of which I got to know very well during the course of the four years – especially the ditches!

Results

My main findings (Lurz, 1995) were that squirrels had unexpectedly large home ranges (a home range being the area a squirrel uses during the course of its daily

travels). Males (approx. 16 ha) tended to have larger ranges than females (approx. 9 ha) – this was particularly true during the breeding period. Essentially, the size of a female's home range is related to food availability, whereas the size of a male's range is influenced by food availability and access to as many females as possible.

Squirrel densities were also comparatively low and ranged between one squirrel for every 3–10 hectare of forest. Habitat use, determined by radio-tracking, followed spatial and temporal variation in seed food supply (Lurz and Garson, in press). In other words, squirrels spent most of their time in the tree types that were producing seeds at any given time. If given a choice however, they preferred Norway Spruce and Lodgepole Pine over Sitka Spruce. Sitka Spruce has the smallest seeds of the three conifers and the seeds are shed in winter. Most American conifers shed their seeds early, in contrast to the European conifers where the majority of seed is shed in spring. The squirrels have therefore only a limited period of time during which the food is accessible in Sitka Spruce. My trapping data also suggested that the more pine and Norway Spruce there was in a plantation and the less Sitka Spruce, the more abundant the squirrels were.

I also carried out a supplementary feeding experiment and supplied the squirrels with sunflower seeds and peanuts from 41 feeding hoppers in two areas for two years at a cost of £ 1700 (cost of seeds only). The feeding did not succeed in increasing the population. All I appeared to accomplish was to draw squirrels into the areas for a limited period, after which they moved on. There was therefore a rather high turnover of squirrels most of which were sub-adults probably dispersing to new areas. I have since learned that peanuts and sunflower seeds constitute a rather bad diet for Red Squirrels. Consumed in large quantities they can cause a calcium deficiency, which can lead to metabolic bone disease. From the results of my experiment and a literature review, I had to conclude that providing additional food for Red Squirrels, unless purely done to see the animal and to attract attention to its decline, will require a balanced diet and considerable commitment of time and money on a large scale to achieve its conservation objective. I am therefore doubtful that feeding Red Squirrels in gardens in Cumbria will help save them.

Drey use by squirrels at Spadeadam was interesting in as much that most squirrels used several dreys (3–8) at any given time. Some of these dreys were also used by other squirrels at different times, although I was never able to determine how this 'time share' was organized. Breeding females used only one drey to sleep in at night, but did rest in one to two others during the day, perhaps to have a break from the offspring? If the conditions are right some squirrels can breed twice (spring and summer litters). The few females that had second litters generally did not use the same breeding drey twice. This may have been a measure to reduce the parasite load in the nests. We found considerable numbers of fleas (*Ceratophyllus sciurorum*) as well as flea larvae in the dreys.

Using the findings of my study (Lurz, 1995, Lurz *et al.*, 1995) and advice from Dr.

John Gurnell, Forest Enterprise (Kielder Forest District) announced the creation of a Red Squirrel conservation area at Spadeadam Forest at the end of 1994 (McIntosh, 1995). Management recommendations include the planting of as much pine (preferably the native Scots Pine) and Norway Spruce as possible, as well as other conifers such as larch, Yew and firs in order to diversify the seed food supply for the squirrels. The planting of broadleaves will be restricted to small-seeded species suited to the uplands and streams such as Birch, Rowan, Alder and willows as well as Hawthorn, Dog Rose and other shrubs. Dog Rose and Hawthorn are known to be Red Squirrel food plants. Large-seeded broadleaves such as Oak, Beech and Sycamore which are known to favour Grey Squirrels, will be excluded from the area, but planted in other parts of Kielder for amenity and wildlife conservation. It has to be stressed that these recommendations are suited for upland conifer plantations dominated by Sitka Spruce. There, restructuring with open areas, riparian management and the planting of a variety of conifer and small seeded broadleaf species will lead to an improved habitat for Red Squirrels and other wildlife. The exclusion of the large-seeded broadleaves and the planting of other conifer species to provide a stable food supply favouring Red Squirrels may not be suitable in other areas. Choices will have to be made in habitats where the conservation of other species and existing broadleaf woodland is more important.

Other work

In addition to the fieldwork, we have given advice and practical help to seven other Red Squirrel conservation projects including Red Alert Northwest, who visited Spadeadam at the start of "Red Alert" in Cumbria. During most of last year and this spring I was also involved in a population genetics study by the Institute of Zoology in London. DNA of different Red Squirrel populations in England, Wales and Scotland was sampled – including squirrels at Spadeadam as well as museum specimens from Tullie House Museum. The findings as far as Cumbria are concerned suggest that Red Squirrels in Cumbria, Argyll and Northumberland share a number of genotypes, probably representing a continuous population (Barratt et al., 1996).

We also assisted in the translocation of Red Squirrels to Thetford Forest a few weeks ago. A few squirrels from Spadeadam Forest as well as a small number from the South Lakes were taken to Thetford Forest to help establish a viable population in their Red Squirrel conservation area.

As a final note I have to say that I was extremely grateful for the practical support I was given by Forest Enterprise and staff at RAF Spadeadam. The latter repeatedly had to repair my radio tracking equipment following unintentional explorations of drainage ditches and collision with seemingly mobile trees in the forest. The future distribution of the Red Squirrel in Britain will probably be a patchwork of "islands" in which the habitat favours Reds. However, I do hope that the Red Squirrel will remain a member of the Cumbrian fauna for a long time to come.

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Correction to: A colony of the mining bee *Andrena humilis* Imhoff at Helsington Barrows, near Kendal

Neil A. Robinson, 3 Abbey Drive, Natland, Kendal, Cumbria LA9 7QN

Correction to the above paper which appeared in the previous issue of the *Carlisle Naturalist* (Vol. 4 No.1, March 1996).

In March 1996 the spider wasp which had been identified as *Priocnemis fennica* Haupt in 1994 was determined by M.C. Day as *P. parvula* Dahlbom, a common species of open sandy places and heathland, but the identifications of *P. schioedtei* and *Anoplius nigerrimus* were confirmed.

Therefore on page 21, line 9, “*Priocnemis fennica* Haupt” should be deleted and replaced by “*Priocnemis parvula* Dahlbom”. The two following sentences on page 21, which suggest that *P. fennica* may be a new record for Cumbria and discuss its habitat, should be deleted.

The study of Cumbrian spiders

John R. Parker F.Z.S., 42 Lakeland Park, Keswick, Cumbria CA12 4AT

The majority of those with an interest in natural history limit their studies to what I call the “three B.s”: Birds, Botany (particularly the higher plants) and Butterflies; no doubt because these are not too difficult to observe with the aid of binoculars and a hand lens. Other groups such as mosses, beetles, flies, bees, wasps, ants and spiders are more challenging and require more expensive equipment such as a binocular microscope with powerful top lighting which is so essential for the examination of small creatures.

Here I write about spiders of which there are just over 650 species in Britain – most of which are very small indeed. So many people dislike spiders, which are much misunderstood, or have a phobia about them especially when some of the larger ones appear unexpectedly in our houses. No doubt this is the reason why, apart from occasional records, no one has provided a list of spider species for Cumbria since that published in the *Transactions* of this Society (Britten, 1912). An attempt to remedy that would take up too much space here. So here I am providing some general information on spiders and the remarkable things they are able to do. There then follows a list of some of the more noteworthy species that have been recorded in Cumbria.

Although spiders have either six or eight eyes, only the small jumping spiders and wolf spiders, which do not spin webs, have any sense of vision enabling them to hunt for the prey they require as food. All the other species are virtually blind. Their eyes are no more than simple ocelli which are sensitive to light and enable the spider to tell day from night (each species being active in one or the other period). The ocelli are also sensitive to ultra violet light, even when the sun is obscured.

All these “blind” spiders have a delicate sense of touch and weave a net of silk to capture their prey. Their nets are really an extension to the normal sensitivity of physical touching. The spiders which spin the beautiful geometric orb webs make them entirely by the sense of touch. Silken lines are also used as a “tightrope” to traverse an open space and as a safety line when the spider drops off a surface. Some use silk impregnated with a pheromone to leave a trail which enables the two sexes to find each other. Silk is also used to make a retreat from the weather and, in the form of a cocoon, to protect the newly laid eggs. Most of the tiny adult spiders can eject a long silken line which, when uplifted by air currents, enables the spider itself to become airborne. Spiders can be dispersed over considerable distances by this method. When there has been a mass dispersal the ground and herbage becomes covered with the gossamer we see on autumn mornings.

The living prey is killed, or at least immobilised, by the injection of a poisonous fluid from the fangs which hold the prey. All spiders digest their food externally. Digestive enzymes are injected into the prey, dissolving the protein which is then imbibed as a fluid. When the spider has need to sever a strand of silk it does not bite through it. A minute drop of the digestive fluid simply dissolves it. When taking down an old web prior to the building of a new one the spider can consume its own silk so that it is in fact re-cycled.

Almost all spiders can live for very long periods without food (there is a published record of 20 months for a *Theridion* species put in a stoppered glass tube and forgotten), but most species cannot survive without water. The exceptions to this are certain house spiders which never have access to water and whose meagre fluid intake consists of the body fluids of their prey.

Many spiders can walk across the surface of water without penetrating the water film. One species actually lives entirely underwater in ponds. Others can exist below water in estuaries and salt marshes where their habitat is covered by every high tide. Some river shingle dwelling species make a burrow below the stones where they over-winter even though the habitat is covered by torrents of water for considerable periods. One large species actually uses the surface of still water as an extension to the sense of touch so that insects and even small fish are detected by vibrations of the water surface and seized by the spider.

Harry Britten (1912) recorded 218 species for the old county of Cumberland (vice-county 70). The number of species from Cumbria now stands at 375 which is about 60% of the total number for Great Britain (there are no species unique to Ireland). Many of these are tiny linyphiid spiders more frequent in the north and in habitats such as raised bogs, high level blanket bogs and on stony mountain tops. Some species are very rare and indeed when discovered in the county were new to Britain or even new to science. The following list refers to some of the most notable of the county's spiders; those marked with an asterisk (*) are recorded by, or have been identified by, the writer.

Class ARACHNIDA

Order ARANAE

Family ATYPIDAE

Atypus affinis Eichwald.*

This is the only British representative of the Sub-order MYGALOMORPHAE (which includes the large bird-eating spiders) and is only 12 mm in size. It occurs in silk-lined burrows adjacent to limestone outcrops in the Silverdale area (SD47).

Family DICTYNIDAE

Lathys humilis (Blackwall).*

A small but rare British species found only on bushes and oak tree foliage at Witherslack (SD48).

Family ULOBORIDAE

Hyptiotes paradoxus (C.L. Koch).*

Spins a triangular web on evergreen shrubs and trees. It was new to science when discovered at Grange-in-Borrowdale (NY21) in 1863, but not subsequently recorded in the county until it was discovered on the Cumbria Wildlife Trust reserve at Grubbins Wood near Arnside (SD47) in 1976.

Family PHOLCIDAE

Pholcus phalangioides (Fuesslin).*

This spindly, long legged species is common in houses south of a line from Spurn Point to Anglesey, but has been taken in a hotel at Grasmere (NY30) and at Isel (NY13).

Family GNAPHOSIDAE

Drassyllus lutetianus (L. Koch).*

Far from common, but widespread in Britain. It was first recorded in Cumbria when found in a gull's nest on North Walney (SD17) in 1976.

Family CLUBIONIDAE

Clubiona norvegica Strand.*

This rare species, known from only three other British localities, is recorded from Wythop Moss (NY12).

Family SALTICIDAE

Euophrys lanigera (Simon).*

A small jumping spider found on the roofs of buildings and recorded in Carlisle from the roof of Tullie House Museum, Carlisle (NY35) by David Clarke.

Family LYCOSIDAE

Pardosa trailli (O.P.-Cambridge)*

A wolf spider associated with mountain scree slopes in England, Scotland and Wales. Recorded in Cumbria from Hell Gate screes, Great Gable (NY20).

Alopecosa cuneata (Clerck).

An early maturing wolf spider (April) recorded from open heathy areas, but not found in Cumbria since 1951.

Trochosa spinipalpis (F.O.P.-Cambridge)

Was new to science when both sexes were taken by the side of Derwent Water at Lodore (NY21) in 1893. Since recorded rarely from other English and Welsh localities.

Arctosa leopardus (Sundevall).*

Widespread but uncommon in Britain. Found in estuarine debris and dead leaves at Roudsea NNR (SD38).

Arctosa cinerea (Fabricius).*

This is the largest British lycosid. It is found on the exposed shingle beds of fast flowing rivers where it makes a burrow under stones covered at times by winter flood waters. River Caldew, Dalston (NY35) and River Eden, Salkeld (NY53).

Family PISAURIDAE

Pisaura fimbriatus (Clerck).*

This very large swamp spider is recorded from North Fen, Esthwaite Water (SD39) and seen in numbers in wet sphagnum at Roudsea and Deer Dyke Moss NNRs (SD38). Adults are found during late June and July.

Family AGELENIDAE

Agelena labyrinthica (Clerck).

Reported by Britten as "very common" on gorse bushes in the south of the county and at Newton Arlosh (NY25). Not seen by the writer but there are records of it in 1933 at North Walney (SD17) and Winster Wetlands (SD49).

Tegenaria saeva Blackwall.*; *T. atrica* C.L. Koch.* and *T. gigantea* Chamberlin & Ivie.*

These three very similar house spiders are, by length (including the legs), the largest spiders in Britain and can be quite startling when suddenly seen teetering across the carpet! These are usually males in search of the opposite sex. Not

recorded by Britten – all three species have spread north into Cumbria during the last 50 years. Carlisle is unique in being the only place where all three species have been recorded. *T. saeva* is the most common although mostly on the western side of the country; *T. atrica* is rarely found in Great Britain although widespread in southern Ireland; *T. gigantea* is generally distributed.

Family THERIDIIDAE

Theridion melanurum Hahn.*

Uncommon and usually found in buildings. Not recorded by Britten but recently observed in Keswick (NY22).

Theridion mystaceum L. Koch.*

Very similar to *T. melanurum* and frequenting the spaces of dry-stone walls where it makes a distinctive web, often of lampshade shape.

Theridion bellicosum Simon.*

Occasionally found under stones on high mountain sides. Not recorded by Britten, but taken by the writer on Helm Crag (NY30) and at the summit of Stickle Pike (SD29).

Family TETRAGNATHIDAE

Tetragnatha pinicola L. Koch.*

Most records are from the south of England apart from a single male recorded by Britten from Solway Moss (NY36). Since then it has been taken at Bowness on Solway Gravel Pits (NY26). These are the only records north of London.

Tetragnatha striata L. Koch.

Widespread but local in Britain, this species spins an orb web between reeds standing in open water. The only Cumbrian record is from the south end of Windermere.

Family METIDAE

Meta menardi (Latreille).*

This large spider spins a small open-meshed orb web in dark caves, old ice houses and mine workings. It is not uncommon in such situations.

Family ARGIOPIDAE

Larinioides sclopetarius Clerck.*

Although widespread throughout England this species has not been recorded north of Cumbria. This large spider is usually found near lakes and rivers. At an hotel at Bowness-on-Windermere (SD49) it spins large orb webs in the outside corners of high windows and across the roof trusses of the garage as well as in the boathouses. In recent years it has been recorded from beneath the railway bridge over the River Caldew in Bitts Park, Carlisle (NY35).

Family LINYPHIIDAE

All the species of this very large family (ca 250 British species) are very small, dark coloured and usually without abdominal pattern. These spiders undertake aerial dispersal: the so called "money spiders" – if found on one's person or clothing they were believed to bring good fortune.

Walckenaeria clavicornis (Emerton).*

New to Britain when discovered by the writer in collections made at Moorhouse NNR (NY73) on the Pennines in 1964. This very remarkable little spider has a circumpolar distribution, occurring even within the Arctic Circle (beyond 80 degrees North) where there is very little life other than the Collembola (springtails) upon which it feeds.

Entelecara errata (O.P.-Cambridge).*; *Semljicola caliginosa* Falconer.*; *Hilaira nubigena* Hull.*; *H. pervicax* Hull.*; *Lepthyphantes pinicola* Simon.* and *L. whymeri* F.O.P.-Cambridge.*

These are all high altitude mountain species which occur either under stones, or in *Juncus/Sphagnum* habitats.

Lepthyphantes expunctus (O.P.-Cambridge).*

Widespread in central Scotland's conifer forests, this species reaches the southern limits of its distribution in Cumbria where it is found on Juniper bushes at Blind Tarn Moss, Easdale and Grasmere.

Satilatlas britteni (Jackson).*

New to science when discovered by Britten on Wan Fell (NY53) in 1913. Since then there have been very few British records. Some years ago the writer found it in a wet area on the estuarine edge of Roudsea Wood NNR (SD38).

Glyphesis cottonae (La Touche).*

This very rare species of *Sphagnum* bogs was only known from the south of England until David Clarke took it on Scaleby Moss (NY46) in 1972.

Erigone welchi* Jackson.

This species was new to science when taken at Carlisle (exact site unknown) in 1914. It is extremely rare on blanket bogs in England, Scotland and Wales – there are no recent records from Cumbria.

Maro sublestus* Falconer.

First described from Wicken Fen (Cambs.) followed by a record from Woodwalton Fen in the same county and another two from Hampshire and Scotland. There were no further records until it was taken at Pull Wyke (NY30) at the north end of Windermere.

Maro lepidus* Casemir.

First described from Germany in 1963. In the same year both sexes were found at Rusland Moss NNR (SD38) followed by others from Yorkshire and Caernarvonshire. All British records by the writer in wet *Sphagnum* habitats.

Centromerus laevitarsis* Simon.

The only British record was from Cheshire by Dr. A. Randell Jackson in 1907, until taken by the writer at Glasson Moss NNR (NY26) and Biglands Bog (NY25) in Cumbria and at a further site in Devon.

Macrargus carpenteri* (O.P.-Cambridge).

A rarity with a few records from the hills of Scotland, Northumberland and Cumbria. The most recent find being made by Jennifer Newton under a stone in Ennerdale (NY11) in 1996.

Bathyphantes setiger* (F.O.P.-Cambridge).

First described from Newton Reigny Moss (NY43) in 1894. Although far from common there are now records from many areas in Britain and Ireland.

Finally, I knew Harry Britten very well when he was at Manchester University Museum and I worked in the city before the war. He informed me that the records for *Porrhoma microphthalmum* (O.P.-Cambridge) published in his list were misidentifications and should be deleted. In fact this species has never been recorded from Cumbria.

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Since Britten's time the nomenclature has changed considerably and that used here is from the references below.

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Artwork: John Read, Roy Atkins & Ann Robinson

All material for publication should be sent to Stephen Hewitt, Tullie House Museum, Castle St., Carlisle CA3 8TP.

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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, or submitted on DOS-formatted 3.5 inch computer disc in ASCII format and accompanied by a paper copy. Only species and genera should be underlined. Authority names in articles 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 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.

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Adult £ 6.00; Family £ 8.00; Junior £ 3.00; Affiliated £ 5.00

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Membership application forms are available from the Secretary.

Winter Meetings, 1996/7

Indoor meetings are at Tullie House Museum and Art Gallery, Castle Street, Carlisle.

Meetings start promptly at 7.15 pm (doors open at 6.50 pm)

28th September (Saturday) (Field Meeting) FUNGUS FORAY, TALKIN TARN.

Leader: Geoff Naylor, Depart 1.30pm. Meet Talkin Tarn (NY544590) at 2.00pm

9th October "A NATURALIST IN MADAGASCAR" Talk by Dr. Roy Armstrong

23rd October "DEER MANAGEMENT IN LAKELAND" Talk by Laurie Walton

6th November MEMBERS NIGHT Contributions from the membership

20th November "THE GEOLOGY OF LAKELAND TARNs" Talk by Dr. Alan Smith

4th December "ARTISANS, THIEVES AND IMPOSTERS – the natural history of solitary bees and wasps" Talk by Neil Robinson

18th December "SOWERBY WOOD" Talk by Barry Marrs

"BATS IN BRIDGES SURVEY 1996" Talk by Geoff Norman

8th January "BIRDS AND WILDLIFE OF THE SEYCHELLES" Talk by Jeremy Roberts

22nd January "BADGER CONSERVATION" Talk by Phil Gray

1st February (Saturday): (Field Meeting) LOCH KEN, GALLOWAY (wild goose chase) Leader: Geoff Horne. Depart 9.00 am.

5th February "FLOWERS OF THE UPPER EDEN VALLEY" Talk by Jonathon Atkins

19th February "UPLAND BIRDS OF PREY" Talk by Steve Redpath

5th March AGM AND MEMBERS NIGHT