Parnassia The Newsletter of the Liverpool Botanical Society



2013

In this Issue

Field Meetings 2005 - 2012 Indoor Meetings 2006 – 2012 Obituaries Vera Gordon, Keith Watson and Tony Bradshaw

Field Meetings 2005

Thurstaston 30th July 2005 Leader – Dave Earl

At Thurstaston Common car park early arrivals had a look at some brambles including *Rubus wirralensis*, *R. nemoralis*, *R. cardiophyllus*, *R. tuberculatus*, *R. lindleianus*, *R. dasyphyllus and R. hylocharis*.

We then walked down to the lane by Thurstaston church to look at a rock outcrop where Bird's-foot, *Ornithopus perpusillus* once grew. The area had been mown recently and no Bird's-foot plants were found, although Early Hair-grass, *Aira praecox* and Annual Pearlwort, *Sagina apetala* were present. After some searching, we did find Navelwort, *Umbilicus rupestris* under the hedgerow nearby.

At the churchyard we found Fox-and-cubs, *Pilosella aurantiaca*, Mouse-ear-hawkweed, *Pilosella officinarum*, Scarlet Pimpernel, *Anagallis arvensis*, Parsley Piert, *Aphanes arvensis*, white flowered Herb-Robert, *Geranium robertianum* and the mosses *Dicranum scoparium* and *Thuidium tamariscinum*. An abundance of Krauss's Clubmoss, *Selaginella kraussiana* was established in a border. Keith Watson then showed us the nearby village Black Poplar, *Populus nigra ssp. betulifolia*.

We then drove down to Thurstaston Country Park for lunch by the cafe, after which we explored the nearby pond finding Water Soldier, Stratiotes aloides, Curly Waterweed, Lagarosiphon major, Rigid Hornwort, Ceratophyllum demersum, Curled Pondweed, Potamogeton crispus, Broad-leaved Pondweed, Potamogeton natans, New Zealand Pigmyweed, Crassula helmsii, Water Mint, Mentha aquatica and Clustered Dock, Rumex conglomeratus. Onwards then to descend the wooded chine beneath the caravan park where we admired Soft Shield-fern, *Polystichum setiferum*, False Brome Brachypodium sylvaticum, Rough Chervil, Chaerophyllum temelum and Black Bryony, Tamus communis. Along the open clay banks of the chine we found Wild Carrot, Daucus carota, Hoary Ragwort, Senecio erucifolius, Quaking Grass, Briza media, Betony, Stachys officinalis, Glaucous Sedge, Carex flacca, Yellow-wort, Blackstonia perfoliata, Restharrow, Ononis repens, Bloody Crane's-bill, Geranium sanguineum, Tall Fescue, Festuca arundinacea and Agrimony, Agrimonia eupatoria. Perennial Sowthistle, Sonchus arvensis Common Reed, Phragmites australis, Lymegrass, Leymus arenarius, Sea Beet, Beta vulgaris ssp. maritima, Sea Club-rush, Bolboschoenus maritimus, Sea Rocket, Cakile maritima, Grass-leaved Orache, Atriplex littoralis and Tree-mallow, Lavatera arborea occurred along the shore.

Further exploration of the clay cliffs gave us Zigzag Clover, *Trifolium medium*, Fairy Flax, *Linum catharticum*, Common Centaury, Centaurium erythraea, Wood Small-reed, *Calamagrostis epigejos* and several small populations of Pepper Saxifrage, *Silaum silaus*. We then explored the meadows above the cliffs finding Heath Groundsel, *Senecio sylvaticus*, Red Bartsia, *Odontites vernus*, Upright Hedgeparsley, *Torilis japonica* and Dyer's Greenwood, *Genista tinctoria*. The nearby ponds provided much interest with Branched Bur-reed, *Sparganium erectum*, Gypsywort,

Lycopus europaeus, Lesser Spearwort, Ranunculus flammula, Brooklime, Veronica beccabunga, Common Water-plantain, Alisma plantago-aquatica, Lesser Water-plantain, Baldellia ranunculoides, Cyperus Sedge, Carex pseudocyperus, Fool's-water-cress, Apium nodiflorum, Marsh Pennywort, Hydrocotyle vulgaris, Lesser Water-parsnip, Berula erecta, False Fox-sedge, Carex otrubae, and the now very local Floating Club-moss, Eleogiton fluitans.

Finally, we returned to Thurstaston Common where Heather, *Calluna vulgaris*, Bell Heather, *Erica cinerea* and Western Gorse, *Ulex gallii* were in bloom. We explored an area of Purple Moor-grass, *Molinia caerulea* and Common Cottongrass, *Eriophorum angustifolium* for the Silver-studded Blue butterfly without success, although we did find an Orange Underwing moth, Cross-leaved Heath, *Erica tetralix*, Common Sedge, *Carex nigra*, Bulbous Rush, *Juncus bulbosus*, Heath Rush, *Juncus squarrosus* and Deer Grass *Trichophorum cespitosum*.

Dave Earl

Runcorn, Manor Park 20th August 2005 Leader – Tony Parker No report available

Otterspool 10th September 2005 Leader – Dave Earl

From Aigburth railway station we walked down to the shore along Mersey Road along which Red Valerian, *Centranthus ruber* and Yellow Corydalis, *Pseudofumaria lutea* are established on walls. We obtained permission to explore the nearby allotments finding Henbit Dead-nettle, *Lamium amplexicaule*, Common Rampingfumitory, *Fumaria muralis*, Scarlet Pimpernel, *Anagallis arvensis*, Long-headed Poppy, *Papaver dubium* and Wild Teasel, *Dipsacus fullonum*. Several species of the Genus *Ribes* are semi-established in the adjoining scrub and allotment fencing and include Black Currant, *Ribes nigrum*, Red Currant, *Ribes rubrum* and Gooseberry, *Ribes uva-crispa*.

On embankments close the shore Sea Radish, Raphanus raphanistrum ssp. maritimus and Tree-mallow, Lavatera arborea are locally frequent whilst in flower beds Great Brome, Anisantha diandra, Lesser Swine-cress, Coronopus didymus and Square-stalked Willowherb, Epilobium tetragonum are established. Amongst the promenade turf Sea-purslane, Atriplex portulacoides and Buck's-horn Plantain, Plantago coronopus were found whilst Sea Pearlwort, Sagina maritima occurs along the sea wall.

After lunch we explored the nearby parkland, horticultural refuse and composting area. Here we found a good number of exotic species including Italian Alder, *Alnus cordata*, Elephant-ears, *Bergenia crassifolia*, Canadian Fleabane, *Conyza canadensis*, Guernsey Fleabane, *Conyza sumatrensis*, Cockspur, *Echinochloa crusgalli*, Pale Willowherb, *Epilobium roseum*, Fuchsia, *Fuchsia magellanica*, Gallant-soldier, *Galinsoja parviflora*,, Shaggy-soldier, *G. quadriradiata*, Hedgerow Crane'sbill, *Geranium pyrenaicum*, Sunflower, *Helianthus annuus*, Hoary Mustard, *Hirschfeldia incana*, Stinking Tutsan, *Hypericum hircinum*, Small Balsam, *Impatiens parviflora*, Cut-leaved Dead-nettle, *Lamium amplexicaule*, Garden Lavender, *Lavendula x intermedia*, Purple Toadflax, *Linaria purpurea*, Purple-loosestrife,

Lythrum salicaria, Intermediate Evening-primrose, Oenothera x fallax, Procumbent Yellow-sorrel, Oxalis corniculata, Water Bent, Polypogon viridis, Field Woundwort, Stachys arvensis, Dark Mullein, Verbascum nigrum, and Argentinian Vervain, Verbena bonariensis.

Onward then to the wooded clough in Otterspool Park. Several exotic trees and shrubs have been planted such as Turkey Oak, *Quercus cerris*, Evergreen Oak, *Quercus ilex*, Tulip Tree, *Liliodendron tulipifera*, Cut-leaved Beech, *Fagus sylvatica*, Cherry Laurel, *Prunus laurocerasus*, Portugal Laurel, *Prunus lusitanica*, and Spotted-laurel, *Aucuba japonica*. Also occurring are Veitch's Bamboo, *Sasa veitchii*, Persian Ivy, *Hedera colchica* and the delightful member of the saxifrage family – Rodgersia, *Rogersia podophylla*. Indigenous species include Yellow Iris, *Iris pseudacorus*, Giant Fescue, *Festuca gigantea*, Goldenrod, *Solidago virgaurea* and Great Wood-rush, *Luzula sylvatica*. After examining and eating the fruits of two woodland brambles - *Rubus hylocharis* and *Rubus cissburiensis* we concluded our very successful field meeting.

Dave Earl

Dibbinsdale 8th October 2005 Leader - Keith Watson

A party of 12 members met at Bromborough Rake station on a dark, cloudy and drizzly morning. Rain followed for most of the meeting. We walked down paths towards the river, noting Turkeytail, *Trametes versicolor* and Common Earthball, *Scleroderma citrinum* on wood. Over the bridge with lots of Water-pepper, *Persicaria hydropiper* to the new ponds dug out about two years ago. They have been colonised with abundant Indian Balsam, *Impatiens glandulifera* and Common Reed, *Phragmites australis* but with other plants such as Trifid Bur-marigold, *Bidens tripartita* and Common Duckweed, *Lemna minor*, with Teasel, *Dipsacus fullonum* on the path. We found several fungi here, including Amethyst Deceiver, *Laccaria amethystea*.

Then we followed the path across Bodens Hey meadow and back over the bridges where Blushing Bracket, *Daedaleopsis confragosa* grew on willow branches, just out of reach. However, we saw it later where the red staining was very evident. Back into the dark and gloomy woods where we found Coral Spot, *Nectria cinnebarina*, and probably Ochre Brittlegill, *Russula ochroleuca* and Beefsteak fungus, *Fistulina hepatica*. On a large fallen tree was Stump Puff-ball, *Lycoperdon pyriforme* and nearby Dryad's Saddle, *Polyporus squamosus*. We also saw a very large frog.

We followed the path to the tunnel under the railway line, where we had lunch to shelter from the rain. Through the tunnel and towards Brotherton Park we found Shaggy Inkcap, Coprinus comatus, and fruits on the Hornbeam, Carpinus betulus. Goldenrod, Solidago virgaurea and Wall Lettuce, Mycelis muralis were found. Then to St Patrick's well, with Jelly Ear, Auricularia auricula-judae growing on alder and Sulphur Tuft, Hypholoma fasciculare. We then walked towards the Warden's cottage, and saw the large Holm Oak, Quercus ilex and Monkey-puzzle, Araucaria araucana. The Deceiver, Laccaria laccata was found in grassland near Woodslee pond and

Birch Polypore, *Piptoporous betulinus* nearby. Finally, we walked back though the tunnel and along the woodland path to the station.

I would like to thank everyone in the group, but especially Maria and Pat, for their enthusiasm and identifications on a rather wet day. Our finds very much exceeded my expectations after my recce walk a few days before.

Keith Watson

Field Meetings 2006

Loggerheads 29th April 2006 Leader – Keith Watson

A party of 11 met at the Visitor Centre car park, admiring plants such as Lesser Celandine, Ranunculus ficaria, Primrose, Primula vulgaris, Ground-ivy, Glenchoma hederacea and Red Campion, Silene dioeca in the woodland border. We walked across the bridge over the river, turning right for a short detour to see the Spurgelaurel, Daphne laureola at the bottom of the steep steps. We then walked along the path by the river, finding abundant Opposite-leaved Golden-saxifrage, Chrysosplenium oppositifolium and, after some discussion, leaves of Dame's-violet, Hersperis matronalis. Bee-flies, probably feeding on the Primrose nectar, buzzed around as we searched for and found Alternate-leaved Golden-saxifrage, Chrysosplenium alternifolium, now much less common than I remember in the past. Herb-Paris, Paris quadrifolia was almost in flower by the wall that marks the Denbs/ Flints boundary. Toothwort, Lathraea squammaria was found near here and in several other places during the day. As we walked along the path we found plants such as Moschatel, Adoxa moschatellina, Common and Early Dog-violet, Viola riviniana and V. reichenbechiana and ferns such as Hard Shield-fern, Polystichum aculeatum, Hart's-tongue Fern, Phyllitis scolopendrium, Black Spleenwort, Asplenium adiantum-nigrum and Scaly Male-fern, Dryopteris affinis.

We had lunch near one of the caves finding leaves of the Early-purple Orchid, *Orchis mascula*, and walked as far as the bridge over the gorge and took the path up to Pantymwyn. We explored the Cowslip fields, but due to the late season very few were in flower, and there was rather little of interest. However, a Holly Blue butterfly was seen, my first of the season.

We then took the lane from Pantymwyn to the top of the cliff above the Visitor Centre. We had a tea break next to a good clump of Hairy Violet, *Viola hirta* and searched amongst the grass for tiny early plants such as Spring-sedge, *Carex caryophyllea* and Whitlowgrass, *Erophila verna agg*. There was a lot of Spurge Laurel here and leaves of Hairy Rock-cress, *Arabis hirsuta* were found. A highlight of the day for me was the Green Hairstreak butterfly, flying around clumps of Common Rock-rose, *Helianthemum nummularium*. We then walked into the woods to see the bush of Fly Honeysuckle, *Lonicera xylosteum* and back down the steep steps to the Visitor Centre and car park.

Keith Watson

Ainsdale 3rd June 2006 Leader – Susan Taylor

On a lovely sunny day, a group of 24 members gathered to explore some of the dunes and slacks at Ainsdale, seawards of the coast road (part of the old Cheshire Lines Railway). We were delighted to welcome 5 new members. This meeting was almost exactly 100 years after the first ever field meeting of the Society at Ainsdale on the 2nd June 1906 when 20 founding members were present.

Today the Ainsdale sand hills are managed as a Local Nature Reserve set up in 1980, by Sefton Borough Council. In 2006 the season was late, most of May being wet and cold. However, most of the dune ephemerals were already in seed, or no longer visible.

In a damp area were found the first flowers of Southern Marsh-orchid, *Dactylorhiza praetermissa* and Early Marsh-orchid, *Dactylorhiza incarnata*. Dave Earl guided us to splendid clump of Rosy Garlic, *Allium roseum*, not far from Sands Lake (Bulrush slack in 1906). Small black Natterjack Toad tadpoles swam in the warm, shallow waters of a pool. Our rarest amphibian.

We had our lunch in the dunes, south of Shore Road. To celebrate the Centenary, those with a liking for alcohol were provided with a little white wine, brought along in a cool bag. One of the party suggested it might be a good idea to have this at all future field meetings! A member who had travelled from Manchester enjoyed a good view of the sea.

Dune Pansy, *Viola tricolor ssp. curtisii* grew in a few places, and under Creeping Willow, *Salix repens* the first flowers of Round-leaved Wintergreen, *Pyrola rotundifolia ssp. maritima* were seen. The flowers of Hound's-tongue, *Cynoglossum officinale* were a favourite of Bumblebees. Common Blue Butterfly and Cinnabar moths fluttered here and there. Some of the Creeping Willow was being eaten by the colourful and hairy caterpillars of White Satin moths, with the pupae hanging in spun cocoons amongst the twigs.

One, old acidic slack, possibly part of the 'Mayflower slack', shown on the OS map of 1848, was particularly interesting. The Sefton Rangers, over the last ten years, have done excellent work to clear a lot of invasive scrub and this area is now grazed by Herdwick sheep from October to April. On a recce for this meeting, many hundreds of Adder's-tongue, *Ophioglossum vulgatum* were discovered. These were admired by the party, the small green blades and spikes partly hidden by the vegetation. We found one of the first flowers of Marsh Cinquefoil, *Potentilla palustris*, the purplish hue of the petals and sepals not easy to find amongst the other dune vegetation. Quite a few of the party enjoyed a rest, seated on a grassy bank

Common Cotton-grass, *Eriophorum angustifolium* was noticeable in a few damp areas and one pool was full of Bogbean, *Menyanthes trifoliata* some in flower and some in seed. One of our favourites.

Circling back towards the Visitor Centre and the car park we passed grassy areas bright with shining Bulbous Buttercup, *Ranunculus bulbosus*, and lemon-yellow Mouse-ear Hawkweed, *Pilosella officinarum* flowers.

A memorable walk in perfect weather. Many thanks to those who helped with transport, also to Dave Earl for guiding us to some interesting plants.

Footnotes:

At the end of the meeting, a few members still with energy and time to spare continued to botanise.

Dave and Joyce Earl led some to Knotted Clover, *Trifolium striatum*, Slender Trefoil, *T. micranthum*, Smooth Rupturewort, *Herniaria glabra* and Purple Ramping-fumitory, *Fumaria purpurea*, all growing on sandy grass verges near Shore Road.

Others went to look at a tall, stout Crucifer near the shore. The pale-yellow flowers and newly developing seed pods caused some debate. The leader returned a few weeks later and is now able to confirm that it was Sea-radish, *Raphanus raphanistrum ssp. maritimus*, the fruits probably dispersed by the sea.

Travis's Flora of South Lancashire mentions that 'leaves, seeds and pollen of *Menyanthes trifoliata* were plentiful in the peat of the submerged forest, north of Hall Road'. World Museums Liverpool has an extensive collection of accurate models of enlarged flowers by R. Brendel, Germany, about 1900. One is of *Menyanthes trifoliata*, well worth a visit.

Susan Taylor

Wallasey 1st July 2006 Leader – Keith Watson

On a hot sunny day, but with a welcome breeze on the coast, a party of 10 members met at Wallasey Grove Road station. Walking towards the coast Dark Mullein, *Verbascum nigrum*, Garden Asparagus, *Asparagus officinalis* and Large-flowered Evening-primrose, *Oenothera glazioviana* were found on the railway bank.

On the evening of June 22nd 1906 a party of 35 members met at Wallasey and followed the inland side of the golf links as far as Leasowe. The dunes were probably more extensive then, and the area less built-up.

In 2006 we walked to the shore, past the miniature golf course, finding Prickly Saltwort, *Salsola kali*, increasing Sea-holly, *Eryngium maritimum* and Sea Ferngrass, *Catapodium marinum*. Continuing west along the shore we had lunch in the old dunes at the edge of the golf course, amongst Burnet-saxifrage, *Pimpinella saxifraga*, Harebell, *Campanula rotundifolia* and Sheep's-bit, *Jasione montana*. Small Heath and Meadow Brown butterflies fluttered around.

After lunch, on to the Gun Site dunes with many plants including Creeping Willow, Salix repens, Burnet Rose, Rosa pimpinellifolia, Crow Garlic, Allium vineale, the introduced Spanish Broom, Spartium junceum and it's most notable plant, the Isle of

Man Cabbage, *Coincya moensis ssp. moensis* in good flower in several places. A new find for me was the annual grass, Hare's-tail, *Lagurus ovatus* on one of the dunes.

The 1906 report mentions Springbeauty, *Claytonia perfoliata*, first reported in the area by a member, Mr Day in 1886 and spreading rapidly. It is now abundant in places on the Gun Site dunes and other places on the Wirral coast. Also according to the report "it makes an excellent salad".

We had a look for Bee Orchid, *Ophrys apifera* in the grassy area just west of the dunes but only one in fruit was found. Sea Spurge, *Euphorbia paralius* was found on the shore with Yellow-wort, *Blackstonia perfoliata* in the grassland.

We did not go as far as Leasowe Castle, where the 1906 report mentions abundant Giant Hogweed, *Heracleum mantegazzianum*, it is maybe less common now but I have, in past years, seen occasional plants on the seaward edge of the golf course.

Then we walked back to the Gun Site dunes, having a tea break at the picnic area and along Green Lane and Bayswater Road back to Grove Road station. Not a lot new to see but we did find Green Alkanet, *Pentaglottis sempervirens* on the roadside, also recorded as increasing at the 1906 meeting.

Keith Watson

Crosby and Hightown 15th July 2006 Leader – Pat Lockwood

It wasn't really the day for walking as we were in the middle of a heat wave. When we did a recce in June the flora was excellent, particularly the Isle of Man Cabbage, *Coincya monensis ssp. monensis*. However on this day we had to search to find very poor specimens. I decided to take the high path close to the golf course in the hope of a cooling breeze. The Soapwort, *Saponaria officinalis* was coming into flower as was Bouncing Bett, the double-flowered form; a new name for me.

The Broad-leaved Everlasting-pea, *Lathyrus latifolius* was in good flower as was Japanese Rose, *Rosa rugosa* which spread everywhere. Sheila Mason found a superb group of Pyramidal Orchid, *Anacamptis pyrimidalis* and a Red Currant, *Ribes rubrum* bush laden with fruit. The Common Meadow Rue, *Thalictrum flavum* is worth mentioning; also Common Broomrape, *Orobanche minor*, a parasitic plant, found by Peter. There was an abundance of Sea Holly, *Eryngium maritimum* and we searched for and Peter found the Sea Bindweed, *Calystegia soldanella* which is such a beautiful plant. The Viper's-bugloss, *Echium vulgare* was still in good flower but suffering from the drought as was the Bloody Crane's-bill, *Geranium sanguineum* and the Cypress Spurge, *Euphorbia cyparissias*.

On the shore the Yellow Horned-poppy, *Glaucium flavum* was as good in flower as in fruit, as was the Rock Samphire, *Crithmum maritimum*. Sea Beet, *Beta vulgaris ssp maritima*, Prickly Saltwort, *Salsola kali*, Annual Sea-blite, *Suaeda maritima*, Glasswort, *Salicornia sp.* and Sea Kale, *Crambe maritima* were admired by all; also

Sea Sandwort, *Honckenya peploides* in good flower and fruit. The spelling of 'Honkenya' differs from flora to flora so take your pick; I prefer the latter. The Duke of Argyll's Tea Plant, *Lyceum barbarum* was doing well. It grows in a very exposed area and survives all that is thrown at it; the frosts and gales of last winter and this spring were particularly unpleasant.

The grasses were predominantly in seed or over but a few were still distinguishable. Wall Barley, *Hordeum murinum*, Perennial Rye-grass, *Lolium perenne*, Lyme-Grass, *Leymus arenarius*, Rough Meadow Grass, *Poa trivialis*, Marram, *Ammophila arenaria* and the Sand Sedge, *Carex arenaria*.

This was a replica of the 1906 meeting and part of the LBS 100th anniversary celebrations. Many thanks to Peter Gately and Douglas for their help with the recce. I should like to think that the LBS will go from strength to strength so that the meeting will be repeated once again in 2106.

Pat Lockwood

Rufford 12th August 2006 Leader – Dave Earl

Beginning at Rufford Station car park, we found the increasingly frequent casual Cockspur, *Echinochloa crus-galli* and an abundance of Hemlock, *Conium maculatum*. At the small fishing pond opposite known as White Bridge Pond we saw both Bulrush, *Typha latifolia* and the hybrid *T. x glauca*.

On reaching the Rufford Branch of the Leeds & Liverpool Canal we again found a few plants of Typha x glauca as well as Skullcap, Scutellaria galericulata, Gypsywort, Lycopus europaeus, False Fox-sedge, Carex otrubae, Remote Sedge, C. remota. Meadowsweet, Filipendula ulmaria, Reed Sweet-grass, Glyceria maxima, Hemlock Water-dropwort, Oenanthe crocata, Yellow Flag, Iris pseudacorus, Water Mint, Mentha aguatica, Branched Bur-reed, Sparganium errectum, Marsh Woundwort, Stachys palustris, Celery-leaved Buttercup, Ranunculus sceleratus and Zigzag Clover, Trifolium medium. Aquatic species included Unbranched Bur-reed, Sparganium emersum, White Water-lily, Nymphaea alba, Yellow Water-lily, Nuphar lutea, Arrowhead, Sagittaria sagittifolia, Perfoliate Pondweed, Potamogeton perfoliatus, Fennel Pondweed, P. pectinatus and Amphibious Bistort, Persicaria amphibia. Common Reed, Phragmites australis is locally abundant here, amongst which Reed Warblers were singing. About the newly constructed marina Cornflower, Centaurea cyanus and Corn Marigold, Chrysanthemum segetum had been sown. Several undescribed bramble species were seen along the towpath. These included the very localised endemic Holmeswood Bramble, the Leyland Bramble (which may have been found recently in North Wales?) and the regional endemic Lancashire Bramble.

We then walked along the path above Rufford Boundary Drain towards Mere Sands Wood finding Whorled Mint, *Mentha aquatica x arvensis*, Fool's-water-cress, *Apium nodiflorum*, Water Forget-me-not, *Myosotis scorpioides*, Spiked Water-milfoil, *Myriophyllum spicatum*, Water-cress, *Rorippa nasturtium-aquaticum* and Nuttall's Waterweed, *Elodea nuttallii*, Common Dog-violet, *Viola riviniana* was found along the stream banks and butterflies seen included Speckled Wood, Common Blue and a

Clouded Yellow. In the adjoining arable fields we noted Cut-leaved Dead-nettle, *Lamium hybridum*, Small Nettle, *Urtica urens*, Pale Persicaria, *Persicaria lapathifolia* and Black-bindweed, *Fallopia convolvulus*.

Lunch was taken in the shade at Mere Sands Wood beneath the Turkey Oaks. Sand Sedge, *Carex arenaria* occurs here on the banks of the Boundary Drain and a surprise find was a bramble that appeared to be *Rubus armipotens* a new vice-county record for South Lancashire if correct. Onward then through the pinewoods to the viewing platform of a man-made lake where Bogbean, *Menyanthes trifoliata* occurs and the invasive New Zealand Pigmyweed, *Crassula helmsii*. Hard Fern, *Blechnum spicant* was seen on a nearby shaded ditch. The meadow area was then visited where we found Common Centaury, *Centaurium erythraea*, Meadow Crane'sbill, *Geranium pratense*, Square-stalked St. John's-wort, *Hypericum tetrapterum*, Purging Flax, *Linum catharticum*, Yellow Loosestrife, *Lysimachia vulgaris*, Purple Loosestrife, *Lythrum salicaria*, Musk-Mallow, *Malva moschata*, Red Bartsia, *Odontites vernus* and Common Fleabane, *Pulicaria dysenterica*. On approaching the Visitor Centre we found what is said to be Green-flowered Helleborine, *Epipactis phyllanthes*. Other plants of interest about ponds included Fringed Water-lily, *Nymphoides peltata* and Grey Club-rush, *Schoenoplectus tabernaemontani*.

Our return journey across arable fields yielded locally abundant Corn Marigold, *Chrysanthemum* segetum, Bifid Hemp-nettle, *Galeopsis bifida*, Common Hemp-nettle, *G. tetrahit* and Field Pansy, *Viola arvensis*. At Flash Lane we enjoyed eating Black Mulberry, *Morus nigra* fruits before concluding our excursion. *Dave Earl*

Leasowe and West Kirby 2nd August 2006 Leader – Keith Watson

This meeting was cancelled due to bad weather. It was raining torrents and blowing a gale as I arrived at Moreton Station. No members arrived by train and only two, Pat and Douglas by car. We decided to call off the walk. As far as I know, this is the only LBS meeting ever abandoned before it even started. *Keith Watson*

Speke 23rd September 2006 Leader – Leander Wolstenholme No report received.

Dibbinsdale 21st October 2006 Leader – Keith Watson

A party of about 10 members met at Bromborough Rake station on a fine, warm, sunny autumn day. We saw Hairy Curtain Crust, *Stereum hirsutum*, Turkeytail, *Trametes versicolor*, Amethyst Deceiver, *Laccaria amethystina* and probably Golden Scalycap, *Pholiota aurivella* on the path down to the river. Many Bonnets, *Mycena sp.* were everywhere but impossible to identify. Lower down we saw Cramp Balls, *Daldinia concentrica*, Dead Moll's Fingers, *Xylaria longipes*, Coral Spot, *Nectria cinnebarina* and Pink Purslane, *Claytonia sibirica* in flower.

We then crossed the bridge over the Dibbin amongst abundant Indian Balsam, Impatiens glandulifera. A clump of Winter Heliotrope, Petasites fragrans had an orange rust on the underside of the leaves. Bodens Hey meadow has been recently cleared to remove tall dense vegetation such as brambles, and the previously rich flora is now recovering with Common Hemp-nettle, Galeopsis tetrahit and Marsh Thistle, Cirsium palustre still in flower with abundant leaves of Sorrel, Rumex acetosa. We headed for a clump of Birch trees to find the Fly Agaric, Amanita muscaria and Brown Rollrim, Paxillus involutus beneath, and had an early lunch in the sunshine.

Then we walked across the bridges with Blushing Bracket, *Daedaleopsis confragosa* growing on branches of Crack Willow, *Salix fragilis* and back into the woods again. There was an abundance of fungi everywhere, many unidentified but including White Coral, *Clavulina coralloides*, Yellow Club, *Clavulinopsis helveola*, Ochre Brittlegill, *Russula ochroleuca*, small Oyster Mushroom, *Pleurotus ostreatus* and Stump Puffball, *Lycoperdon pyriforme*.

We walked through the tunnel under the railway, to find Shaggy Inkcap, *Coprinus comatus* by the path in exactly the same place as last year. Other finds were Yellow Brain, *Tremella mesenterica*, Shaggy Parasol, *Macrolepiota rhacoides* and at the viewpoint on the path towards Woodslee, White Saddle, *Helvella crispa*. We had tea here, finding Birch Polypore or Razorstrop Fungus, *Piptoporus betulinus* nearby and then descended on a path down to the river. The riverside walk here along several exposures of the soft, red Bunter Sandstone is notable for the ferns, especially Hard Fern, *Blechnum spicant*, the many species of mosses and liverworts, and the Opposite-leaved Golden-saxifrage, *Chrysosplenium oppositifolium*.

The fruits of Hornbeam, *Carpinus betulus* were seen as we walked back past the Reed beds, back through the tunnel and along the woodland path with Jelly Ear, *Auricularia auricula-judae* and back to the Station.

Keith Watson

Field Meetings 2007

The following are based on reports by the leader unless stated otherwise.

21st April 2007 Dibbinsdale Leader: Keith Watson

Meeting at Bromborough Rake Station on a cool morning, through it gradually got hotter during the day. Due to Merseyrail delays some members were late, but eventually a party of ten walked down the path into the woods. There were masses of Wood Anemone Anemone nemorosa, Bluebell Hyacinthoides non-scripta, and Dog's Mercury Mercurialis perennis. A good spot along the path towards Dibbinsdale Road contained Sanicle Sanicula europaea, Barren Strawberry Potentilla sterilis, Bugle Ajuga reptans and Primrose Primula vulgaris. Marsh-marigold Caltha palustris and Pink Purslane Claytonia sibirica were in flower by the river.

We then crossed the bridge, to Bodens Hey meadow. There was nothing much in flower yet in the grassland but the trees were interesting with fruits on the *Wych Elm Ulmus glabra*. We also saw *Norway Maple Acer platanoides*. Then, across the bridges, back into the woods where *Moschatel Adoxa moschatellina* was found in a damp spot by the Dibbin. After lunch amongst the tall Hornbeams *Carpinus betulus*, we walked through the tunnel under the railway to Brotherton Park. *Gooseberry Ribes uva-crispa*, Black Currant *Ribes nigrum* and Cuckooflower *Cardamine pratensis*, with an egg-laying, female Orange Tip butterfly were seen.

The path along the bottom of the cliff towards St Patricks well has many ferns, such as Lady-fern *Athyrium felix-femina*, Broad Buckler-fern *Dryopteris dilitata*, Soft Shield-fern *Polystichum setiferum* and Hard-fern *Blechnum spicant*. Opposite-leaved Golden-saxifrage grows on the tufa outcrops, and there is abundant Great Wood-rush *Luzula sylvatica*.

At St. Patrick's well there were Ramsons Allium ursinum, Three-nerved Sandwort Moehringia trinervia, Hairy Wood-rush Luzula pilosa, as well as the garden escapes Kerria Kerria japonica and Cherry Plum Prunus cerasifera var. pissardii.

Holly Blue butterflies were flying, high in the trees in the sun at Woodslee, as we started our way back down through the woods, through the tunnel again and back to the station.

12th May 2007 Downham Leader: David Earl

At Downham we spotted plants of Green Figwort growing along the village brook before moving on to admire the long established plants of Fairy Foxglove growing on a village garden wall. We were surprised to find another exotic the American Speedwell growing in a nearby flowerbed, a new record for SD74. Other established plants seen about the village included Garden Rock-cress, Red Valerian, Ivy-leaved Toadflax, Shining Crane's-bill, Spotted Hawkweed, Welsh Poppy, Yellow Corydalis and Slender Speedwell. A footpath across a large field lead us to the Fairy Hills where amongst the rock outcrops we found Parsley-piert, Harebell, Spring Sedge, Pignut, Lady's Bedstraw, Common Bird's-foot-trefoil, Hoary Plantain, Barren Strawberry, Cowslip, Bulbous Buttercup, Lesser Celandine, Salad Burnet, Rue-leaved Saxifrage, Wild Thyme and Common Dog-violet. After a bit of searching we located a few plants of Limestone Bedstraw a plant that is rare in South Lancashire.

After lunch we explored the Ings Beck Valley. Much of our recording was carried out on the north-side of the beck within vice-county 63 (Mid-west Yorkshire). Plants of the woodlands included Bugle, Wood Anemone, Ramsons, Three-nerved Sandwort, Greater Stitchwort, Bluebell, Giant Horsetail, Yellow Pimpernel, Primrose, Goldilocks Buttercup and Crab Apple. In the meadows adjoining the beck we found Lady's Smock, Water Avens, Quaking-grass, Marsh Marigold, Large Bitter-cress, Lesser Pond-sedge, Meadowsweet, Marsh Horsetail, Marsh Bedstraw, Square St. John's Wort, Green Figwort and a nice population of Marsh Valerian. On the drier slopes and banks plants included Common Lady's mantle, Glaucous Sedge, Carnation Sedge, Crosswort, Bitter-vetch, Rough Hawkbit, Fairy Flax, Lousewort, Mouse-ear-hawkweed and Great Burnet. Another colony of Fairy Foxglove was found on a wall below a farm.

Along Twiston Beck we found Intermediate Polypody before starting our return journey back to Downham village along Twiston Lane. Close by to the beck The Special Roadside Verge section of the lane featured Wild Strawberry, Woodruff, Greater Burnet-saxifrage, Sanicle, Black Bryony and a speciality sadly not in flower Wood Crane's-bill. Further to the west Pat Lockwood found Hybrid Hawthorn. In addition to our characteristic wild flowers of the hedgerows other plants along the lane included native Field Maple, Guelder-rose, Giant Bellflower, Bird Cherry and locally abundant Goldilocks Buttercup.

9th June 2007 Rimrose Valley Leader: Steve Cross

We met at Seaforth and Litherland Station and a total of 15 members and friends made our way over the footbridge across Princess Way observing Chinese *Bramble Rubus tricolor*, Prickly Lettuce *Lactuca serricola*, Eastern Rocket *Sisymbrium orientale* and Sweet Briar *Rosa rubiginosa* enroute. We then entered the Local Nature Reserve at Brook Vale. Here the planted trees along the railway included Cherry *Plum Prunus cerasifera* and Field Maple *Acer campestre*. The wetland areas delighted us with Floating Sweet Grass *Glyceria fluitans*, Greater Spearwort *Ranunculus lingua*, Galingale *Cyperus longus*, Hemlock Water Dropwort *Oenanthe crocata*, Pendulous Sedge (Carex pendula) and Yellow Iris *Iris pseudacorus*, the latter being ravaged by Iris Sawfly larva, much to the fascination of those present.

The path through some of the drier areas had been seeded with "wildflower mix" and yielded Hedgerow *Cranesbill Geranium pyrenaicum*, Greater Knapweed *Centaurea scabiosa* and Purple *Toadflax Linaria purpurea*. Climbing up out of the wetland on to what was formerly a tip we entered a large grassland area provided a rich hunting ground with Hemlock *Conium maculatum*, Scarlet Pimpernel *Anagallis arvensis*, Lady's Bedstraw *Galium verum*, Wild *Carrot Daucus carota* and we were able to compare and contrast Black Medick *Medicago lupulina* and Lesser Hop Trefoil *Trifolium dubium*. Further north we found Glaucous Dog Rose *Rosa caesia* ssp. *glauca*, Hairy Sedge (Carex hirta) and a yellow form of Rough Meadow Grass *Poa trivialis*. However what was probably the find of the day was the tiny pink flowers of Grass Vetchling *Lathyrus nissolia* at the edge of the track.

A change of habitat was provided by the Leeds-Liverpool Canal and here we came across Gipsywort *Lycopus eoropaeus*, Skullcap *Scutellaria galericulata* and masses of Fringed Water Lily *Nymphoides peltata*, here too was a large blue Emperor Dragonfly and we also saw quite a few different butterflies. On the day 194 species of plants were listed.

15th June 2007 (Evening Meeting) Altcar Rifle Range Leader: Steve Cross

Starting at the Hightown Hotel with Hop growing against the wall we entered the Rifle Range. The range was a mass of orchids (at least 30,000) and other wet meadow flowers with many Southern and Early Marsh *coccinea* Orchids with also some Northern Marsh and Early Marsh *incarnata*. Ragged Robin, Marsh Bedstraw, Lesser Spearwort, Cuckoo Flower and Yellow Rattle were in profusion. Hairy Sedge, Californian Poppy, Bee Orchid and Pyramidal Orchid added to the botanical delights.

I Range, an important part of the site, added around about 1000 flowering spikes of Common Twayblade; False Fox Sedge, Brown Sedge and Common Spotted Orchid. Under some pines in Anniversary Wood were some Dune Helleborine Orchids and the ditches had masses of Blue Water Speedwell.

23rd June 2007 Cwm Idwal, Snowdonia Joint meeting of the MNA and Liverpool Botanical Society

A cwm, or corrie in Scotland, marks the source of a glacier which has scoured a deep, crater-like hollow in the flanks of a mountain massif. Cwm Idwal is a classic example and has long been popular with geologists, naturalists and climbers. The concept of an Ice Age was first introduced in to this country in the 1840s by Louis Agassiz, a Swiss naturalist. Charles Darwin made several visits and his notes reveal how the evidence was overlooked, scientists just concentrating on the rocks, fossils and structures such as folds and faults rather than the landscape. As in Snowdon's Clogwyn Du'r Arddu the backwall of Cwm Idwal shows a clear example of a downfold or syncline, best seen in winter when a light fall of snow picks out the ledges.

Although the early morning weather had not been promising it brightened up considerably as we approached Llyn Ogwen via Nant Ffrancon. Only a short distance into the walk we encountered Grey Wagtails by the cascading, boulder-strewn Afon Idwal and our first clumps of Parsley and Hard Fern which became prolific at higher elevations. The wetter terrain away from the path attracted attention with its nodding heads of Common Cottongrass, a fine display of Bog Asphodel, a thin scattering of Heath Spotted Orchid and small cluster of Round-leaved Sundew amongst Sphagnum Moss. The path's edges had a familiar leaf but larger than usual – this belonged to Marsh Violet. One was actually in flower and duly photographed. The reddish, leafless stems and pale lilac flowers of Water Lobelia were common in the shallow margins of Llyn Idwal, their rosettes of leaves being submerged. On the other side of the path a drystone retaining wall produced a much admired rock garden with so many species packed into such a small area – notably Alpine, Fir, Staghorn and Lesser varieties of Clubmoss, the yellowish-green Lemon-scented Fern with it's backward-projecting pinnules.

During our lunch break attention was drawn to a Great Crested Grebe diving in the lake, the distinctive calls of Common Sandpipers and a Heron on the far side where later we saw its food source, namely great shoals of minnows, and frogs. While House Martins from the Ogwen centre skimmed the surface three Choughs flew towards Bethesda. A single Small Heath fluttered by in the swirling wind.

As the path steepened we added Milkwort, Wild Thyme and, along the rocky rivulets descending from Idwal Slabs, numerous butterworts with a good haul of insects. The huge boulders in the scree at the foot of Twil Du (Devil's Kitchen) provided a microcosm of what could be found higher up on the less accessible rock faces and ledges. Mossy Saxifrage was abundant with a little Starry Saxifrage and just one specimen of Alpine or Snowy Saxifrage. The rough surfaces also yielded Mountain Sorrel, Slender St. John's Wort,

Welsh Goldenrod and Roseroot while in the deep shade were Wood Sorrel and Oak Fern. More energetic members scrambled up to the Kitchen where blotches of yellow resolved to be Welsh Poppy and the distinctive, aptly named Globeflower. A Raven's deep croaks added to the location with its dark, dripping rock faces, as did the screaming calls of a Peregrine and the surprisingly loud song of a Wren, echoing within the Kitchen. Back down by Llyn Idwal but on its Northern shore an almost hands and knees job to study some aquatics revealed Shoreweed with its very long stamens and Alwort, so concentrated as to form a kind of sward. Further along the shingle beach were several good specimens of the normally submerged Quillwort. Meanwhile the Afon Ogwen by the visitors centre had its inevitable Dipper while the deciduous and coniferous trees had come up with Spotted Flycatcher, Goldcrest, Siskin and Willow Warbler. David Bryant

7th July 2007 Moreton Leader: Keith Watson

On a fine, sunny, but windy day, a party of 18 met at Moreton Station and transferred by car to the Leasowe lighthouse car park. We walked west along the path towards Meols and notable plants at the pond included Greater Spearwort Ranunculus lingua, Floweringrush Butomus umbellatus, Blunt-flowered Rush Juncus subnodulosus and New Zealand Pigmyweed Crassula helmsii. Buttonweed Cotula coronopifolia was searched for but not found by me on several visits this year, it has become increasingly harder to find over recent years.

The poppies, both *Common Poppy Papaver rhoeas* and *Long-headed Poppy Papaver dubium* were in fine flower, with abundant Lucerne *Medicago sativa* ssp. *sativa*. A new record for me in this area was Spanish Broom *Spartium junceum*. Two naturalised garden plants, *Rose Campion Lychnis coronaria* and *Seaside Daisy Erigeron glaucus* were found, the latter not uncommon on the N Wirral coast.

In the remnant of an old dune slack, home of several Cheshire rare plants, we found Bog Pimpernel *Anagallis tenella*, Southern Marsh-orchid *Dactylorhiza praetermissa* and Fewflowered Spike-rush *Eleocharis quinqueflora*.

We had lunch in a sheltered area of the dunes, and then Vipers Bugloss *Echium vulgare* and Sea Radish *Raphanus raphanistrum* ssp. *maritimus* were found in the dug areas, provided for conservation of the Belted Beauty moth. Continuing towards Meols, we found two spikes of Pyramidal Orchid *Anacamptis pyrimidalis*. A clump of about six spikes was known here for several years, but in 2005 it was dug up by someone. It is nice to know it still survives in this area.

Near the Coastguard Station we found the rare rose hybrid, *Rosa* x hibernica (R. pimpinellifolia x *canina*). At Dove Point, near the toilets the uncommon Small-flowered Crane's-bill *Geranium pusillum* was growing with the common Dove's-foot Crane's-bill *Geranium molle*. Then we made our way back towards Leasowe near the sea defence wall, finding seaside plants such as Sea Spurge *Euphorbia paralias*, Sea Rocket *Cakile maritima*, and *Sea Holly Eryngium maritimum*. Butterflies recorded were Small Tortoiseshell and Small Heath. Finally, for me the best plant of the day was near the end of the walk when we found Pepper-saxifrage *Silaum silaus* in the grassland near the sea wall.

28th July 2007 Gisburn Forest, near Slaidburn. Leader: E.F.Greenwood

A group of sixteen members and friends met at Cocklet Hill car park on a beautiful sunny morning. After a brief discussion most of the group decided to attempt the nine-mile walk round Stocks Reservoir, recently designated an Important Plant Area for its bryophyte flora by Plant Life. However to cater for those that felt the walk was too long shorter stretches of the walk were organised.

On leaving the car park the identity of a large yellow sedge was debated and although not a perfect match it was thought to be Carex viridula ssp. brachyrrhyncha whilst on the nearby lane side there was a fine patch of Senecio ovatus. This is abundant throughout Gisburn Forest. The party followed tracks and footpaths via Brook House Green and Rain Gill to Black House passing a patch of calcareous grassland with *Plantago media* on a trackside bank and a northern hay meadow, Barn Gill Meadow SSSI, which was long past its best but probably contained Euphrasia arctica. The path then followed the track of the old railway used to construct the reservoir before descending to cross the dam. Here a number of annual weeds, e.g. Viola arvensis and V. tricolor not common in the area, were found. The path followed the reservoir to the fishing club's clubhouse where lunch and refreshments were available. Normally at this time of year the water level of the reservoir is low revealing a 'draw-down' zone with several species characteristic of this habitat. Unfortunately for botanists the reservoir was overflowing and none of the species was visible. The next section of the path again followed an old railway track passing boggy fields and flushes until Copped Hill Clough was reached. There, calcareous flushes supported a wonderful flora with an abundance of *Primula farinosa* and *Pinquicula* vulgaris. Euphrasia confusa, E. scotica and hybrids were seen along with a few plants of Parnassia palustris (not yet in flower), Carex dioica and Salix repens ssp. repens. The next section of the walk took the party back to the School Lane car park in Gisburn Forest via the abandoned New House. On the way a patch of Salix repens ssp. argentea was seen and the differences between this and ssp. repens were noted. At School Lane most of the group decided to take a lift to Cocklet Hill whilst the remainder enjoyed the final section of the walk through the forest.

25th August 2007 Cabin Hill Leader: Philip H. Smith

With permission of Natural England, members and friends visited Cabin Hill National Nature Reserve, Formby, an area of sand-dunes which has been much-modified by past sand-winning. This so weakened the coast-protection function of the dunes that a barrier bank was erected in 1970 as a secondary defence against the sea. We first crossed an area of grazed dune pasture where bare sandy patches have been colonised by a variety of ruderal plants, including Common and Sticky Stork's-bills *Erodium cicutarium* and *E. lebelii* and their rare hybrid *Erodium x anaristatum*, the latter known only from Wales and South Lancashire in the British Isles. The hybrid is easily identified by its large, intermediately-coloured flowers, vigour and near-sterility. Moving on, we next came to a large borrow-pit from which sand was excavated to make the barrier bank. This created a damp slack, now supporting the best display of Grass-of-Parnassus *Parnassia palustris* on the Sefton Coast. The abundance of this charismatic plant, officially listed as "endangered" in Lancashire, was breathtaking. West of the bank is another, deeper and therefore wetter, borrow-pit which supports a large stand of the uncommon Blunt-flowered Rush *Juncus subnodulosus*. Nearby, was the

nationally "vulnerable" Flat-sedge *Blysmus compressus*, a species that is rapidly declining in most of Britain but which is doing well on the Sefton sand-dunes.

Our final stop was at a large wet-slack which was cleared of invasive Grey *Willow Salix cinerea* in 2005. Since then it has been colonised by about 140 vascular plants, 32 of which are new to the reserve. Around the edges we examined several bushes of the nationally rare hybrid willow *Salix x friesiana*, comparing it with one of its parents, Creeping Willow *S. repens*, which occurs here as the incredibly variable coastal variety *argentea*. The slack had a spectacular display of Purple Loosestrife *Lythrum salicaria*, while less common plants to enjoy included Water Speedwell *Veronica scutellata*, Pink Waterspeedwell *V. catenata*, Shore Horsetail *Equisetum litorale* and Yellow Bartsia *Parentucellia viscosa*.

8th September: St Helens Canal and Burgy Banks Leader: Peter Gateley

On a very pleasant autumn Saturday 14 LBS members and friends set off southwards from St Helen's station. On our left we followed the old sandstone wall forming the boundary of the railway land, this was generally devoid of plants apart from sparse Oxford Ragwort Senecio squalidus along the base and in the joints. However about two thirds of the way along there was a small colony of ferns just below the coping, mainly Wall-rue Asplenium ruta-muraria with some Hart's-tongue Phyllitis scolopendrium. On the right-hand side of the road the newly re-landscaped park was noted, with a large glacial erratic forming its central feature.

After crossing the railway we turned sharp left to follow the route of the St Helens Canal northwards, at this point the canal has been filled in but the footpath follows the former towpath, between two lines of tall steel fences. In this disturbed area a typical range of ruderal plants was found, many of which were still in flower; one of the more interesting local species was Field Woundwort Stachys arvensis with many flowering specimens along the path edge, others included the rayed form of Groundsel Senecio vulgaris, Sun Spurge Euphorbia helioscopica and Redshank Persicaria maculosa.

Continuing north we passed under a road bridge to a section of canal still in water, this had also been recently landscaped with a broad screen of planting down the western side of the towpath. Within this planting the hazel bushes turned out to be *Filbert Corylus maxima* and several ripe nuts were harvested and enjoyed. Young seedlings, presumably of this species, were also noted around the fringes of the canopy. In various open weedy patches between the shrubs and trees a wide range of plants was noted, including a fine display of *Scarlet Pimpernel Anagallis arvensis*, still flowering well but also displaying many fruits as well as the black-dotted undersides of the leaves.

The canal itself is still recovering from restoration work but Hemp Agrimony Eupatorium cannabinum was flowering well in the sidewall and Common Spikerush Eleocharis palustris was the most frequent water plant. In the stonework leading up to the former swing bridge there was a small but healthy population of Black Spleenwort Asplenium adiantum-nigrum. On the opposite (eastern) side of the canal the derelict remains of an old factory had evidently been vacant for many years and a complex mosaic of herb-rich grassland, tall herb vegetation, developing scrub and bracken patches had regenerated naturally. Black Medick Medicago lupulina was abundant throughout the sward, its main feature at this time of year being numerous clusters of jet black seeds, standing out against the mainly pale and mildewed leaves. Amongst the many other species looked at here were still-flowering Eyebright Euphrasia species, Red Bartsia Odontites verna and Bladder Campion Silene vulgaris. A more unusual find was Small Melilot Melilotus indicus.

Crossing the roads to the next section of canal the exotic tree and shrub planting was noted, including species that are very capable of seeding into surrounding areas, such as Himalayan Honeysuckle Leycesteria formosa and two exotic species of alder. A locally unusual tree included in the plantings was Liquidamber, or Sweet Gum, Liquidambar styraciflua. Along this section of canal we lunched by the remains of the eighteenth century Parr New Double Locks, noting various wall plants and water plants. One unexpected species growing out of the far wall of the old lock chamber was Fern-leaf Yarrow Achillea filipendulina. Downstream of the double lock there is a well-vegetated stretch of canal water with areas of tall swamp and a healthy aquatic flora. Plants seen in this section included: Broad-leaved Pondweed Potamogeton natans, Fennel-leaved Pondweed P. pectinatus, Rigid Hornwort Ceratophyllum demersum and the alien Fringed Yellow Waterlily Nymphoides peltatus.

From these rich waters we crossed the course of Rainford Brook, now routed along the course of the former Gerrard's Bridge branch of the St Helens Canal. The brook is quite fast flowing but has broad marginal strips of a mix dominated by Branched Bur-reed Sparganium erectum, Himalayan Balsam Impatiens glandulifera and Reed Canary-grass Phalaris arundinacea. In the central channel the most notable species were Broad-leaved Pondweed and Fennel-leaved Pondweed.

Over the footbridge, to the north, the tall steep slopes of the southern (Haresfinch) burgy bank dominate the scene. At this point there is a wide bunded terrace at the foot of the slope where saline leachate collects from the multiple layers of waste product from industrial glass polishing; pumped here as slurry along pipes directly from the glassworks. This terrace is quite sparsely populated, with grassy islands surrounded by bare crusty surfaces; the dominant species is Reflexed Saltmarsh-grass Puccinellia distans; seedheads of Marsh Arrow-grass Triglochin palustris were also noted. An indication of how inimical the conditions here are to plant growth was given by the yellowed and stunted growth of Japanese Knotweed Fallopia japonica on the edge of this area. From the eastern end of this terrace we followed the steep path up to the flat plateau top, being thankful for the dry weather, as the exposed waste is excessively slippery when wet.

being thankful for the dry weather, as the exposed waste is excessively slippery when wet. This area, perched high over the former canal and bounded by a railway line to the west and north-west and a road in the north-east, has remained unmanaged since tipping of the polishing waste ceased following the introduction of the float glass process in the 1960s. After several years of the slurry drying out, plants began to colonise the surface and developed a diverse and unusual vegetation; however, over the last couple of decades continuing vegetation development and natural succession has led to the area being dominated by increasing areas of willow/birch scrub, dense grass/herb swards and tall herb stands, with a few remaining areas of wetter ground. The plateau now represents a fairly typical area of 'urban common' where natural vegetation processes have progressed but involving a significant element of exotic species. The most notable aliens seen on the burgy banks were species of Michaelmas Daisy Aster species, Tansy Tanacetum vulgare and Evening Primrose species and hybrids Oenothera species, these are mixed with a wide range of native herbs and grasses presenting flower-rich swards that must be highly attractive to insects all through the summer.

After descending from the high plateau the group followed Rainford Brook upstream then followed the railway to the south, calling in at a small Victorian park that had seen better days but whose abandoned tennis courts and bowling green provided habitat for a range of flowering weed species, including: Field Woundwort, *Marsh Cudweed Gnaphalium uliginosum* and Toad Rush *Juncus bufonius*. We followed the railway back to the station; noting en route an interesting street tree, a species of *Malus* with clusters of tiny orangered fruits, and the abundance of Hemp Agrimony as a street weed in St Helens.

13th October 2007 Freshfield Leader: Steve Cross Fungal Foray

With the mild damp weather seeming ideal for finding fungi the group of 18 set off from Freshfield Station, following along the side of the railway line towards the level crossing. Diverting into the heath the first fungal specimens were found *including Laccaria laccata* (Common Deceiver), *Paxillus involutus* (Brown Roll-rim), *Lycoperdon perlatum* (Common Puffball) and *Psathyrella conopilus* (Cone Brittle-head). Passing into the mainly Birch woodland more species were located these *including Leccinum scabrum* (Brown Birch Scaber Stalk), *Lactarius torminosus* (Woolly Milk-cap), *Russula ochroleuca* (Yellow-ochre Russule), *Stereum hirsutum* (Hairy Leather-bracket), *Cortinarius paleaceus* (Pelargonium Web-cap), and several Mycenas or Bonnets.

Passing through a meadow we saw a carpet of *Ornithopus perpusillus* (Bird'sfoot) with both fruit and flowers, and *Juncus tenuis* (Slender Rush).

On the perimeter of Freshfield Dune Heath were some lovely specimens of *Amanita muscarina* (Fly Agaric), one of *A. rubescens* (The Blusher), a few *Lactarius necator* (Ugly Milk-cap) and some *Clavulinopsis helvola* (Yellow Spindles).

Just inside Freshfield Dune Heath we found many specimens of *Suillus luteus* (Slippery Jack) and one nice specimen of *Heterobasidon annosum* (Conifer Base Polypore). Passing across the railway the route followed down Fisherman's Path to Old Fisherman's Path. Along this path we continued to find and identify more fungi including *Lactarius deliciosus* (Delicious Milk-cap), *Rickenella fibula* (Orange Navel-cap), *Collybia maculata* (Spotted Tough-shank), *Hygrophoropsis aurantiaca* (False Chanterelle), *Hypholoma fasciculare* (Sulphur Tuft), *Scleroderma citrinum* (Common Earthball), *Hygrocybe conica* (Blackening Wax-cap), *Piptoporous betulinus* (Birch Polypore), *Nectria cinnabarina* (Coral Spot Fungus), *Stropharia aeruginosa* (Verdigris agaric) and, *Agaricus silvicola* (Wood Mushroom). Also studied were several Russulas found under conifers, a *Marasimus* (Mummy-cap), a *Clitocybe* (Funnel-cap) and a *Pholiota* (Scale-head).

Coming over the dunes to briefly glimpse the tide we turned back up Fisherman's Path and completed the foray with a fine display of *Coprinus comatus* (Shaggy Ink-cap) and *Geastrum triplex* (Collard Earthstar).

Maria Knowles

Field Meetings 2008

Caergwrle 26th April 2008. Leader Pat Lockwood.

A warm but overcast morning saw sixteen members gather for the first field trip of the present season. Down by the Alyn the day got off to a great start with the group finding Alternate-leaved Golden Saxifrage, *Chrysosplenium alternifolium* amongst the Ramsoms, *Allium ursinum* and Dog's Mercury, *Mercurialis perennis*. A Kingfisher on the river provided a great highlight.

A gentle uphill stroll towards the lunch site gave a nice selection of plants that included Bitter Vetchling, *Lathyrus linifolius*, Goldilocks, *Ranunculus auricomus* and Greater Stitchwort, *Stellaria holostea*. Lunch was taken amongst drifts of English Bluebell,

Hyacinthoides non-scriptus Wood Anemone, Anemone nemorosa and Wood Sorrel, Oxalis acetosella.

On the Plas Maen path Marsh Valerian, *Valeriana dioica*, Marsh Marigold, *Caltha palustris* and Lesser Pond Sedge, *Carex acutiformis* were seen along with two Horsetails, *Equisetium palustre* and *telmateia*. On the roadside near Cymau we found Rough Chervil *Chaerophyllum temulum*, Navelwort, *Umbilicus rupestris* and Early Purple Orchids, *Orchis mascula*, just coming into flower. Four plants of Cornsalad, *Valerianella locusta* were possibly the highlight of this site. No less than eight Veronicas were found through the day. All in all, a very good start to the season.

Many thanks to Pat Lockwood for taking on the role of leader for this outing.

Peter Tipping.

Bumblebee Identification. Liverpool Wildflower Centre. 24th May 2008. Leaders- Carl Clee and Tony Parker.

The Bumblebee Identification workshop was aimed at raising awareness of both the plight and the significance of this very important group of insects.

The first session consisted of a Powerpoint presentation of the six commonest species, and an explanation of their life cycle and value within an ecosystem. The presentation was backed up with an information pack including a very useful laminated identification graphic. The final part of the presentation was a quiz, to see who had been paying attention!

The after lunch session consisted of a capture, identify and release activity. Graphics are well and good but the creature in hand is obviously another matter! We watched Redtailed, Carder and other bees whilst seeing at close quarters the difference between nectaring and pollen collecting. A quite magnificent queen Cuckoo bee was the star capture of the session. Aptly named, these bees lay their eggs in the nests of hosts.

The botanical highspot of the day was a Red/White Campion hybrid, *Silene x hampeana* with both colours being displayed on the one plant.

It was nice to see some new faces in the party—please come back!

Carl Clee is always interested to hear about sightings and reports of bees. Any reports or records can be sent to him in any format at the museum, or by email to carl.clee@liverpoolmuseums.org.uk.

Great thanks to both Carl and Tony for a very interesting and informative day.

Peter Tipping

Anderton Country Park 7th June 2008 Leader: John Somerville

Seven members met in the car park at Northwich on a cloudy but dry day. Just outside the car park we firstly found Grass Vetchling Lathyrus nissolia and then Hoary Ragwort Senecio erucifolius with Common Ragwort nearby to compare the differences. We then

walked along the path between Ashton Flash and Neumann's Flash to a bird hide from where we watched the pair of Black Winged Stilts with their one remaining youngster. This was the first time that this bird had had a chick in Cheshire and only the third time in the UK. Continuing along the path we found <code>Dame's Violet Hesperis matronalis</code>, <code>Mouse-ear Hawkweed Pilosella aurantiaca</code>, the remains from last year of <code>Great Mullein Verbascum thapsus</code> and a large patch of <code>Sainfoin Onobrychis viciifolia</code> in Ashton's Flash. We passed a number of <code>Swedish Whitebeam Sorbus intermedia</code> trees before we reached a second bird hide overlooking Neumann's Flash where we found <code>Great Burnet Sanguisorba officinalis</code> with <code>Meadowsweet Filipendula vulgaris</code> nearby, both not yet in flower.

Continuing our circuit of Neumann's Flash we passed numerous Orchids which were identified, with difficulty, as mainly Northern Marsh Dactylorhiza purpurella and Southern Marsh Dactylorhiza praetermissa Orchids. Reaching Haydn's Pool bird hide we stopped for ten minutes to watch the Black Swans with their two young and other birds including Little Grebe and Ringed Plover.

After leaving Haydn's Pool we walked along Witton brook towards the Anderton Boat lift. We passed numerous plants of Hemp Agrimony Eupatorium cannabinum, Teasel Dipsacus fullonum, Tansy Tancetum vulgare, Marsh and Hedge Woundworts Stachys palustris/Stachys sylvatica, Prickly Sow-thistle Sonchus asper, Black and Hoary Mustard Brassica nigra & Hirschfeldia incana, Common Valerian Valeriana officinalis, Creepng Cinquefoil Potentilla reptans, White Bryony Bryonia dioica, Fodder Burnet Sanguisorba officinalis ssp. muricata, but our star find was a solitary plant of Maiden Pink Dianthus deltoides.

Where Witton Brook flows into the River Weaver we saw Floating Pennywort Hydrocotyle ranunculoides which is a mat forming pest which would choke a river if not kept in check. As we walked along the Weaver we passed Imperforate St. John's Wort Hypericum maculatum and Creeping Yellowcress Rorippa sylvestris until we reached the Anderton Boat Lift with its visitor centre. We stopped for lunch near the visitor centre and then spent ten minutes inside before setting out again on the return leg of our walk.

A couple of ponds produced Amphibious Bistort Persicaria amphibia, Gipsywort Lyccopus europaeus, Water Forgetmenot Myosotis scorpioides, White Water Lily Nymphaea alba, and Yellow Iris Iris pseudacorus then along the path we were finding Common Fleabane Pulicaria dysenterica, Cowslips Primula veris, and the star of the area, Pennyroyal Mentha pulegium. The Cowslips were in seed and it would be another month before the Fleabane and Pennyroyal would be in flower.

We entered an area where the park rangers had cut down all the scrub to let the plants grow on the lime rich subsoil and we first found Vipers Bugloss Echium vulgare. Searching the rest of the area was slow as most of our group were busy eating the wild Raspberries Rubus idaeus but we found two poor specimens of Fragrant Orchid Gymnadenia conopsea.

Leaving this area we entered the hay meadows and then continued along the path towards Marbury lane. There were not many new plants along this path but we did find Lucerne *Medicago sativa* ssp. *sativa*, Marsh Willowherb *Epilobium palustre*, Brooklime *Veronica beccabunga*, and Black Bryony *Tamus communis*.

Reaching Marbury lane, we cut through a wood and then walked along Witton Brook back to our car park.

Birkdale Green Beach. 21st June 2008. Leader Pat Lockwood.

Eleven intrepid souls ventured out on the longest day of the year. Practically mid-summer, it couldn't rain that hard or for that long could it? Despite the weather a good morning botanising was to ensue.

First encounter was with a splendid specimen of Sea Radish Raphanus raphanistrum ssp. maritimus. On the first section of the beach we found large numbers of, Sea Club-rush Bolboschoenus maritimus, Brookweed Samolus valerandi, Strawberry Clover Trifolium fragiferum and Sea Milkwort Glaux maritima. Toad Rush Juncus bufonius agg. Fool's Watercress Apium nodiflorum and Eyebright Euphrasia spp. were doing very well. The conditions suited them if not us!

Forgetmenots are not easy to work out at the best of times, but when the books are getting wetter by the minute it does not really help. Even so Tufted Myosotis laxa and Changing Forgetmenot Myosotis discolor were certainties before the book got too wet. Garden Angelica Angelica archangelica was an impressive sight with Hemlock Water Dropwort Oenanthe crocata. Red Bartsia Odontites vernus and Water Cress Rorippa nasturtiumaguaticum, the real one this time, were found around the pool edges, along with Marsh Bedstraw Galium palustre.

Turning into the dunes for a bit of respite we were cheered up by stands of Red Hot Poker Kniphofia uvaria trying to be bright even on a day like this. Now the ground is drier, believe it or not, Houndstongue Cynoglossum officinale, Sand Sedge Carex arenaria and Wild Parsnip Pastinaca sativa make their presence known.

A nice sheltered slack rewarded our endeavours with Early Marsh Orchid Dactylorhiza incarnata, in flower and Marsh Helleborine Epipactus palustris, two species worth seeing at any time. Common Milkwort Polygala vulgaris, Dewberry Rubus caesius and Sea Spurge Euphorbia paralias were looking good despite the weather. A single specimen of Common Broomrape Orobanche minor was found parasitising Restharrow Ononis repens. It was at about this time that the weather degenerated even more. It was time to call it a day, but whilst making a dash to the cars we did take the time to notice Yellow-wort Blackstonia perfiolata and Lesser Spearwort Ranunculus flammula.

We certainly got the best out of a poor day weatherwise, but enough was enough! Many thanks to a brave Pat Lockwood for leading the session under such poor conditions. Peter Tipping.

South Stack, Anglesey 5th July 2008 Leader: David Bryant

A sunny, warm but breezy week was concluded by the arrival of a depression during Friday night so that Saturday morning was cloudy with occasional downpours and hopes weren't high after previous wet outings to Tregaron and Crook of Lune. However brighter skies to the west raised our spirits as we approached St. Asaph. By the time we reached South Stack it was blue skies with fluffy cumulus clouds so that first time visitors could truly appreciate the venue – dramatic cliffs, stacks and a natural arch, a deep-blue agitated sea, a dazzling white lighthouse and impressive views towards Snowdonia.

The main group made its way towards the cliff top path, traversing a good example of low, maritime heath with Western Gorse, Heather, Cross-leaved Heath and Bell Heather. Variety was added to by Angelica, Burnet Saxifrage, Catsear and several hybrid Southern Marsh Orchids. A Silver-studded Blue was disturbed but quickly sought shelter from the breeze. The sinuous cliff walk was a veritable rock garden with English Stonecrop. Sheep's-bit Scabious, Lesser Centaury, Sea Plantain and Rock Sea-spurrey. Sea Carrot demonstrated its convex flower head or umbel and usually a central red flower while some of the Sea Pink produced extremely large spongy cushions of fine leaves. We made our way south as far as the path permits, having our lunch against a large stack where Choughs flew about and fed on the steep grassy slopes towards the summit. A Rock Pipit called and eventually put in an appearance while an immature Fulmar soared to and fro on rigid wings over a deep inlet – a predictable haunt. Far below on the foam–streaked swell

mixed groups of browner Guillemots and contrasting black and white Razorbills bobbed about. On retracing our footsteps attention was drawn to the scale and structure of the cliffs with complex folds in the Pre-Cambrian white quartzites and greener schists with ages well in excess of 600,000,000 years, the oldest rocks in Wales.

Approaching Ellinis tower with its RSPB centre Kidney Vetch and Sea Campion were noted. A Grayling butterfly on the path was so well camouflaged that it was difficult for some to spot even at close quarters. The birds were obviously used to people since we were able to get very close views of a male Stonechat and a pair of Choughs, only taking to the air at the last minute. From the base of the tower we had a grandstand view of the serried ranks of Guillemots on the exposed white-washed ledges, growling and gargling, not too dissimilar to the sounds from a frustrated and angry Marg Simpson! The Razorbills confined themselves to the more sheltered rockier ledges, overhangs and crannies. Descending the steps to the lighthouse on the north side of the great colony enabled us to see at least five puffins, a great attraction for many members of the public. Some of the slopes there are less precipitous and have fairly thick soil for burrowing with protective vegetation. Peering over the wall revealed a good quantity of Golden Samphire and a little Rock Sea-lavendar while Dave Hardy photographed a Ruby Tailed Wasp. Terry Williams thought he heard a Common Sandpiper amidst the calls of the auks and gulls and patient scrutiny with binoculars and telescopes revealed the bird on the darker rocks below the auk ledges on the lighthouse cliffs. A few of the Guillemots were the "bridled" form with a white eye-ring and a white line extending backwards from the eye. Out to sea Gannets passed by in ones and twos and much further out Manx Shearwaters were confirmed with binoculars. Then attention was diverted to a Heron overhead which was inevitably mobbed by gulls. We were equally fascinated by the standing waves and foam caused by opposing currents coming into conflict fairly close inshore to the north-west.

Against a rapidly changing cloudscape and with intermittent showers we crossed the road and headed east up to a pair of shallow lakes, their margins colonised by Water Horsetail and Bottle Sedge. Although no dragonflies were evident we could at least admire a good concentration of Marsh St. John's-wort with yellow flowers and rounded glaucous leaves. After sheltering from a heavy shower we had a last look at the heath below the café and came across Scarlet Pimpernel, Annual Wall Rocket, plenty of Goldenrod, a solitary Common Lousewort and numerous red rounded, berry-like galls, *Diplolepsis spinosissinae*, on the Burnet Rose.

Earlestown 26th July 2008 Leader: Peter Gateley

Sixteen members met at the exit to Earlestown Station, delayed slightly by a 10 minute wait for the train to arrive. However we soon moved off and looked at some typical urban situations for plants. Just across the road, on the empty plot of a demolished property tall stands of Hemp Agrimony were just starting to flower, this is a typical weed of the whole of the urban parts of St Helens. Amongst the usual mix of coarse grasses and annual weeds there were also flowering specimens of Autumn Hawkbit. We proceeded via Chemical Street into Suez Street where many plants occupied the niches provided by abandoned buildings and urban dereliction.

One wall top had strikingly silhouetted plants of Blue Fleabane and Perforate St John's-wort, and a wall further down the street was festooned with growths of Ivy-leaved Toadflax. Hemp Agrimony had also established in this vertical display as well as various ferns and other plants noted included Oxford Ragwort, Black Nightshade, Canadian Fleabane and Eastern Rocket, part of a rich mix of native and exotic annuals and ruderal plants. Joined by a further member, the party of seventeen moved west along Earle Street noting more plants established in the walls of the old Victorian works, but also the rich mix of species in plots where buildings had been demolished and edges kept maintained as short

flower-rich verges. This section of the walk provided an ideal opportunity to compare and contrast some similar species that learner botanists can be puzzled by. We were able to study Lesser Trefoil and Black Medick, along with Hop Trefoil, pointing out the distinguishing features of these low-growing yellow-flowered legumes; just further along, Smooth Tare and Hairy Tare were growing together in some abundance, allowing the characters of the flowers and fruits to be closely compared.

From Earle Street we cut into The Dingle, where one end has been left unmanaged to allow a diverse acidic flora to develop, this probably represents relict vegetation from the former Newton Common that formerly stretched westwards from here. The sward is dominated by a mix of Purple Moor-grass, Common Bent, Red Fescue and Heath Grass, with a range of other typical acidophiles, including Heather, Tormentil, Common Rush, Mat-grass and many others.

From here we crossed into Sankey Valley Park and went to look at the now remarkably clean waters of Sankey Brook with waving strands of what looked like Water Crowfoot and pondweed species visible in the strong flow. The path through was edged with a mix of tall herb and coarse grasses, with many species typical of very damp conditions. Amongst the species picked out for extra attention was a colony of Greater Burnet-saxifrage, just coming into full flower and large flowering bushes of Burdock, with the future sticky-bobs clearly visible. Other species typical of the path under the nine-arched viaduct were Himalayan Balsam, Rosebay Willowherb, Yellow Flag, False Fox-sedge, Wild Angelica, Floating Sweet-grass, Red Bartsia, Common Fleabane, Tufted Vetch. Many of the species were in full flower and put on a bright show.

We lunched on the edge of the section of canal that is still in water, admiring the flowering patches of Yellow Waterlily, some with fruits well-formed, and entertained by passing coots, Brown Hawkers and Emperor Dragonflies. After lunch we climbed Mucky Mountains, a large mound of alkaline waste dating from the 1830s and 1840s that was formerly known for a wide range of limestone-loving plants not normally associated with the St Helens area. Despite proliferation of scrub over the last two decades, shading the ground and enriching the surface soil, much Fairy Flax and Quaking Grass was still to be seen, as well as some large patches of Mouse-ear Hawkweed and scattered Common Centaury. Along the northern edges much colour was provided by Red Clover, Knapweed and Tall Melilot.

After continuing along the canal to admire typical water plants such as Greater Duckweed, Fools Watercress, White Waterlily, Purple Loosestrife and Gipsywort we then retired to the shade of Old Hey Wood and walked back through this strip of woodland that predates the canal. Although it was late in the year for looking at woodlands there was evidence of a good population of Bluebells and the typical woodland grasses: Wood False-brome, Tufted Hair-grass and Wavy Hair-grass were all flowering well; a small population of Pill Sedge was also noted along the path edge, emphasising the acidic nature of this wooded slope. After leaving the wood we walked through Wargrave, back into Earlestown and those that could resist the temptation of the pub on this very hot day (by no means all of the party!) arrived at the station just in time for the next Liverpool train.

16th August 2008 Highfield Moss Leaders: David Bryant/Chris Felton

This was a joint meeting between the LBS and the MNA. 17 members gathered outside the station and we started botanising and insect hunting nearly straight away. There was a marvellous wall nearby, covered in ferns. David said it was bedrock sandstone; a considerable time was spent there. We walked into Willow Park, an excellent area with lots

of interest for both Societies. We passed an overhanging plum tree, damson trees and filled our faces with blackberries (yummy). Highfield Moss is a wonderful place. Vera and I visited the area every August for many, many years. For those of you who have never been to the Moss, it is well worth a visit. The weather forecast was very bad but we were so lucky; it didn't rain, although it was very gloomy with a cold wind blowing. Everyone enjoyed the day. My thanks go to David Bryant and Chris Felton for their expertise and also for their great company. Here's to the next time.

List of plants worth a mention:

Gentiana pneumonanthe (Marsh Gentian) - the star of the show!

Hydrocotyle ranunculoides (Floating Pennywort)

Impatiens glandulifera (Himalayan Balsam)

Oenanthe crocata (Hemlock Water Dropwort)

Rorippa nasturtium-aquaticum (Water Cress)

Lemna minor (Common Duckweed)

Stachys palustris (Marsh Woundwort)

Galium palustre (Marsh Bedstraw)

Achillea ptarmica (Sneezewort)

Solidago virgaurea (Goldenrod)

Senecio aquaticus (Marsh Ragwort)

Pedicularis sylvatica (Lousewort)

Cydonia oblonga (Quince)/ Loquot - identification still to be confirmed.

Report from Pat Lockwood

Calderstones Tree Trail LBS 6th September 2008 Leader – Maria Knowles

A group of 12 explored the trees of Calderstones Park which include some interesting specimens from North America (planted due to the Park's connection with the transatlantic shipping line Cunard), as well as many from Asia, Europe and even the southern hemisphere.

Over 70 species were looked at and discussed. The first tree was the unusual Spur-Leaf (*Tetracentron sinense*) from Asia, which is allied to the Magnolias and has the primitive wood structure of a conifer. Two Plum Yews were studied (*Cephalotaxus fortunei* and *C. harringtonii*) and compared to the Common Yew (*Taxus baccata*) and also to the closely related Californian Nutmeg (*Torreya californica*).

Comparisons were made between different species of:

Limes- Tilia x petiolaris, T x euchlora, T x europaea and Tilia americana;

Ashes- Fraxinus ornus, F. excelsior and F. oxycarpa;

Walnuts- Juglans regia, J. nigra, and J. ailanthifolia;

Pines- Pinus ponderosa, P. mugo, P. parvifora, P. pinaster, and P x holfordiana;

Redwoods- Sequoia sempervirens and Sequoiadendron giganteum;

Cedars- Cedrus atlantica, C. deodara and C. libani.

The two deciduous conifers Dawn Redwood (*Metasequoia glyptostroboides*) from China, and Swamp Cypress (*Taxodium distichum*) from the USA, were compared and contrasted. Time was spent at the 1000 year old Allerton Oak, under which 'Hundreds Courts' were said to have been held.

Five closely related conifers were examined in the 'Ring of Five'. These are: Western Red Cedar (*Thuja plicata*); Lawson Cypress (*Chamaecyparis lawsonia*); Sawara Cypress (*C. pisifera*); Hinoki Cypress (*C. obtusa*) and Nootka Cypress (*C. nootkatensis*). The close proximity of these five helps with their tricky identification.

Estimation of the height of a tree was demonstrated and measurement of girth was used to suggest the age of a couple of specimens.

Lunch was enjoyed in the sunshine in the walled garden where the Norfolk Island Pine (*Araucaria heterophylla*) was viewed in the glasshouse.

Later the group walked down the avenue of American Limes on route to see the Calderstones themselves (six stones which formed part of a burial chamber used by a local Neolithic community), which are now housed in a glasshouse in the Harthill side of the Park.

Towards the end of the day two trees from the southern hemisphere were seen: *Polylepis australis* (an unusual member of the Rosaceae family from the Andes with a papery bark which builds up in layers) and Coigue (*Nothofagus dombeyi*) a Southern Beech. And finally the day ended with a new find of the Snowbell Tree (*Styrax japonica*) showing its lovely hanging fruits.

Thanks to all who came along to enjoy the trees of Calderstones Park.

Maria Knowles

18th October 2008 Eastham Woods Leader: Steve Cross

A small but select group of 6 assembled for the final field trip of the season. Before setting off the group took a few minutes to remember Keith Watson, who would have led this trip had not the tragic circumstances of last February taken place.

Under the canopy of Beech Fagus sylvatica, Sycamore Acer pseudoplatanus, many showing evidence of Tar Spot Rhytisma acerinum and Sweet Chestnut Castanea sativa amongst others, a nice selection of fungi were found. These included: Honey Fungus Armillaria spp., Coral Spot, Stereum hirsutum, Earth Ball Scleroderma citrinum, Candle Snuff Xylaria hypoxylon, Fairies' Bonnets Coprinus disseminatus, Birch Polypore Piptoporus betulinus, Bleeding Broadleaf Crust Stereum rugosum, Southern Bracket Ganoderma australe, Judas' Ear Auricularia auricula-judae, Common Puff Ball Lycoperdon perlatum and Sulphur Tuft Hypholoma fasiculare. The Sweet Chestnut also provided grazing for several of the group!

A notice board informed us that some of the trees were in the order of five hundred years old. Not to be dictated to, we measured the girth of several. One huge Beech had a girth of 204 inches. This gives a free-standing tree a possible age of over two hundred years but for a tree in woodland I am told that figure can be doubled. With an age of four hundred and eight, it started growth in the year King Charles 1 was born, was five years old when the Gunpowder Plot was discovered and entitled to a bus pass when the Plague hit London! Makes you think, doesn't it?

Several plantings in the woods showed specimens of interest, Mahonia *Mahonia japonica* in flower, Norway Maple *Acer platanoides* showing the start of its Autumn colours, Cherry Laurel *Prunus laurocerasus* complete with fruit and, perhaps the prize tree of the wood Wellingtonia *Sequoiadendron giganteum*. This magnificent tree was growing near, of all things, a Victorian Bear Pit, an obscene reminder of our one-time attitude to animals in captivity.

Away from the heavy tree canopy Bittersweet *Solanum dulcamara* showed its colourful fruit and Traveller's Joy *Clematis vitalba* was a remarkable sight, its seedheads covering the undershrubs. Purple Loosestrife *Lythrum salicaria*, Meadow Cranesbill *Geranium pratense* and Tansy *Tanacetum vulgare* showed us the remnants of summer planting in the Pleasure Gardens.

Jay, Blue Tit, Coal Tit, Great Tit and Nuthatch provided the birdlife of the day. Thanks also to Michael Barrow for providing both the species list.

Peter Tipping

Field Meetings 2009

25th April 2009 Wepre Woods Leaders: Peter and Sheila Mason.

Fourteen members met under lowering skies and heavy rain at Shotton station. A short drive took us to Wepre Country Park where we were met by a further three members. The trip proper started in the now disused garden of the original estate where Cowslip *Primula veris*, Sweet Woodruff *Galium odorata*, Common Dog Violet, *Viola riviniana*) and Cuckoo Pint, *Arum maculatum* were in good flower.

From here we moved into the woodland habitat. Two different Ivies, Irish and Persian, Hedera helix 'Hibernica' and Hedera colchica could be seen close enough to compare and contrast. Enchanter's Nightshade Circaea lutetiana, Wood Anemone Anemone nemorosa and Wood Sorrel Oxalis acetosella were in abundance. For those interested in ferns a varied selection was growing in close proximity, this being a help to those wishing to revise the differences and particular features which help in identification. Male Fern Dryopteris filix-mas, Scaly Male Dryopteris affinis and Lady Fern Athyrium filix- femina presented a good introduction to common ferns. We also could examine Broad Buckler Dryopteris dilitata, Hard Shield-fern Polystichum aculeatum and Hard Fern Blechnum spicant at close hand.

Still in the woodlands, but along the side of the stream, we encountered Wild Angelica *Angelica sylvestris*, Hemlock Water-dropwort *Oenanthe crocata*, Wood Speedwell *Veronica montana*, Wood Avens *Geum urbanum* and Fool's Watercress *Apium nodiflorum*. Peter Mason was able to point out the differing spikes, fertile and sterile, of Great Horsetail, *Equisetium telmateia*, an interesting exotic plant, in full deep-red flower so early in the year, was the Thimbleberry or Purple Flowered Raspberry (*Rubus odorata*. Grasses in the woodland included Tufted Hair-grass *Deschampsia cespitosum* and perhaps one of the prettiest of woodland grasses Wood Melick *Melica uniflora*. Both Wood and Greater Stitchwort were also seen, *Stellaria nemorum* and *Stellaria holostea*. Two species of wood-rush were found in good numbers, Great Wood-rush *Luzula sylvatica* and Hairy Wood-rush *Luzula pilosa*.

From the woodland we moved into an open area with a mix of plants typical of both woodland edges and open ground. Species looked at included Soft Brome *Bromus hordeaceus*, Field Pansy *Viola arvensis* and Corn Spurrey *Spergula arvensis* in the moreopen areas. Three species of speedwell: Germander, Ivy-leaved and Thyme-leaved, (*Veronica chamaedrys*, *V. hederifolia* and *V. serpyllifolia*) complemented the Wood Speedwell found earlier.

Birds seemed in very short supply, even though the weather improved vastly after the poor start. With butterflies, however, after their two previous appalling seasons, we were rewarded by good views of Orange Tip, *Anthocharis cardamines*, Green-veined White *Pieris napi*, Speckled Wood *Parage aegeria* and Comma *Polygonia c-album*. Despite the damp start we had a very pleasant day. Many thanks to Peter and Sheila Mason for arranging and leading the visit. *Peter Tipping*

9th May 2009 Gwersyllt to Gresford Leader: Peter Gateley

Five members met on Bidston station to make the change for the Chester train to reach Gwersyllt. By the time we had we had reached the public footpath system, via the north-eastern road through the village, the party had increased to twelve. After perusing the pavement edge and verge plants along the village roads, including an extensive bank of Mouse-ear Hawkweed *Pilosella officinalis*, we followed the footpath to the east, leading into a shallow valley of predominantly pasture land. However, the valley bottom is occupied by a strip of diverse swampy habitat, mainly dominated by Reedmace *Typha latifolia*, but with very noticeable large clumps of Greater Tussock-sedge, *Carex paniculata*, in full flower. Amongst many other species in this area were Lesser Pondsedge *Carex acutiformis*, Ragged Robin *Lychnis flos-cuculi* and Marsh Marigold *Caltha palustris*.

The footpath continued east, crossing the B5425; given that the party included several younger members, time was spent comparing the three common buttercup species and also three horsetails, Field Equisetum arvense, Marsh E. palustre and Giant E. telmateia. This footpath leads into the lush Alyn valley, with rich grasslands and glimpses into woodland showing both Bluebell Hyacinthoides non-scripta and Wild Garlic Allium ursinum in abundant full flower. Bulbous Buttercup Ranunculus bulbosus, was in abundance in this part of the walk and lunch was taken on a grassy bank over-looking the river Alyn. Heading north along the Alyn valley we then turned east, across the river, and into the very different landscape of a disused colliery, with typical development of birch woodland and areas of disturbed ground with good displays of ephemeral plants such as Weld, Reseda luteola and Scarlet Pimpernel Anagallis arvensis amongst many others. The footpath then took us across both carriageways of the busy A483(T) into the flat arable land of Gresford. Crossing through the fields, looking at arable weeds and hedgerow plants, we arrived at Gresford Church. The churchyard here is how botanophiles would like to see all churchyards, a fitting setting to the magnificent mediaeval church but also sensitively managed to maximise local biodiversity. Mixed grass and wood-rush swards were studded with plump clumps of fading Primrose Primula vulgaris as well as some Cowslip P. veris and Cuckoo-flower Cardamine pratensis, but the chief delights were the frequent patches of Meadow Saxifrage Saxifraga granulata, just coming into full flower, and Goldilocks Buttercup, Ranunculus auricomis. Our party was able to observe the diverse foliage of this plant and its strangely sparse flowering habit. We also admired the magnificent ancient Yew tree Taxus baccata, on the north-east side of the church, said to be the largest and oldest in Wales.

Sharp-eyed Peter Tipping noted carvings of green-man on the exterior of the church and inside, the most helpful and informative custodian moved aside a flower arrangement to show us another magnificent green-man low down on the wall of one of the side-chapels. From this glorious churchyard we headed back west, through part of Llay and then across restored colliery land that now forms part of the Alyn Waters Country Park. We re-crossed the Alyn along sections of old country lanes with species-rich hedges and verges that had escaped the rigours of coal mining and returned to Gwersyllt station and car park.

Peter Gateley

Saturday 13th June Tansley Dale & Cressbrook Dale *Leader: John Somerville*

Ten of us met in Litton village at 10am on a bright sunny day. Two cars were driven to the end of Cressbrook Dale where one was left before returning to Litton village. As we walked along the lanes to the start of Tansley Dale we met Rue-leaved Saxifrage *Saxifraga tridactyla* on the walls and discussed the differences between the abundant Rough-stalked Meadow-grass *Poa trivialis* and Smooth-stalked Meadow-grass *P. pratensis*. Then, over a tall stile, across a small field and we were into Tansley Dale.

Wild flowers were everywhere. In the first 50 metres we had seen Meadow Saxifrage Saxifraga granulata, Mouse-eared Hawkweed Pilosella officinarium, Kidney Vetch Anthyllis vulneraria, Fairy Flax Linum catharticum, Salad burnet Sanguisorba minor, Wild Thyme Thymus polytrichus, Common Milkwort Polygala vulgaris and Limestone Bedstraw Galium sterneri. A bit further on and we were seeing Rock-rose Helianthemum nummularium, Dropwort Filipendula vulgaris, Early Purple Orchis mascula and Common Spotted Dactylorhiza fuchsii Orchids, Thyme-leaved Sandwort Arenaria serpyllifolia, Field and Small Scabious (Knautia arvensis and Scabiosa columbaria), Hairy Rock-cress Arabis hirsuta, Perennial Cornflower Centaurea montana and Downy Oat-grass Helictotrichon pubescens. Further down Tansley Dale we met a patch of Crow Garlic Allium vineale and an area of Brittle Bladder-fern Cystopteris fragilis. Large patches of Spring Sandwort Minuartia verna were seen around the tailings of the old lead mines.

Reaching the bottom of Tansley Dale we passed through a small gate and entered Cressbrook Dale. A lush patch was full of Silverweed *Potentilla anserina* and some plants of Water Forget-me-not *Myosotis scorpioides*. We sat on a grassy bank for lunch and then continued our walk. The first plants noted after that were Sheep's Fescue *Festuca ovina*, Goldilocks Buttercup *Ranunculus auricomis*, Shining Cranesbill *Geranium lucidum* and more Rue-leaved Saxifrage. Then, quite surprisingly far up a steep bank, we reached one of the star attractions, a large area of Globeflower *Trollius europaeus*. The plants grow at least 25 metres above the path, which traverses the slope fairly high above the valley floor, it could be easy not have recognized them, assuming that the yellow flowers above were Meadow Buttercup.

We descended back to the path and continued into Cressbrook Dale. We were now walking under the trees with a limestone face on our left. A gap in the trees had allowed Harebells Campanula rotundifolia to grow on the rock face. Along the path we found False Brome Brachpodium sylvaticum, Hairy Brome Bromopsis ramosus, Greater Burnet-saxifrage Pimpinella major, Broad-leaved Helleborine Epipactis helleborine, Wood Sedge Carex sylvatica, Woodruff Galium odoratum, Nettle-leaved Bellflower Campanula trachelium and Midland Hawthorn Crataegus laevigata. Then it was up a path that led us out of the trees to an open grassy bank where we found Stone Bramble Rubus saxatilis, Lesser Meadow-rue Thalictrum minus, Common Twayblade Listera ovata and Mountain Melick Melica nutans. We enjoyed a 20 minute rest sitting on this bank in the bright sun and then it was time to go. Ready to go but three of our group were missing, a quick search found them keeping cool by sitting in the shade of some Hazel Corylus avellana bushes.

The final leg of our walk led us past the cottages in Cressbrook Dale and up the track to the road. Half of our group had missed the Sanicle *Sanicula europaeus* which was among the last plants found in Cressbrook Dale. Now we reached the road where one of our cars had been parked earlier and this was used to ferry all the car drivers back to Litton village. Then back to pick up our entire group before returning again to Litton village. It was

3.40pm and the shop was still open so we finished the day by sitting around a table outside the shop enjoying coffees, teas and ice cream.

11th July 2009 Moore Nature Reserve Leader: John Somerville

The weather was dull but dry when we met at the crossroads, 15 LBS members started out, with 2 guests from the Manchester Field Club. In the morning we covered the western third of the reserve. Entering the reserve at we noted abundant low creeping vegetation at the side of the path, it turned out to be Ground-ivy *Glechoma hederacea*, looking very atypical. Other plants here included Yellow Rattle *Rhinanthus minor*, Germander Speedwell *Veronica chamaedrys*, Common Mouse-ear *Cerastium fontanum*, Lesser Burdock *Arctium minus*, Lesser Stitchwort *Stellaria graminea* and Creeping Thistle *Cirsium arvense*, and it was on this Creeping Thistle that the eagle eyes of Peter Gateley spotted a Tortoise Beetle.

Along the path we passed planted Many-flowered Rose *Rosa multiflora* before entering another open area next to a bird hide. Here we found Yarrow *Achillea millefolium*, Meadow Vetchling *Lathyrus pratensis*, Smooth Hawksbeard *Crepis capillaris*, Self Heal *Prunella vulgaris* and much Common Centaury *Centaurium erythraea*. A small pond nearby had been previously dug out to try and remove the Australian Swamp Stonecrop *Crassula helmsii* but it was back and totally covered the pond area.

Moving along we passed much Birdsfoot Trefoil *Lotus corniculatus*, Marsh Thistle *Cirsium palustre*, Spear Thistle and Large-flowered Evening–primrose *Oenothera glazoviana*, Marsh Bedstraw *Galium palustre* and Hedge Parsley *Anthriscus sylvestris* before arriving at an area with Common Cudweed *Filago vulgaris*. We knew that Small Cudweed *F. minima* grew on the reserve but we could not spot it anywhere nearby.

It was not until we came to a set of timber steps that we found two small plants of Small Cudweed. The Dovesfoot Cranesbill *Geranium molle* in this area showed both the normal pink-purple form and also some very pale forms.

Further on we arrived at some ponds containing Water Soldier *Stratiotes aloides*, Corn Mint *Mentha arvensis* and Marsh Pennywort *Hydrocotyle vulgaris*. Of the orchids that normally grew in this area there was no sign at all.

As we moved along the path towards the end of the reserve we came across a single plant of Fragrant Orchid *Gymnadenia conopsea*. At the end of the reserve we passed though a gate onto the road, turning left we walked only a few yards before coming to an opening on our right with a totally different habitat. Here, on the banks were Lady's Bedstraw *Galium verum*, Mignonette *Reseda lutea*, Wild Radish *Raphanus sativus*, Common Field Speedwell *Veronica persica*, Scentless Mayweed *Tripleurospermum inodorum*, Dark Mullein *Verbascum nigrum*, Tufted Vetch *Vicia cracca*, Bush Vetch *V. sepium*, Fodder Vetch *V. villosa*, Burnet Saxifrage *Pimpinella saxifraga*, Wild Carrot *Daucus carota*, Black Horehound *Marrubium vulgare*, Comfrey *Symphytum x uplandicum*, and Scarlet Pimpernel *Anagallis arvensis*. A few yards further and we were on the banks of the Manchester Ship Canal where there was Goatsbeard *Tragopogon pratensis* and some vigorous plants of Weld *Reseda luteola*.

We were now in a large open area stretching along the Ship Canal back to the crossroads where our cars were parked. Here we found Red Bartsia *Odontites verna*, Creeping Cinquefoil *Potentilla reptans*, masses of Birdsfoot Trefoil and a small specimen of Hemlock *Conium maculatum*. On the road banks nearby the Hemlock was up to ten foot tall. Walking through the Smooth Tare *Vicia tetrasperma* we came down into an area that was about twelve foot lower that the main field. Here some ponds contained Branched Burreed *Sparganium erectum* and Spiked Water Milfoil *Myriophyllum spicatum* and another LBS member, Rob, who had come late now found us at last. On the final leg, walking

back to our cars we found Bristly Ox-tounge *Picris echioides*, Dotted Loosestrife *Lysimachia punctata* and much Musk Mallow Malva moschata.

Lunch was taken in the sun on a grassy bank in the reserve before we got back into the cars and drove to the eastern end of the reserve. Climbing over a gate led us into a very dry area full of Haresfoot Clover *Trifolium campestre* and the odd plant of Trailing St. John's-wort *Hypericum humifusum*. We walked down to the edge of the lake which was edged with Purple Loosestrife *Lythrum salicaria* and watched the Broad-bodied Chasers *Libellula quadrimaculata*. As we walked back to our cars we came across an area containing hundreds of Small Cudweed plants where in the morning we had only found two specimens after much searching.

Back over the gate we walked down the track to a bird hide where we finished the day with the sighting of a Kingfisher.

25th July 2009 Wigan Flashes Leader John Clegg

Twenty four people assembled for this joint L.B.S. and M.N.A. outing to Wigan. This included two new members for the L.B.S. Outside a very forlorn looking Wigan Pier (can it really be shut down?), we found the usual range of plants for such an environment, including Hemp Agrimony, *Eupatorium cannabinum*, Ivy-leaved Toadflax, *Cymbalaria muralis* and Canadian Fleabane *Conzya canadensis*. Reaching the start of the canal path there was Feverfew *Tanacetum parthenium*, a white flowered Musk Mallow *Malva moshata* and Gipsywort *Lycopus europaeus*. What was to be one of the plants of the day, Rock Stonecrop *Sedum fosterianum* and Sticky Groundsel *Senecio viscosus* were soon found along with Prickly Lettuce *Lactuca serriola* a plant that seems to be cropping up in ever increasing numbers.

Not to be outdone by the Stonecrop the next plant, all on it's own, was Broad-leaved Helleborine, *Epipactis helleborine*, why just the one in splendid isolation I do not know. Following the canal bank we were able to observe Skullcap *Scutellaria galericulata*, Japanese Rose *Rosa rugosa* and Hemlock Water-dropwort *Oenanthe crocata* also several plants of Orange Hawkweed, or Fox and Cubs *Pilosella aurantiaca*.

Marsh Woundwort Stachys palustris, Weld (Reseda luteola and Common Field Speedwell Veronica persica were all growing well. Just before the lunch break we enjoyed an area with Golden Melilot Melilotus altissima, Sneezewort Achillea ptarmica and Red Bartsia Odontites vernus.

During lunch we were entertained watching Common Tern fishing in the canal, lunch all round then!

The afternoon session gave us Black Medick *Medicago lupulina*, Zig-zag Clover *Trifolium medium* and Bladder Campion *Silene vulgaris*. Narrow Leaved Everlasting Pea, *Lathyrus sylvestris* caused some discussion, only to be superseded by it's bigger and brighter relative Broad Leaved Everlasting Pea *Lathyrus latifolius*.

The other plant that gave rise to some serious discussion was what turned out to be the young leaves of Unbranched Bur-reed *Sparganium emersum* and NOT *Vallisneria spiralis* as I had suggested!

Peter Tipping

8th August 2009 Birkdale Green Beach Leader: Pat Lockwood

In all 20 members gathered together at Birkdale Station. It was a glorious morning as we made our way down to the beach, some going by car others walking. It was such a contrast to the year before, when the rain was torrential and the meeting, after 2 hours,

was abandoned. I enjoyed hearing the chattering of happy voices. We were sorry that George Russell was unable to join us. We wish him well and hope he will lead us on another occasion.

The first plant that really stood out is the Sea Club Rush Bolboschoenus maritimus, it was really impressive. Jointed Rush Juncus articulatus, Saltmarsh Rush J. gerardii, Baltic Rush J. balticus and Common Cord-grass Spartina anglica were also studied, also Fools Watercress Apium nodiflorum and Wild Celery A. graveolens and the Lesser Water Parsnip Berula erecta. Lots of Willowherbs were pored over, Hoary Willowherb Epilobium parviflorum, Great Willowherb E. hirsutum and Marsh Willowherb E. palustre. The Hemlock Water-dropwort *Oenanthe crocata* was an interesting contrast to the thousands of plants of Parsley Water Dropwort O. lachenelii, wonderful hosts to so many insects. Gypsywort Lycopus europaeus, Sea Milkwort Glaux maritima, Sea Aster Aster tripolium, Watermint Mentha aquatica Common Fleabane Pulicaria dysenterica, Himalayan Balsam Impatiens glandulifera, Strawberry Clover Trifolium fragiferum and Alsike Clover T. hybridum were all in very good flower. Sea Arrow-grass Triglochin maritima, Marsh Arrowgrass T. palustris, Thrift Armeria maritima, Sea Plantain Plantago maritima, Greater Seaspurrey and Lesser Sea- spurrey (Spergularia media and S.marina) and Common Glasswort Salicornia europaea were all seen. David Bryant found a Lesser Conehead, a rare species of bush-cricket locally.

We wandered onto the main path where there were lots of goodies. Creeping Thistle *Cirsium arvense* and Spear Thistle *C. vulgare* were studied, so were Large-flowered Evening Primrose *Oenothera glazioviana* and Intermediate Evening Primrose *O. x fallax*, and the Spear-leaved Orache *Atriplex prostrata*. Red Bartsia *Odontites vernus*, Common Restharrow *Ononis repens*, Tufted Forget-me-not *Myosotis laxa*, were found and Sea Mayweed *Tripleurospermum maritimum* grew along the edges, also the Common Centaury *Centaurium erythraea*, Seaside Centaury *C. littorale* and Lesser Centaury *C. pulchellum*. We were very pleased to find Galingale *Cyperus longus*.

In the dunes Wild Parsnip *Pastinaca sativa* was everywhere, Marion spotted the Common Broomrape *Orobanche minor* and Yellow-wort *Blackstonia perfoliata* still in good flower, as also were Sea Holly *Eryngium maritimum*, Eyebright *Euphrasia sp.*, Carline Thistle *Carlina vulgaris*, Garden Speedwell *Veronica longifolia* and Ploughman's Spikenard *Inula conyzae*. John found really very good flowers on the Marsh Pennywort *Hydrocotyle vulgaris*, and two found very good specimens of fruiting Crosswort *Cruciata laevipes*.

5th September 2009 Ness Gardens Tree Trail Leader: Maria Knowles

We looked at and discussed over 60 different species of trees.

Ness of course is famous for its *Sorbus* collection, being the largest in the country. We first looked at *Sorbus rosea*, introduced to cultivation through Ness. It was wild-sourced from Gillgit in Pakistan in the 1980's and has whitish pink berries. *Sorbus leyana*, Ley's Whitebeam is described as Britain's rarest tree. It is an apomictic microspecies, and is thought to be derived from Rowan *S. aucuparia* and Rock Whitebeam *S. rupicola*. It is endemic to south Wales and is critically endangered. *Sorbus domestica*, the True Service Tree is native from southern Europe to north Africa. It was disputed to be native to Britain until it was found near Cardiff in 1984. It is a big tree with leaves like Rowan, but slightly

bigger and hairy beneath. It exists in two forms, one with apple-shaped fruit (f. *pomifera*), and one with pear-shaped fruit (f. *pyrifera*).

There are many lovely birches at Ness. *Betula nigra*, River Birch grows on river banks and waterways in the warmer parts of eastern USA, where it can survive being wet for several weeks at a time. The seeds ripen early and fall when the water is lowest to germinate in the moist rich soil. It has dark rugged bark when young, but the mature bark is pinkish orange and shaggy. It is a lovely tree to plant in a damp area. *Betula dahurica* is similar to *B.nigra* but is even nicer-looking, it is found in Japan and Russia. *Betula michauxii*, the tiny Swamp Birch was sourced from an oil refinery access road in a place called Come by Chance, Newfoundland, Canada in 1988.

We looked a several maples. *Acer platanoides* 'Crimsin King' is a variant of Norway Maple with nice crimson fruits. *Acer griseum*, Paper-bark Maple was brought back from China by Ernest Wilson in 1901 and has bark with papery scrolls and lovely autumn colour. The nutlets have a very thick shell and often form without pollination so the tree is difficult to raise from seed. *Acer cappadocicum* is like Norway Maple but the fruits are more angled and the leaves less lobed. It turns butter-yellow in Autumn and is one of the four species of maple with latex. It is native to Asia Minor. *Acer saccharinum*, Silver Maple is native to eastern USA. It is airy and willowy, with silver under its leaves it is attractive when ruffled by wind. It can be confused with Sugar Maple *A.saccharum*, the species depicted on Canada's flag. Silver Maple is closely related to *A.rubrum* and like it produces red flowers in spring before the leaves. It does produce a small amount maple syrup. *Acer carpinifolium*, Hornbeam-leaved Maple has leaves like hornbeam, elegant, hanging and golden in autumn.

Two species of Liquidambar were considered. *Liquidambar styraciflua*, American Sweet Gum, has five-lobed leaves which are star-like and has good autumn colour. *Liquidambar formosana*, Chinese Sweet Gum has matt leaves with usually only three lobes, but occasionally five. The fruits have curled spines.

Platanus orientalis, Oriental Plane is from south east Europe and has deeper lobes than London Plane (which is the hybrid of *P.orientalis* and *P.occidentalis*). The species we looked at is most likely 'Digitata', which has narrow lobes.

There are some lovely Alders at Ness. We looked at the elegant *Alnus glutinosa* 'Imperialis' a variant of Common Alder, more graceful and finely cut than 'Laciniata' and very Japanese-looking. We also looked at *Alnus sieboldiana*, a splendid tree named after Von Siebold, a German botanist who worked in Japan as a doctor in the 1820s and amassed thousands of both living and preserved specimens of plants. This tree has big leaves edged with yellow teeth and impressive cones.

The two species of Tulip Tree were compared. *Liriodendron tulipifera*, the Tulip Tree from eastern USA, where it is known as Yellow Poplar, has flowers like 5cm 'tulips' of green and orange. *Liriodendron chinense*, Chinese Tulip Tree, from east China to north Vietnam, has leaves that are purple in spring, more waisted and whiter below.

We considered the differences between firs and spruces. *Abies procera*, Noble Fir, was discovered and brought to Britain from the US in 1830 by David Douglas. It has huge cones which disintegrate on the tree with seeds that are enjoyed by squirrels. It is very successful in Britain and regenerates naturally in Scotland. *Abies concolor*, Colorado White Fir, grows from Utah to Mexico and has leaves which are pale and curl vertically

above the shoot. *A. delavayi var forrestii*, also known as *A. forrestii* was discovered by Forrest in China in 1910. It has glossy dark green leaves and lovely purple cones. Two spruces were compared to the firs, *Picea smithiana*, Morinda Spruce and *Picea spinulosa* Sikkim Spruce. The main difference between spruces and firs are that spruces have 'pegs' on old shoots which are left when the leaves fall and they have pendulous cones. Firs don't have pegs but the leaves leave small scars, they have resin blisters on the trunk and cones which disintegrate on the tree.

A few species of pine were considered. *Pinus longaeva*, the Great Basin Bristlecone Pine is one of the worlds longest lived trees, living nearly 5000 years. It grows in parts of California, Nevada and Utah. One was found to have 4,862 annual rings when it met its tragic end in 1964, accidentally cut down by forest rangers sent to take a core sample for counting. *Pinus nigra ssp. laricio*, Corsican Pine, can be differentiated from *Pinus nigra ssp. nigra*, Austrian Pine, by having a pale trunk, longer twisted needles, cleaner straighter bole and boughs like poles. On the other hand Austrian Pine is heavy limbed and has dark bark. We looked at the splendid row of Austrian Pines planted by A K Bulley as a windbreak. *Pinus contorta ssp. contorta*, Shore Pine is like Lodgepole Pine (*P.contorta ssp. latifolia*) but has shorter twisted needles pressed closer to the shoot and is more bushy. *Pinus wallichiana*, Bhutan Pine is from the Himalayas and has blue green leaves in 5's which are long enough to droop.

We compared the two deciduous conifers. *Metasequoia glyptostroboides*, Dawn Redwood, a critically endangered tree in the wild, discovered in 1941 in a village in China. It has leaves, buds and side shoots all opposite, it comes into leaf earlier and has spongier darker bark than Swamp Cypress. *Taxodium distichum*, Swamp Cypress, from eastern USA, can cope with waterlogged conditions by throwing up 'knees' or pneumatophores, which trap silt around the roots and probably help the roots to breathe. It has side shoots borne alternately (actually helically) along twigs and comes into leaf later and has a much more feathery look than Dawn Redwood.

Three redwoods were looked at and compared. Sequoiadendron giganteum, Giant Sequoia or Wellingtonia, is the world's largest tree, has a flared bole with soft spongy bark and scale-like leaves. It is native to California where it grows on the western slopes of the Sierra Nevada. Cryptomeria japonica, Japanese Red Cedar, a giant tree in the mountains of Japan, is a redwood with hard bark, it has awl-shaped leaves arranged in a helix around the shoot and yields an excellent reddish timber. Sequoia sempervirens 'Cantab' is a variant of Coast Redwood which originated from 'witches brooms' at the University Botanic Gardens at Cambridge. Massive brooms could be seen in the tree we examined.

From the terrace three species of cedar could be easily compared. *Cedrus deodora*, Deodar, from the Himalayas has a drooping leader, shoots that hang and leaves which are longer and softer than the others. *Cedrus libani*, Cedar of Lebanon has black-brown bark and level plates of foliage. *Cedrus atlatica*, Atlas Cedar is most often seen as the form 'glauca', with greyer bark, shorter needles in rosettes and branch tips that ascend.

Some other notable trees were:

Aesculus wangii is found in China and Vietnam, where it is threatened by habitat loss, and bears enormous panicles (to 45cm) of scented yellow purple-brown spotted flowers in spring, followed by large encased seeds (conkers) up to 10cm across. Although the Ness specimen is the British Champion it has not flowered yet.

Salix alba var sericea, Silver Willow is a County Champion for girth and height. The leaves stay silky hairy above so that the tree looks like a puff of pale smoke from a distance.

Fagus sylvatica 'Asplenifolia' Fern-leaved Beech, is a 'chimaera' with inner tissues of typical Beech enveloped by cells of the 'sport', so that sprouts of normal leaves will often grow from the trunk especially after injury. Both types of leaves were visible on the tree. Cercidiphyllum japonicum, Katsura is from China and southern Japan (where it is endangered), it has opposite leaves that flush pink and die off lemon and orange with a smell of caramel from summer on. We had to smell four different trees before all the group could smell the caramel!

Davidia involucrata var vilmoriniana, the Dove or Handkerchief Tree is fertilized by bats, and has huge white hanging bracts early in the summer. This variety, which is the one most planted as it is the most hardy, is not hairy on the under surface of the leaf in comparison with Davidia involucrata var involucrata which is very downy underneath. Cunninghamia lanceolata, Chinese Fir, is native to China to Vietnam and its leaves clasp the shoot all round in a helix. 'Glauca' has metallic blue-bloomed foliage due to more vivid stomatal bands and a waxy bloom. It is hardier than the type which is sensitive to cold winds.

Thuja plicata, Western Red Cedar, from the USA, brought here 1853, has dull white stripes under the leaves and a smell of pineapple which fills the air around the tree on warm days.

Thujopsis dolebrata, Hiba, is related to Thuja but has broader leaves 'painted' white underneath, which are more glossy, and scale-like resembling tiny axe-heads (botanical name 'dolabra' means hatchet). It is an important forestry tree in Japan, the wood being light, strong and hard-wearing.

Populus wilsonii, a beautiful and unusual poplar, it has big sea-green leaves which flap noisily and turn black on falling. It was found in Yunnan in China in 1907 by Ernest Wilson.

Polylepis australis is from high altitudes in the Andes; its generic name refers to the peeling bark.

Drimys winteri, Winter,s Bark is native to the central Andes, it has aromatic bark that was once chewed by sailors to combat scurvy and so was collected by Francis Drake. The fruits have been used as a pepper substitute.

Luma apiculata, Chilean or Orange-barked Myrtle is closely related to *Myrtus*, it has aromatic almost black foliage, abundant white flowers, cinnamon bark which peels to white and fruits which are edible and sweet. It has become naturalised in some gardens in southern Ireland.

Phymosia umbellata, Mexican Bush Mallow has deep red mallow-like flowers and green velvety leaves. Apparently hummingbirds love it.

Styrax japonicus, Snowbell Tree, from Japan, has buds like furry mittens, massed snow white flowers which droop below every branch in early summer to be replaced by fruits like dangly earrings. It is hardy yet delicate, a lovely tree to plant.

Poncirus trifoliata, Japanese Bitter Orange is closely related to Citrus and has white flowers, yellow inedible fruits, trifoliate leaves and spines. It is from China and Korea and makes an attractive thorny hedge which is hardy.

Juglans nigra, Black Walnut is native to eastern and central USA. The leaves have 10-23 slender leaflets often with no end one, and are finely toothed and downy underneath. This specimen is the County Champion for girth and height and was laden with fruit.

Ailanthus altissima, the Tree of Heaven is native to northern China but naturalises in US cities and Southern Europe as it survives in dry polluted urban sites. Male trees are reputed to smell bad. It has extra-floral nectaries like *Prunus*.

Phellodendron amurense, Amur Cork Tree resembles Ailanthus but the fruit is a drupe and the winter buds are enclosed.

Pterocarya x rhederiana, the hybrid of P. fraxinifolia (Caucasian Wingnut) and P. stenoptera (Chinese Wingnut), is a big tree with long hanging fruits, and this specimen is a County Champion.

We compared the cut stumps of a Beech and a Giant Redwood to see different thickness of the bark and the annual rings. We also listened to water moving up Eucalyptus Trees. And also, we visited the *Quercus robur* planted in memory of Vera Gordon and were very pleased to see it looking healthy and already supporting four types of gall! (Marble, Spangle, Silk-button and Artichoke).

26th September 2009 Ormskirk and Lathom Leader: Peter Gateley

Continuing the weather theme for this September it was a dullish, but dry, Saturday morning when 19 members and friends met up at the recently refurbished Ormskirk Station. We headed north from the station through the exotic plantings of the car park, noting the purple berries on Box-leaved Honeysuckle *Lonicera pileata*; a blackbird was seen feeding on them, no doubt leading to potential spread of this Chinese species as the effects of global warming increase seed viability. A wide range of typical railway weeds was recorded as we headed to the north-east towards the route of the disused line that once ran through Skelmersdale to St Helens. The low embankment here has been colonised by mature oak growth, both *Quercus robur* and *Q. cerris*, with traces of a former acidic sward surviving where the shade is not too dense and where not swamped by exotic species spreading from the adjacent back gardens. A rampant specimen of Mile-a-minute Vine *Fallopia baldshuanica* was noted and its numerous inflorescences compared with those of its cousin, Japanese Knotweed *F. japonica*).

After leaving the old railway we stopped at an old roadside sandstone wall that has been colonised by patches of a large-flowered Yellow Corydalis *Pseudofumaria lutea*. Walking along residential streets we found a range of typical pavement-crack and gutter species and admired various weeds and exotics in front gardens, including Field Woundwort *Stachys arvensis*. We turned off the pavements onto the track known as Ladies' Walk, heading north through the former Lathom estates of the Earls of Derby. Here a range of typical arable field edge weeds was seen, many of them still flowering, including Field Pansy *Viola arvensis* and Corn Spurrey *Spergula arvensis*, with many others in full seed. Towards the northern end of this track a recently planted hedge of native species was thriving on the eastern side, beyond this was a potato field with a tall fringe of weeds, mainly Red Goosefoot *Chenopodium rubrum* and Common Orache *Atriplex patula* but also with much Redleg *Persicaria maculosa* and a little Leafy-fruited Nightshade *Solanum sarachoides*. This field edge marked the end of the second 1km square recorded, with 126 vascular species noted along the route.

Following lunch we proceeded along Castle Lane towards the village of Westhead. All along the right-hand side of the route there was a broad seeded edge to the ploughed field, with sparse wheat ears intermixed with many seed-rich weeds such as red goosefoot and redleg and also scattered Maize *Zea mais* and Sunflower *Helianthus annuus* plants. Gallant Soldier *Galinsoga parviflora* was present in the edges near to Westhead. South from Westhead a footpath led us through a much more-enclosed landscape with tall mixed hedges and many trees. Just to the east of the church there is a sheep-grazed field with a short sward dominated by Common Bent *Agrosis capillaris*, on the edge next to the church was a flourishing strip of Michaelmas Daisy *Aster* sp. in full flower.

We next called in at Ruff Woods, where a birch and oak-dominated woodland has established around a disused sandstone quarry. The ground conditions are predominantly acidic and patches of Purple Moor-grass *Molinia caerulea* and Wavy Hair-grass *Deschampsia flexuosa* were noted amongst abundant fern and bracken growth. Various fungi were also noted, including earth ball, tawny grisette and a species of bolete. Walking from the woods, into Ormskirk, various wall-ferns were noted from garden boundaries and just before returning to the station a large population of Water Bent *Polypogon viridis*, that has recently established in one of the main car parks, was visited.

17th October 2009 Caergwrle, Leaders: Pat Lockwood & Peter Gateley

The Bus Replacement service from Bidston, arriving in Caergwrle one hour later than expected, was quite disruptive to our plans, especially as it was also discovered that our usual car park was also out of bounds. It was possible to let many members know about this in advance via email and the website, but many apologies to those members who did not get to find out in time. In all 18 of us gathered for a walk through glorious autumn weather.

Our route took us along the highways and byways of this lovely area, hoping to find the hedgerow dripping with lots of berries, hips and haws; but, surprisingly, these were generally lacking. Either the birds must have had a very good feed, or the season for fruit setting has been poor here this year. The fungi were also hiding from us, probably due to the recent prolonged dry periods. Those few we did see were examined and named for us by Tim Rogers: *Panaeolus accuminatus*, Smallbracket fungus (*Bjerkandera adjusta*), Bonnet Mycena (*Mycena galericulata*), Yellow wax cap (*Hygrocybe chlorophana*). The first tree of note along the walk was the Blue Atlas Cedar *Cedrus atlantica* f. *glauca*, a lovely tree, and we also looked at the Purging Buckthorn *Rhamnus cathcartica* and Wild Damson *Prunus domestica*, full of fruit. We were very lucky to see the Small-leaved Lime *Tilia cordata* exhibiting upright fruits at the end of the branches.

Surprisingly some grasses were in good flower, particularly the False Oatgrass *Arrhenatherum elatius*, Cocksfoot *Dactylis glomerata* and False-brome *Brachypodium sylvaticum*. At the end of the walk we found Wood Melick *Melica uniflora* flowering on shady road banks, along with ferns, the Western Polypody *Polypodium interjectum*, Male Fern *Dryopteris filix-mas* and Bracken *Pteridium aquilinum*, the latter turning rich Autumn colours.

Although a note was made of all plants seen, only the ones in flower are listed here, a surprising total for mid-October: Fox and Cubs, known also as Orange Hawkweed, *Pilosella aurantiaca*, White Dead-nettle *Lamium album*, Wild Basil *Clinopodium vulgare*, Marjoram *Origanum vulgare*, Self-heal *Prunella vulgaris*, Balm *Melissa officinalis*, Woodsage *Teucrium scorodonia*, Germander Speedwell *Veronica chamaedrys*, Herb Robert *Geranium robertianum*, Hedgerow Cranesbill *Geranium pyrenaicum*, Herb Bennet *Geum urbanum*, Hogweed *Heracleum sphondylium*, Ragwort *Senecio jacobaea*, Red or Pink Campion *Silene dioica*, Nipplewort *Lapsana communis*, Common Fumitory *Fumaria officinalis*, Yarrow *Achillea millefolium*, Wall lettuce *Mycelis muralis*, Yellow-wort *Blackstonia perfoliata*, Scarlet Pimpernel *Anagallis arvensis*, Agrimony (still in good flower and wonderful seeds, *Agrimonia eupatoria*) and most abundantly Ivy *Hedera helix* with flower heads buzzing with insects..

Amongst the Autumn fruits we did find were Duke of Argyle's Tea plant *Lyceum barbarum*. It was noted that the current wonder-food, the Goji Berry, is actually the dried fruit of this species. White Bryony *Bryonia dioica* was a glorious sight in flower and early fruit, and also Black Bryony *Tamus communis* with swags of scarlet berries.

We were pleased to have Tom Smale with us again after a long absence, and we welcomed our new members, namely Helen Hebden, Matthew Bradman and Michael Penney and we do hope we will see you again soon. We were also very pleased to have Val Gateley along and wish him a full recovery, following a serious illness.

On a biodiversity note, we would like to mention the site of a Badgers' latrine alongside one of the footpaths up the base of Hope Mountain. The stools were full of damson stones and bramble seeds and when we did the recce the site was in perfect order, however by the time of the field meeting it was a bit past its sell-by-date.

Because of the train problems, members faced a longer trip home than anticipated, hopefully there were no hitches on your journey.

Patricia Lockwood

Field Meetings 2010

Fairy Glen LBS Meeting 10th April 2010 Leader: David Earl

We were greeted by a pleasant spring morning and began our excursion by looking into Sprodley Wood from the main road from where we could see nice patches of Wood Anemone, Dog's Mercury and Lesser Celandine in flower and also found an established patch of Lesser Periwinkle by the woodland edge.

Having crossed the busy main road we then explored Fairy Glen. There are several areas of wet woodland in the upper section of the wood where we found Marsh Marigold, Large Bitter-cress, Pendulous Sedge, Remote Sedge, Wild Angelica, Opposite-leaved Goldensaxifrage, Lady Fern, Meadowsweet, Hemlock Water-dropwort and Yellow Flag with Common Valerian, Wood Speedwell, Ramsons and Bistort occurring along the stream banks. On the surrounding slopes the flora included Bluebell, Dog's Mercury, Enchanter's-nightshade, Lords-and-ladies, Pignut, Red Campion and Wood-sorrel. Patches of Townhall Clock where found at the base of trees and surprisingly it was later found that this species had not previously been recorded from this area for the South Lancashire Flora Project. A patch of Garden Grape-hyacinth was found by a pathway and was thought to have been planted.

About the footbridge at the top of the 'gorge like' section of woodland patches of Fringe-cups are well established. The steep banks of the clough beneath the footbridge provide a habitat for Hart's-tongue, Scaly Male Fern, Soft Shield-fern, Hard Fern, Hairy Wood-rush and the rather splendid Great Wood-rush. A small population of Hairy Saxifrage remains established on the wet rocks by the waterfall.

After lunch we saw how patches of Himalayan Balsam have extended from the stream sides to colonise the Bluebell slopes of the clough and evidence suggests that such

colonisation does results in the decline of our native Bluebell populations.

Finally we returned via the higher pathways which frequently adjoin the nearby gardens. A number of escapes are established along this section of the woodland and include Wood Forget-me-not, Snowdrop and several Garden Daffodil cultivars. Here also were a few patches of Primrose which may be of garden origin.

Loggerheads - April 24th 2010. Leaders: Peter Gately and Peter Tipping.

A beautiful April morning saw twenty-two members meet for the second visit of the season. The English Bluebells, *Hyacinthoides non-scripta*, that were only in leaf at Appley Bridge were starting in flower here only a short time later. Primrose, *Primula vulgaris* and Lesser Celandine, *Ranunculus ficaria* (or do we have to call it *Ficaria veris* these days?) made perfect companions to the strong blue of the Bluebells. The banks of the mill race by the bridge afforded us our first but far from last views of Butterbur, *Petasites hybridus* this too was complemented just over the bridge from the café area by a considerable colony of Winter Heliotrope, *Petasites fragrans*. Must get a move on we are not even away from Caffi Florence yet!

The first stone wall we looked at showed not only Wall Lettuce, *Mycelis muralis* but some very nice plants of Brittle Bladder Fern, *Cystopteris fragilis*, but onwards we go across the bridge and follow the River Alyn along the Leete path, constructed by the Victorian miners to help with the extraction of lead from the limestone which makes up this area. The limestone is from the Carboniferous age, approx 240 million years ago, long before the Jurassic and its associated dinosaurs. This area was a shallow tropical sea and consequently abounds in fossil sea creatures such as brachiopods, spirifers and crinoids or sea lilies. Nowadays the vertical outcrops offer a superb selection of ferns, including Hartstongue, *Phylitis scolopendrium*, Hard Shield, *Polystichum aculeatum*, Black Spleenwort, *Asplenium adiantum-nigrum*, Common Polypody, *Polypodium vulgare* and Maidenhair Spleenwort, *Asplenium trichomanes*.

Down on the banks of the Alyn we were pleased to find Opposite leaved Golden Saxifrage, *Chrysosplenium oppositifolium*, Wood Anemone, *Anemone nemorosa*, Wood Sorrel, *Oxalis acetosella*, more Buttebur and Toothwort, *Lathraea squamaria* along with Ground Elder, *Aegopodium podagraria*, Ground Ivy, *Glechoma hederacea*, Enchanter's Nightshade, *Circaea lutetiana* and Wood Forgetmenot, *Myosotis sylvatica*. Lots of Moschatel, *Adoxa moschatellina* presaged a discussion about the variety of English names for plants, Geoffrey Grigson where are you when we need you! From there we made our way to the second site for Herb Paris, *Paris quadrifolia*. At both sites the Paris was in its very early stages, but no less interesting for that.

Continuing the walk towards Devil's Gorge we were able to look at two violets, *Viola riviniana* and *reichenbachiana* comparing flower shape and the colour and shape of the spur, both features aiding recognition. Common Rock Rose, *Helianthemum nummularium*, Wood Sage, *Teucrium scorodonia* and Salad Burnet, *Sanguisorba minor* were showing well. Wild Strawberry, *Fragaria vesca* and Barren Strawberry, *Potentilla sterilis* growing close together allowed us to compare and contrast as we had done with the violets.

Returning from the Gorge and then ascending the steps to take us to the top of the limestone cliffs overlooking Loggerheads, Colomendy and the Clwyd mountains we were able to find our first orchid of the season, Early Purple Orchid, *Orchis mascula*. On the top of the cliff we found Hairy Violet, *Viola hirta*, Thyme, *Thymus polytrichus*, Lesser Meadow

Rue, *Thalictrum minus*, Carline Thistle, *Carlina vulgaris*, Spring Sedge, *Carex caryophyllea* and Bloody Cranesbill, *Geranium sanguineum*.

This left only the final descent through the Beech woods, there were however two more plants worthy of our attention, Fly Honeysuckle, *Lonicera xylosteum*, (where did that plant come from?) and at least twenty five Spurge Laurel, *Daphne laureola*. All in all a good day of botanising in an area that has been studied for very many years.

Peter Tipping

Bold Moss, 22nd May 2010 Leader: Peter Gateley

Thirteen members gathered at St Helens Junction station for the walk north-east onto the former Bold Colliery tip, now known as Colliers Moss Common. We started off by looking at grasses in the station car park where Red Fescue Festuca rubra, Rough-stalked Meadowgrass Poa trivialis, Sterile Brome Anisantha sterilis, Soft Brome Bromus hordeaceus and Cocksfoot Dactylis glomerata were all just coming into flower, also in flower were several good plants of Field Madder Sherardia arvensis, along the edges of the exotic shrub beds. We left the station on the path along the base of a high retaining wall with a suite of both native and alien plants growing from the mortar, including Thale Cress Arabidopsis thaliana, Coltsfoot Tussilago farfara, Wall Speedwell Veronica arvensis, Buddleia Buddleja davidii, Box-leaved honeysuckle Lonicera pileata and Oxford Ragwort Senecio squalidus.

We entered the site via Hoghton Road looking at various typical urban ruderal species and plantings along the way. The path took us through quite species-rich grassland with much Knapweed *Centaurea nigra* and Meadow Buttercup *Ranunculus acris* but also abundant Birds-foot Trefoil, but the continental variety *Lotus corniculatus* var. *sativus* that grows tall and leggy rather than the native ground-hugging form, indicating that the sides of the path had been seeded with a 'wildflower' seed mix. We later saw some colonies of the native type in good flower.

The many plantings carried out to restore the colliery waste have matured greatly over the last few decades. The oldest plantings were carried out by the National Coal Board in the early 1970s to present a green face to the bare grey tip edge for passengers on the Liverpool Manchester Railway. We looked at and compared the nitrogen-fixing species planted into the low nutrient spoil, four main tree species of which only Alder *Alnus glutinosa* is native; the others are Italian Alder *A. cordata*, Grey Alder *A. incana* and Falseacacia *Robinia pseudoacacia*. Later the Groundwork Trust supplemented this plantation with natives such as Oak *Quercus robur*, also birches and willows seeded themselves adding to the rather more natural look of this southern face of the former tip.

As well as colliery waste from the former Bold Colliery some parts of the tip also received pulverised fuel ash (PFA) from the adjacent Bold Power Station (both demolished years ago). The PFA had a mollifying effect on the very acidic coal waste and allowed more rapid natural regeneration of birch and willow scrub, much of which has now progressed to woodland. The colliery waste was tipped into an area of cut-over lowland raised mire beyond which the surrounding land was either heavily industrialised and urbanised or intensively farmed there was no existing old woodland nearby to provide propagules for the full range of woodland species. The birch and willow seeds blew in on the wind, as did fern and moss spores, birds later delivered berry-bearing species such as hawthorn, bramble, elder, honeysuckle etc and jays brought in acorns. However there was almost no development of groundflora, so in the 1980s experimental blocks of bluebell *Hyacinthoides non-scripta*, Wood Sage *Teucrium scorodonia*, Hedge Bedstraw *Galium album* and

Primrose *Primula vulgaris* were planted under the developing canopy and monitored under the auspices of Liverpool University. Although the monitoring was discontinued once the PhD student graduated, the plants have continued to grow well beyond their original bounds and make a great contribution to the natural feel of the woodland on this artificial site. Near to these plantings a colony of Adders-tongue *Ophioglossum vulgatum* was spotted by a sharp-eyed member.

From the eastern side of the former tip the long drought made it possible for a brief foray into the Purple Moor-grass *Molinia caerulea* dominated cut-over surface of Burtonwood Moss, part of the once large mire whose turbary rights were shared amongst four surrounding townships. Fragments of Bold Moss and Sutton Moss survive around the tip edge but Parr Moss was almost totally buried and nothing now remains. Burtonwood Moss is the largest surviving fragment and previous management to retain water in the system has been effective, the bunds across the drains allowing re-wetting of the peat and development of large *Sphagnum* hummocks. On Burtonwood Moss we noted a colony of Marsh Pennywort *Hydrocotyle vulgaris* in a damp hollow and much Tormentil *Potentilla erecta* on drier areas, another colony of adders-tongue was also noted amongst the (burntover) *Molinia* tussocks.

Around the northern edge of the former tip, the large utilitarian drain that was dug along its edge has been re-shaped and formed into a series of wetlands linked by a gently meandering watercourse, a wide range of water and water's-edge plants was noted here, contrasting with the generally dry and acidic nature of much of the site.

Also on parts of the northern and north-western slopes areas of heathland have been developed amongst the plantations and naturally regenerated woodlands. Much Heather *Calluna vulgaris* was noted, some of this naturally spread from the surviving mire edges but the largest blocks derive from introduction of heather seed by the Groundwork Trust. The surface of the colliery waste in these areas had such high levels of acidity that Prof. Tony Bradshaw recommended that liming would be required to raise the pH to a level that would more suit the heather. To this end a crusher was employed to grind concrete demolition waste into suitable sized particles to spread over and incorporate into the tip surface, the result is now some fine areas of natural-looking heath development.

On their way back from the northern edge the party was now getting severely overheated under the relentless sun and very high temperatures, so we only had a cursory glance at the former settling lagoons, once bare and grey but now supporting extensive reedbed (*Phragmites australis*) with peripheral clumps of Common Cotton-grass *Eriophorum angustifolium*, just coming into its fluffy seed stage. Before we got back to the station the majority of the group had diverted to the Junction Inn for a cooling drink and when we got back to our car the temperature reading was 32 degrees!

Sutton Manor 15th June 2010 Leader: John Somerville

Fifteen members met on a hot summers day in the car park at the Smithy Manor pub. We spent the next hour recording the plants around the edges of the large car park and amassed a surprisingly large list. The star attraction here must be the three Bee Orchids *Ophrys apifera*.

Another large list of plants was found near the gate as we entered the Country Park. Amonst these we found large quantities of Hedgerow Cranesbill *Geranium pyrenaicum* and Grass Vetchling *Lathyrus nissolia*. These two plants were to be found throughout the reserve. Another nice find here was Early Wintercress *Barbarea intermedia*.

Moving along the path leading to Dream (20m high statue erected in May 2009) we took a

diversion to a ditch where Barbara had found Blue-eyed Grass *Sisyrinchium bermudiana* in previous years. Barbara found it again but the flowers were not yet open and it looked like a tuft of grass. Time was spent trying to identify the Orchids which were abundant throughout the site. Thanks to to Tim Rogers who identified Northern Marsh Orchid, Southern Marsh Orchid and Early Marsh Orchid.

Now approaching the Dream statue, we found Caper Spurge *Euphorbia lathyrus* and Black Mustard *Brassica nigra*. Lunch was taken sitting on the steps surrounding the statue before setting off again towards the north east side of the reserve where we passed some small ponds containing Common Water Crowfoot *Ranunculus aquaticus*, Fool's Watercress *Apium nodiflorum*, Ivy-leaved Duckweed *Lemna trisulca* and Greater Plantain *Plantago major*. Ten minutes were spent here examining the honey guides on the Common Water Crowfoot to confirm our identification.

At the eastern edge of the site we found Jacob's Ladder *Polemonium caeruleum* before turning south then west and heading back towards the Dream statue. The last plant of the day, Field Pansy *Viola arvensis*, was found by Marion Chappel at the side of the path as we walked back to the car park. On reaching the car park ten of our members entered the Smithy Manor pub for a well-earned drink after a very hot day.

Rainford / Holland Moss - June 19th 2010 Leader: David Bryant

Thirteen chipper members met at Rainford Junction to explore relict mossland that at one time covered huge swathes of this part of Lancashire. A short walk took us to the now cultivated farmland where we encountered a nice range of grasses. Cocksfoot *Dactylis glomerata* in full flower, Crested Dog's Tail *Cynosurus cristatus*, two meadow grasses, Smooth *Poa pratensis* and Rough *Poa trivialis* and Italian Rye Grass *Lolium multiflorum* gave members plenty of opportunity to look for distinguishing features. Also encountered were Timothy *Phleum pratense*, Common Bent *Agrostis capillaris*, Yorkshire Fog *Holcus lanatus*, Soft and Barren Brome *Bromus hordeaceus* and *Anisantha sterilis* Common Soft Grass *Holcus mollis* and Wild Oat *Avena fatua*.

A really nice specimen of Goatsbeard *Tragopogon pratensis* was in flower and also carried seedheads. The open flowers, well it WAS only half eleven, were attracting lots of insect attention. Field Pansy *Viola arvensis*, Fat Hen *Chenopodium album*, Corn Spurry *Spergula arvensis* and Black Bindweed *Fallopia convolvulus* were good examples of field margin plants.

As farmland gave way to domed mossland the group could see the changes in vegetation taking place. A very distinctive Bramble found on acid mossland was noted but not specifically identified. Where is David Earl when you need him?

The Mossland itself gave up some great plants, Two Cotton Grasses, Common Eriophorum angustifolium and Harestail Eriophorum vaginatum plus Cross Leaved Heath Erica tetralix told us we were on the old moss. Silver and Downy Birch Betula pendula and Betula pubescens looked as if they had been introduced in some numbers.

And so we came to the orchids. Many members had been waiting for this part of the trip. We were not to be disappointed with a nice selection. Common Spotted *Dactylohriza fuchsii*, Southern Marsh *Dactylohriza praetermissa* and the hybrid *Dactylohriza x grandis* were the first to be found. Common Twayblade *Listera ovata* came next quickly followed by Early Marsh *Dactylorhiza incarnata ssp. coccinea*. A few Marsh Helleborine *Epipactus palustris* were in bud but not full flower. I don't think such a collection is often encountered on an inland site.

Two good size bushes of Bog Myrtle *Myrica gale* were, for me the stars of the show. I would suppose relict plants from a bygone times. Back at the railway station car park Long Headed Poppy *Papaver dubium* seemed to say "I know you have seen some lovely plants today, but I am worth a look as well." It wasn't wrong.

Peter Tipping

Lathkill Dale - Saturday 3rd July 2010 Leader: John Somerville

Ten members of the Liverpool Botanical Society met at 10.30am just outside Monyash on the lay-by at the west end of Lathkill Dale. We intended to leave one car at Over Haddon where our walk was to finish and use this car to get the drivers back to the walk start to pick up their cars. However the husband (Keith) of Aderyn Turner was going to meet his wife in Over Haddon and offered to transport all the other drivers back to the walk start.

The weather was cloudy but dry as we entered Lathkill Dale by the stile. We were walking down a grassy field used by cattle. Plants such as Meadow Saxifrage were no longer showing but we found many others on a limestone ridge which ran parallel to the path on our right. These included: Ivy-leaved Toadflax, Spring Sandwort, Hoary Plantain, Wall Rue, Polypody, Rough Hawkbit, Wall Lettuce, Salad Burnet, Marjoram, Brittle Bladder Fern, Welted Thistle and Musk Thistle.

Another stile lead us from the grassy field lead us into a gorge with limestone cliffs on both sides. Plants here included: Sweet Cicely, Common Spotted Orchid, Mossy Saxifrage, Ladies Smock, Jacob's Ladder, Shining Cranesbill, Greater Knapweed, Upright Hedge-parsley, Common Valerian, Lesser Stitchwort, Water Avens, Orpine, Greater Birdsfoot Trefoil and Harebell.

The path in this gorge was quite tricky and it was nice to emerge from a fairly narrow gorge into a grand deep valley where on our left the rocky slope of the valley soared up to the fields at the top. The first plant you notice growing on this slope is the tall Hoary Mullein. We were surrounded with plants such as Rock Rose, Salad Burnet, Fairy Flax, Biting Stonecrop, Smooth Hawkbit, Thyme-leaved Sandwort, Birdsfoot Trefoil, Kidney Vetch and Small Scabious.

As we descended the valley we met our first water where Cave Dale joins Lathkill Dale. It was now 1pm and the sun had been out for the last two hours so we stopped here for lunch. Though the stream was virtually dry there was a little water and we studied the plants from the footbridge which spans the stream and found Fool's Watercress, Brooklime and Water Speedwell. Moving on we came to an area where the open slope on our left came to an end and here we found lots of Hoary Plantain and Hairy Rock-cress.

Across a stile and we were now walking along a path with steep wooded slopes and the stream gurgling down the middle. Plants found along the path included, Large Bittercress, Hemp Agrimony, Nettle-leaved Bellflower, Opposite-leaved Golden-saxifrage, Greater Knapweed, Spearmint, Pignut, Greater Burnet-saxifrage, Small Balsam, Crow Garlic and Wood Meadow Grass.

This section of Lathkill Dale was home to several lead mines of which the most important was Mandale Mine and we spent a quick ten minutes studying the ruins and reading the information board.

Finally we came to a steep road which led up to Over Haddon village and here we met Keith who drove all the car drivers back to the walk start at Monyash

Tatton Tree Trail: 7th August 2010 Leader: Peter Gateley

After a wait in the car park and the stableyard for possible late-comers a select band of seven set off towards the gardens but not before looking at the specimens of castor-oil Plant *Ricinus communis* used as centre-pieces for large planted tubs. This plant from the Mediterranean is the source not only of castor oil but also the deadly poison, ricin. Although superficially similar to the False Castor-oil plant *Fatsia japonica*, it is not closely related to the ivies but in a family and genus of its own.

Once we all had our tickets for the gardens we walked through the pergola to a large square lawned area, on the right as a fine specimen of Black Walnut *Juglans nigra*. The eastern black walnut can grow up to 40m and produces edible nuts, much used as food. Its long compound leaves are fairly unusual, generally lacking a terminal leaflet.

In the central bed is a small specimen of the Rice-paper Plant *Tetrapanax papyrifer*. This is a large shrub capable of growing to 10m height in favourable circumstances. Edible rice paper is made from the pith of this plant; paper is also made from rice starch but that paper is not edible, it is generally used for Chinese paintings.

Opposite the walnut is a specimen of Chinese Spruce *Picea likiangensis*, also known as Lijian Spruce, a tree of high mountainous areas of China and Bhutan. It was first collected and brought to Europe by E. H. (or Chinese) Wilson.

Passing a tall screen of eccentrically clipped yews we arrived at a handsome grove of Dawn Redwood *Metasequoia glyptostroboides*, a deciduous conifer, with very neat ferny foliage with opposite leaflets of equal length. This tree was unknown to western science or horticulture until 1944, but three other members of this genus had previously been known from their fossilised remains, resulting in the name dawn redwood, considered as being from the dawn of time. Like other redwoods, this is a big tree, growing up to over 60m in height.

Through the redwood grove we came to elegant small trees of the Turkish Hazel *Corylus colurna* from south-eastern Europe and south-western Asia. It is the largest of the hazels and can grow up to 35m in height. It makes a good urban tree, thriving in less than ideal conditions. The nuts are edible but smaller than common hazel and thick shelled, so not a viable commercial proposition.

Next we looked at a range of exotic conifers, including, Western Hemlock *Tsuga heterophylla* native to the west coast of North America (Alaska to northern California). It is a large tree, up to 70m, and has distinctive drooping tips to the branches and a dense cover of small flattened leaves. The leaves are dark green above with two white lines of stomata below. The leaves are irregular in length (heterophyllous) and we observed the distinctive occasional up-side-down one or two on each stem.

We passed Japanese Redwood *Cryptomeria japonica*, which is in fact found widely through eastern Asia. Large globular spiny cones were seen at the tips of branches. Next we studied a fir, the Korean Fir *Abies koreana* with distinctive, upward pointing, dark blue cones. Unlike the spruce seen earlier it has no pegs at base of leaves, there is a slight scar but not a distinct peg. This is a small conifer, generally only reaching around 18m. Unlike spruces and pines, fir cones disintegrate to release the seeds.

We then looked at another hemlock, the Mountain Hemlock *Tsuga mertensiana*. It has a similar geographical range to western hemlock but thrives at higher altitudes here. The leaves are much more uniform in size than western hemlock, but are arranged more

untidily on the branches, all around the twigs rather than in ranks.

To the left of this is an Eastern Hemlock *Tsuga canadensis*, native to the eastern side of North America. This tree has ranked leaves, but of more-or-less equal size and with smaller up-side-down leaflets along the centres of the stems. This is a long lived tree, over 500 years, but relatively low growing, usually reaching only about 35m.

We then found another deciduous conifer, the odd-looking Golden Larch *Pseudolarix amabilis*. It is not really closely related to the true larches, but has some similarities, including annual leaf loss, its name coming from the bright yellow coloration the leaves take on before falling. It can grow to 40m in its native China.

After passing the Japanese garden we crossed a bridge to fine specimen of Swamp Cypress *Taxodium distichum*. This is another deciduous conifer (hence its alternative name of bald cypress) and it is native to wetter parts of south-eastern USA. A distinctive feature of specimens growing in wet areas is the production of 'knees' once thought to act as pneumatophores. The leaves are much less neatly arranged than in dawn redwood, leaflets are more variable in length and less consistently opposite.

Back to the Broad Walk we headed towards the monument and down path on the left by the large Turkey Oak *Quercus cerris*. There is a fine Large-leaved Lime *Tilia platyphyllos* on the right-hand side. Unlike common lime this seldom has sprouts from the base of the trunk and we admired the ribbed and downy fruits.

We passed a huge American Red Oak *Quercus rubra* on our way to a specimen of the Sapphire Berry *Symplocos paniculata*, from Japan and Korea. When fully ripe the fruit turns a metallic blue, but the green berries had only a hint of blue at their tips when we saw them. Maria Knowles reported that they had turned a more complete blue about a month later.

A favourite of most of the members was the Prickly Castor-oil Tree *Kalopanax septemlobum*, like the rice-paper plant, this is related to ivy, but not to the true castor oil plant! The large panicles of flowers were very ivy-like and the lovely palmate leaves were mainly seven-lobed. The strong spines along the twigs, branches and even the main trunk make this quite an unusual tree, not conducive to climbing! !t comes from north-eastern Asia where it can grow up to 30m tall.

Passing out of the arboretum and across the lawns back to the stableyard we passed some specimens of Silver Lime *Tilia tormentosa* with some late flowers beautifully scenting a wide area around them.

We thoroughly enjoyed the wide range of trees to be seen at Tatton, that we saw so many was thanks to the time taken by Maria Knowles visiting the site beforehand with our leader for the day and pointing out (and identifying) all the prime specimens.

Gop Hill and Graig Fawr, North Wales – 11th September 2010 Leaders: Sheila and Peter Mason

We drove through a torrential shower to the meeting place in Trelawnyd Car Park where 13 members gathered. We sheltered twice from further showers before emerging onto the

side of Gop Hill where we found Marjoram *Origanum vulgare* flourishing amongst a colony of Creeping Thistle *Cirsium arvense*. In spite of the rain, Harebells *Campanula rotundifolia*, Tormentil *Potentilla erecta* and Eyebright *Euphrasia nemorosa* (white form) were in good shape, and Fairy Flax *Linum carthaticum*, Thyme *Thymus polytricus* and Lady's Bedstraw *Galium verum* were still showing their end of season flowers. A small quarry-side had a fine array of Rock Rose *Helianthemum nummularium* in its second flowering. We had arranged this visit to look at the Autumn Lady's Tresses *Spiranthes spiralis* which grows in profusion here. 2007 and 2008 had the hillside white with the flowers; 2009 gave a much more meagre display and on the 2010 recce the week before we found some 50 plants. But the season was early this year and by the time of our visit most blooms were over, and we found only a few with the white flowers all the way up the spiralling stem – just enough to provide photos. Darwin made an extensive study of this flower to examine the pollination mechanism when bees visited them , he doesn't appear to have enquired why they grow in such a tight spiral!

The *Spiranthes spiralis* trail took us to the entrance gate onto the Gop cairn itself, the second largest man-made mound in Britain after Silbury, 14 metres high and 250 metres above sea level. Like the hill it is all limestone, presumably quarried nearby in Neolithic or Bronze Age times, although no archaeological finds have dated it securely. An almost impenetrable sloe forest guards the entrance and the mound itself is home to a wide variety of flora. We found Carline Thistle *Carlina vulgaris*, Musk Thistle *Carduus nutans*, two Stonecrops, *Sedum acre*, *Sedum anglicum*, Red Valerian *Centrathus ruber*, Salad Burnet *Sanguisorba minor*, Parsley Piert *Aphanes arvensis* and a particularly fine specimen of Ploughman's Spikenard *Inula conyzae*. One or two *Spiranthes* grew right on the summit.

As it was temporarily dry and sunny, we ate an early lunch on the top of the mound with splendid views across the Clwyd estuary towards Snowdonia and across the Dee estuary to Wirral. Golden Grove, an Elizabethan mansion, was bathed in sunshine across the valley to the north. We watched the next downpour approaching along the Clwyd valley and descended rapidly to the entrance but were thoroughly soaked by the time the rain stopped.

Some of the party went to look at the Gop Rock Shelter and Caves where Neolithic human remains and Pleistocene mammal debris had been found. The limestone cliffs there hosted many plants including Maidenhair Spleenwort *Asplenium trichomanes* and Rock Rose in profusion.

The cavers rejoined the others who had sheltered in the forest by the cairn and we all proceeded along the Millennium Path through the trees, finding Wood Avens *Geum urbanum*, Lesser Burdock *Arcticum minus*, and a variety of ferns and mosses. We emerged from the forest and followed the path back to Trelawnyd, noting Agrimony *Agrimonis eupatoria* and Pellitory-of-the-Wall *Parietaria judaica* on the way.

At Trelawnyd 4 members left to return home, while 9 drove on to Graig Fawr, a National Trust site and again a limestone hill. It was rather late in the season for this site, but we found Red Bartsia *Odontites vernus*, good displays of Travellers' Joy *Clematis vitalba* in fruit, Common Mallow *Malva sylvestris* and a plant of Lesser Meadow Rue *Thalictrum alpinum* in a limestone crevice. There were good patches of Rays Knotgrass *Polygonum oxyspermum* along the path. Several interesting grasses were found, including Yellow Oat Grass *Trisetum flavescens*, Heath Grass *Danthonia decumbens* and Crested Hair Grass *Koeleria macrantha*. The weather was fine and from the summit there were magnificent

views along the Welsh coast.

The party dispersed, only to meet again at the nearby Jacksons Garden Centre for tea. We'd had just enough sunshine to see how beautiful the countryside is and to make up for the rain. Several members felt they would like to return there and explore further. To quote Renoir: "The beauty remains, the pain passes."

Field Meetings 2011

Martin Mere - 30th April 2011 Leader David Earl

Fifteen members assembled at the car park to Martin Mere Wildfowl and Wetlands Trust on a blowy morning with broken cloud on the first field meeting of the season. It was nice to see both familiar faces and new ones too.

On leaving the car park to walk around the reserve the first plant of note to be seen was Bogbean *Menyanthes trifoliata* in flower. Nearby was Grey Alder *Alnus incana* and Wall Speedwell *Veronica arvensis*.

In the woodland at the edge of the road we saw Jack Go To Bed at Noon *Tragopogon* pratensis and, twining it's way up the trees Hop *Humulus lupulus*. Next was Red Currant *Ribes rubrumi* with several groupings of Fringecups *Tellima grandiflora*.

Leaving the woodland and walking the edge of a cultivated field we saw many of the plants associated with that type of habitat. These included: Black Bindweed *Fallopia convolvulus*. Henbit Dead-Nettle *Lamium amplexicaule*. Hedge Mustard *Sisymbrium officinalis*, along with Amphibious Bistort *Persicaria amphibia*, with water nowhere to be seen. It's always puzzling how this plant has a land form. Great Willowherb *Epilobium hirsutum* was making growth among the lusher vegetation slightly away from the edge.

The "yellow Job" by the gate turned out to be, after some consultation, Beaked Hawksbeard *Crepis vesicaria* followed by Hairy Tare *Vicia hirsuta* and Hairy Sedge *Carex hirta*, probably a conspiracy because I have lost the beard myself!

When we walked the mossland the vegetation changed. Wintercress *Barbarea vulgaris*, Lesser Spearwort *Ranunculus flammula* and a variety of Apple Mint *Mentha villosa sativa* making an appearance. Red Hot Poker *Kniphofia uvaria*, Meadow Vetchling *Lathyrus pratensis* and Lucerne *Medicago sativa* were showing the intervention of habitation in the area.

The newly dug ponds, what for I don't know, showed a lot of potential and could in the near future be sites worth a visit to record their colonisation. All in all, a very pleasant start to the season. Many thanks to David Earl for leading this trip.

Peter Tipping

Hall Road (Crosby) coast and dunes 14th May 2011 Leader: Mary Dean

After a long, dry and warm spell, twenty-four members braved the drop in temperature and

strong north-westerly winds to meet at Hall Road to explore the botanical interest along the manmade shingle and the stabilised dunes between Hall Road and Hightown.

Close to the car park we saw *Cochlearia danica* (Danish Scurvy-grass), *Armoracia rusticana* (Horse Radish) and *Beta vulgaris* ssp. *maritima* (Sea Beet) and discussed the merits, or otherwise, of Sea Beet as a vegetable, recommended by one member as an alternative to spinach. On the brick shingle two large plants of *Crambe maritima* (Sea-kale) looked magnificent in full flower.

Other plants seen on shingle or the flattened dunes included *Honckenya peploides* (Sea Sandwort), *Lotus corniculatus* (Bird's-foot Trefoil), *Medicago lupulina* (Black Medick), *Trifolium dubium* (Lesser Trefoil), *Silene vulgaris* (Bladder Campion), *S. latifolia* (White Campion), *Vicia hirsuta* (Hairy Tare), *V. sativa* (Common Vetch) and both pink- and white-flowered *Rosa rugosa* (Japanese Rose). A large shrub of flowering *Lycium barbarum* (Duke of Argyll's Teaplant) provided a temporary and welcome windbreak. Further on we found a solitary *Smyrnium olusatrum* (Alexanders), a plant several people had not seen at this site on previous visits, and a large patch of *Cymbalaria muralis* (Ivy-leaved Toadflax).

Turning inland for an early lunch break in the shelter of the pumping station wall, we saw *Geranium sanguineum* (Bloody Crane's-bill). After lunch we saw *G. dissectum* (Cut-leaved Crane's-bill), followed by *Hypochaeris radicata* (Common Cat's-ear) which we compared to and separated from *Leontodon hispidus* (Rough Hawkbit).

Continuing up the coast the plants included *Reseda lutea* (Wild Mignonette), *Avenula pratensis* (Meadow Oat-grass) looking particularly splendid, *Rosa spinosissima* (Burnet Rose), *Glaucium flavum* (Yellow Horned-poppy), *Euphorbia paralias* (Sea Spurge), *Crithmum maritimum* (Rock Samphire), *Parietaria judaica* (Pellitory-of-the-wall) and *Eryngium maritimum* (Sea Holly), although not all were yet in flower.

Turning back and following a more inland route we came across a damper area with *Thalictrum flavum* (Common Meadow Rue) and *Angelica sylvestris* (Wild Angelica). On the drier areas were *Asparagus officinalis* (Garden Asparagus), *Geranium pyrenaicum* (Hedgerow Crane's-bill) and attractive annual dune grasses *Phleum arenarium* (Sand Cat's-tail) and *Vulpia fasciculata* (Dune Fescue).

Speeding up to get back before the rain a few naturalised species were found: a lovely show of *Euphorbia cyparissias* (Cypress Spurge), *Polygonatum multiflorum* (Solomon'sseal), *Spiraea* sp. (Bridewort), *Ribes rubrum* (Red Currant), *Papaver pseudoorientale* (Oriental Poppy) and *Syringa vulgaris* (Lilac).

Just before returning to the car park we found several flowering plants of the rare endemic *Coincya monensis* ssp. *monensis* (Isle of Man Cabbage).

The field trip finished just in time for the eleven members who stayed to the end to remain dry. Fifteen minutes later it was raining heavily. My thanks for everyone for helping out with finding plants of interest, identification and tips for identifying the difficult ones.

Mary Dean

Clock Face Country Park – 21st May 2011 Leader: Barbara Allen

Sixteen members witnessed the array of plants, insects and birds on the former site of Clock Face Colliery now a country park.

From the older plantings presumably by the National Coal board on the outskirts, Betula

pendula (Silver Birch) conveniently planted near *Betula pubescens* (Downy Birch) making comparing easer, along with *Ilex* x *altaclerensis* (Highclere Holly), *Syringa vulgaris* (Lilac), *Rhododendron* ssp but also *Cydonia* (Quinces) and posibly *Inula helenium* (Elecampane),this will need further visits for conformation. All adding interest and maturity to the site.

Thanks to the diversity of the area some being more acid than others, boggy, barren, wooded and even having an excellent fishing pond this gave rise to over one hundred and fifty species recorded on the day. A quadrant of approximately one metre square was done on the top east side by some members, a rather fragile surface, yet surprisingly they found fifteen different species not counting mosses and surviving on millimetres of soil.

Many insects were pointed out to us from Common Blue and Peacock Butterflies, Silver Ground Carpet Moth also including the release of a Poplar Hawk Moth, even a small green beetle with a yellow petticoat apparently living off Alder trees. Birds like the Jay, Long-Tiled Tit and almost constantly in the background the song of a Willow Warbler adding to the ambience of the walk.

Amazingly the weather held which helped people appreciate our surroundings and with the individual expertise of members the meeting was enriched and all the more enjoyable.

Many thanks to all that attended and even help prepare for the meeting.

Barbara Allen

Altcar Rifle Range 3rd June 2011 Leader: Steve Cross

Runcorn Heath & Oxmoor 11th June 2011 Leader: Rob Duffy

Plants of the dry Heath of Runcorn Hill included Sheep's Sorrel *Rumex acetosella*, Sheep's Fescue *Festuca ovina*, Creeping Soft Grass *Holcus mollis*, Early Hair Grass *Aira praecox*, Wavy Hair grass *Deschampsia flexuosa*, Sumach *Rhus typhina*, Broom *Cytisus scoparius* and Hairy Fruited Broom *Cytisus striatus*. Also there were Gorse *Ulex* spp. Heath Groundsel *Senecio sylvaticus*, Sticky Groundsel *Senecio viscosus*, Heath Bedstraw *Galium saxatile*, Sea Buckthorn *Eleagnus rhamnoides*, Heather *Calluna vulgaris*, Sand Spurrey *Spergularia rubra*, Wood Sage *Teucrium scorodonia*, Hawkweed *Hieracium* spp. Pineappleweed *Matricaria discoidea*, Tulip Tree *Liriodendron* sp. and Hairy Brome *Bromus ramosus*.

In the wetland we found New Zealand Pygmy Weed *Crassula aquatica*, Amphibious Bistort *Persicaria amphibia*, Sweet grass *Glyceria* spp., Common Rush *Juncus conglomeratus*, Common Cudweed *Filago vulgaris*, Toad Rush *Juncus bufonis*, Slender Rush *Juncus tenuis*, Balsam Poplar *Populus trichocarpa x Populus balsamifers* And in the glens was Raspberry *Rubus idaeus*, Honeysuckle *Lonicera pericyclemum*, Orange Hawkweed *Pilosella aurantiacum*, Climbing Corydalis *Ceratocapnos claviculata*, Wood Sorrel *Oxalis acetosella*, Enchanter's Nightshade *Circaea lutetiana* and Stitchwort *Stellaria* spp.

The Species list for Oxmoor included Yellow Bartsia *Parentucellia viscose*, Hemlock Water Dropwort *Oenanthe crocata*, Field Penny Cress *Thlaspi perfoliatum*, Hard Rush *Juncus inflexus*, Hairy Sedge *Carex hirta* Glaucous Sedge *Carex flacca*, Common Spike Rush *Eleocharis palustris*, Common Club Rush *Scirpus lacustris*, Tufted Hair Grass *Deschampsia flexuosa*, Cut leaved Cranesbill *Geranium dissectum*, Silver Hair grass *Aira coryophylla*, Field Madder *Sherardia arvensis*, Brown Sedge *Carex disticha*, Sweet Briar

Rosa rubiginosa, Yellow wort Blackstonia perfoliata, Marsh Bedstraw Galium palustre, Blue Fleabane Erigeron acer, Wild Angelica Angelica sylvestris, Grass Vetchling Lathyrus nissolia, Crosswort Cruciata laevipes, Tufted Forget-Me-Not Myosotis laxa, Wall Speedwell Veronica arvensis, Water Figwort Scrophularia auriculata, Teasel Dipsacus fullonum, Corn Chamomile Anthemis arvensis

Hemlock *Conium maculatum*, Skullcap *Scutellaria galericulata*, Lesser Spearwort *Ranunculus flammula*, Tormentil *Potentilla erecta*, Purple Toadflax *Linaria purpurea* and Aquilegia *Aquilegia vulgaris*.

Species list Runcorn Hill:-

The dry Heath:-

Sheep's Sorrel Rumex acetosella Sheep's Fescue Festuca ovina Creeping Soft Grass Holcus mollis Common Bent Agrostis capillaris Creeping Bent Agrostis stolonifera Red fescue Festuca rubra Early Hair Grass Aira praecox Wavy Hair grass Deschampsia flexuosa Sumach Rhus typhina Broom Cytisus scoparius Hairy Fruited Broom Cytisus striatus Gorse Ulex spp. Heath Groundsel Senecio Sylvaticus Sticky Groundsel Senecio viscosus Heath Bedstraw Galium saxatile Sea Buckthorn Eleagnus rhamnoides Heather Calluna vulgaris Sand Spurrey Spergularia rubra Wood Sage Teucrium scorodonia Hawkweed Hieracium spp. Pineappleweed Matricaria discoidea Tulip Tree Liriodendron

The wetland:-

Hairy Brome Bromus ramosus

New Zealand Pygmy Weed Crassula aquatica Amphibious Bistort Persicaria amphibian Sweet grass Glyceria spp.
Soft Rush Juncus effusus
Common Rush Juncus conglomeratus
Common Cudweed Filago vulgaris
Toad Rush Juncus bufonis
Slender Rush Juncus tenuis
Balsam Poplar Populus trichocarpa x
Populus balsamifers
The glens:Raspberry Rubus idaeus
Honeysuckle Lonicera pericyclemum
Orange Hawkweed Pilosella aurantiacum

Climbing Corydalis Ceratocapnos claviculata Cat's Ear Hypochaeris radicata Wood Sorrel Oxalis acetosella Enchanter's Nightshade Circaea lutetiana Stitchwort Stellaria spp.

Species list Oxmoor:-

Yellow Bartsia Parentucellia viscose Marsh Horsetail Equisetum palustre. Hemlock Water Dropwort Oenanthe crocata Yellow Rattle Rhinanthus major Field Penny Cress Thlaspi perfoliatum Hard Rush Juncus inflexus Hairy Sedge Carex hirta Glaucous Sedge Carex flacca Common Spike Rush Eleocharis palustris Common Club Rush Scirpus lacustris Tufted Hair Grass Deschampsia flexuosa Reed Canary Grass Phalaris arundinacea Cut leaved Cranesbill Geranium dissectum Silver Hair grass Aira coryophylla Field Madder Sherardia arvensis Brown Sedge Carex disticha Sweet Briar Rosa rubiginosa Yellow wort Blackstonia perfoliata Marsh Bedstraw Galium palustre Blue Fleabane Erigeron acer Wild Angelica Angelica sylvestris Grass Vetchling Lathyrus nissolia Crosswort Cruciata laevipes Tufted Forget-Me-Not Myosotis laxa Wall Speedwell Veronica arvensis Water Figwort Scrophularia auriculata Teasel Dipsacus fullonum Corn Chamomile Anthemis arvensis Hemlock Conium maculatum Skullcap Scutellaria galericulata Lesser Spearwort Ranunculus flammula St. John's Wort Hypericum spp. Tormentil Potentilla erecta Purple Toadflax Linaria purpurea Aquilegia Aquilegia vulgaris

Ben Lawers 2nd & 3rd July 2011 Leader: Peter Gateley

The Species list for Ben Lawers on 2nd July 2011 came to 111 species. The highlights included: *Alchemilla alpina* Alpine Ladies-mantle, *Botrychium lunaria* Moonwort, *Carex binervis* Green-ribbed Sedge, *Carex saxatilis* Russet sedge, *Cerastium alpinum* Alpine mouse-ear, *Cystopteris fragilis* Brittle Bladder-fern, *Empetrum nigrum* Crowberry, *Epilobium anagallidifolium* Alpine Willowherb, *Gaultheria mucronata* Prickly Heath,

Gnaphalium supinum Dwarf cudweed, Huperzia selago Fir clubmoss, Juncus triglumis Three-flowered rush, Lycopodium clavatum Stag's-horn clubmoss, Menyanthes trifoliata Bogbean, Meum athamanticum Spignel, Minuartia sedoides Cyphel, Myosotis alpestris Alpine forget-me-not, Oreopteris limbosperma Lemon-scented Fern, Oxyria digyna Mountain sorrel, Pinguicula vulgaris Butterwort, Poa alpina Alpine meadowgrass, Potentilla crantzii Alpine cinquefoil, Racomitrium lanuginosum Woolly fringe-moss, Rubus saxatilis Stone bramble, Salix aurita Eared Willow, Salix herbacea Least willow, Saxifraga aizoides Yellow saxifrage, Saxifraga hypnoides Mossy saxifrage, Saxifraga oppositifolia Purple saxifrage, Saxifraga stellaris Starry saxifrage, Sedum rosea Roseroot, Selaginella selaginoides Lesser clubmoss, Sibbaldia procumbens Sibbaldia, Silene acaulis Moss Campion, Thalictrum alpinum Alpine meadow-rue, Tofieldia pusilla Scottish asphodel, Trichophorum germanicum Deergrass, Vaccinium vitis-idaea Cowberry, Veronica serpyllifolia humifusa Mountain thyme-leaved speedwell and Viola lutea Mountain Pansy.

Species list for Ben Lawers: 2 nd July 2011
Achillea millefolium Yarrow
Adoxa moschatellina Moscatel
Agrostis capillaris Common Bent
Alchemilla alpina Alpine ladies-mantle
Alchemilla species Lady's-mantle species
Anemone nemorosa Wood Anemone
Anthoxanthum odoratum Sweet Vernal-grass
Asplenium viride Green spleenwort
Bellis perennis Daisy
Betula pendula Silver Birch
Betula pubescens Downy Birch
Blechnum spicant Hard Fern
Botrychium Iunaria Moonwort
Briza media Quaking-grass
Calluna vulgaris Heather
Caltha palustris Marsh-marigold
Campanula rotundifolia Harebell
Cardamine pratensis Cuckooflower
Carex binervis Green-ribbed Sedge
Carex nigra Common Sedge
Carex saxatilis Russet sedge
Cerastium alpinum Alpine mouse-ear
Cerastium fontanum Common Mouse-ear
Chamerion angustifolium Rosebay Willowherb
Chrysosplenium oppositifolium Opposite-leaved Golden-saxifrage.
Cirsium palustre Marsh Thistle
Corylus avellana Hazel

Cynosurus cristatus Crested Dog's-tail Cystopteris fragilis Brittle Bladder-fern Deschampsia cespitosa Tufted Hair-grass Deschampsia flexuosa Wavy Hair-grass Digitalis purpurea Foxglove Draba incana Hoary whitlowgrass Empetrum nigrum Crowberry Epilobium anagallidifolium Alpine willowherb Equisetum palustre Marsh Horsetail Equisetum sylvaticum Wood Horsetail Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax Lotus comiculatus Bird's-foot Trefoil	
Deschampsia cespitosa Tufted Hair-grass Deschampsia flexuosa Wavy Hair-grass Digitalis purpurea Foxglove Draba incana Hoary whitlowgrass Empetrum nigrum Crowberry Epilobium anagallidifolium Alpine willowherb Equisetum palustre Marsh Horsetail Equisetum sylvaticum Wood Horsetail Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Cynosurus cristatus Crested Dog's-tail
Deschampsia flexuosa Wavy Hair-grass Digitalis purpurea Foxglove Draba incana Hoary whitlowgrass Empetrum nigrum Crowberry Epilobium anagallidifolium Alpine willowherb Equisetum palustre Marsh Horsetail Equisetum sylvaticum Wood Horsetail Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Cystopteris fragilis Brittle Bladder-fern
Digitalis purpurea Foxglove Draba incana Hoary whitlowgrass Empetrum nigrum Crowberry Epilobium anagallidifolium Alpine willowherb Equisetum palustre Marsh Horsetail Equisetum sylvaticum Wood Horsetail Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Deschampsia cespitosa Tufted Hair-grass
Draba incana Hoary whitlowgrass Empetrum nigrum Crowberry Epilobium anagallidifolium Alpine willowherb Equisetum palustre Marsh Horsetail Equisetum sylvaticum Wood Horsetail Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Deschampsia flexuosa Wavy Hair-grass
Empetrum nigrum Crowberry Epilobium anagallidifolium Alpine willowherb Equisetum palustre Marsh Horsetail Equisetum sylvaticum Wood Horsetail Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Digitalis purpurea Foxglove
Epilobium anagallidifolium Alpine willowherb Equisetum palustre Marsh Horsetail Equisetum sylvaticum Wood Horsetail Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Draba incana Hoary whitlowgrass
Equisetum palustre Marsh Horsetail Equisetum sylvaticum Wood Horsetail Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Empetrum nigrum Crowberry
Equisetum sylvaticum Wood Horsetail Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Epilobium anagallidifolium Alpine willowherb
Erica tetralix Cross-leaved Heath Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Equisetum palustre Marsh Horsetail
Eriophorum angustifolium Common Cottongrass Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Equisetum sylvaticum Wood Horsetail
Eriophorum vaginatum Hare's-tail Cottongrass Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Erica tetralix Cross-leaved Heath
Euphrasia sp. Eyebright species Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Eriophorum angustifolium Common Cottongrass
Festuca rubra Red Fescue Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Eriophorum vaginatum Hare's-tail Cottongrass
Festuca vivipara Viviparous fescue Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Euphrasia sp. Eyebright species
Galium saxatile Heath Bedstraw Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Festuca rubra Red Fescue
Gaultheria mucronata Prickly Heath Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Festuca vivipara Viviparous fescue
Geranium sylvaticum Wood Cranesbill Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Galium saxatile Heath Bedstraw
Gnaphalium supinum Dwarf cudweed Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Gaultheria mucronata Prickly Heath
Helictotrichon pratense Meadow Oat-grass Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Geranium sylvaticum Wood Cranesbill
Holcus mollis Creeping Soft-grass Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Gnaphalium supinum Dwarf cudweed
Huperzia selago Fir clubmoss Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Helictotrichon pratense Meadow Oat-grass
Juncus conglomeratus Compact Rush Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Holcus mollis Creeping Soft-grass
Juncus effusus Soft Rush Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Huperzia selago Fir clubmoss
Juncus squarrosus Heath Rush Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Juncus conglomeratus Compact Rush
Juncus triglumis Three-flowered rush Linum catharticum Purging Flax	Juncus effusus Soft Rush
Linum catharticum Purging Flax	Juncus squarrosus Heath Rush
	Juncus triglumis Three-flowered rush
Lotus corniculatus Bird's-foot Trefoil	Linum catharticum Purging Flax
	Lotus corniculatus Bird's-foot Trefoil

Luzula multiflora Heath Woodrush	Sibbaldia procumbens Sibbaldia				
Luzula spicata Spiked woodrush	Silene acaulis Moss Campion				
Luzula sylvatica Great Woodrush	Solidago virgaurea Goldenrod				
Lycopodium clavatum Stag's-horn clubmoss	Sorbus aucuparia Mountain Ash				
Menyanthes trifoliata Bogbean	Sorbus aucuparia Rowan				
Meum athamanticum Spignel	Succisa pratensis Devil's-bit Scabious				
Minuartia sedoides Cyphel	Thalictrum alpinum Alpine meadow-rue				
Molinia caerulea Purple Moor-grass	Tofieldia pusilla Scottish asphodel				
Montia fontana Blinks					
Myosotis alpestris Alpine forget-me-not	Trichophorum germanicum Deergrass				
Nardus stricta Mat-grass	Trifolium repens White Clover				
Oreopteris limbosperma Lemon-scented Fern	Vaccinium myrtillus Bilberry				
	Vaccinium vitis-idaea Cowberry				
Oxalis acetosella Wood Sorrel	Veronica chamaedrys Germander Speedwell				
Oxyria digyna Mountain sorrel	Veronica officinalis Heath Speedwell				
Pedicularis sylvatica Lousewort	Veronica serpyllifolia humifusa Mountain thyme-leaved speedwell				
Persicaria vivipara Viviparous bistort	Viola lutea Mountain Pansy				
Pinguicula vulgaris Butterwort					
Plantago lanceolata Ribwort Plantain	Species list for Black Wood:				
Poa alpina Alpine meadowgrass	3 rd July 2011				
Polygala serpyllifolia Heath Milkwort	Ajuga reptans Bugle				
Polygala vulgaris Milkwort	Alnus glutinosa Alder				
Polystichum Ionchitis Holly Fern	Anemone nemorosa Wood Anemone				
Potamogeton polygonifolius Bog Pondweed	Angelica sylvestris Wild Angelica				
Potentilla crantzii Alpine cinquefoil	Anthoxanthum odoratum Sweet Vernal-grass				
Potentilla erecta Tormentil	Anthriscus sylvestris Cow Parsley				
Racomitrium lanuginosum Woolly fringe-moss	Athyrium filix-femina Lady-fern				
Ranunculus acris Meadow Buttercup	Betula pendula Silver Birch				
Rhinanthus minor Yellow-rattle	Betula pubescens Downy Birch				
Rubus saxatilis Stone bramble	Blechnum spicant Hard Fern				
Sagina procumbens Procumbent Pearlwort	Briza media Quaking-grass				
Salix aurita Eared Willow	Calluna vulgaris Heather				
Salix herbacea Least willow					
Saxifraga aizoides Yellow saxifrage	Campanula rotundifolia Harebell				
Saxifraga hypnoides Mossy saxifrage	Carex binervis Green-ribbed Sedge				
Saxifraga oppositifolia Purple saxifrage	Carex pallescens Pale Sedge				
Saxifraga stellaris Starry saxifrage	Chamerion angustifolium Rosebay Willowherb				
Sedum rosea Roseroot	Conopodium majus Pignut				
Selaginella selaginoides Lesser clubmoss	Cytisus scoparius Broom				
	Dactylis glomerata Cock's-foot				

Deschampsia flexuosa Wavy Hair-grass	Thalictrum flavum Common Meadow-rue		
Digitalis purpurea Foxglove	Trientalis europaea Chickweed wintergreen		
Dryopteris filix-mas Male-fern	Vicia sepium Bush Vetch		
Festuca rubra Red Fescue	Viola riviniana Wood-dog-violet		
Festuca vivipara Viviparous fescue	Species list for Loch an Daim: 3 rd July 2011		
Fraxinus excelsior Ash	Achillea millefolium Yarrow		
Gymnadenia borealis Heath fragrant-orchid	Arenaria serpyllifolia Thyme-leaved Sandwort		
Gymnocarpium dryopteris Oak Fern	Calluna vulgaris Heather		
Hypericum pulchrum Slender St John's-wort	Carex pulicaris Flea Sedge		
Lathyrus linifolius Bitter-vetch	Carex rostrata Bottle Sedge		
Lotus corniculatus Bird's-foot Trefoil	Dactylorhiza maculata Heath Spotted-orchid		
Lysimachia nemorum Yellow Pimpernel	Drosera rotundifolia Round-leaved Sundew		
Melampyrum pratense Cow-wheat	Equisetum palustre Marsh Horsetail		
Mercurialis perennis Dog's Mercury	Erica cinerea Bell Heather		
Molinia caerulea Purple Moor-grass	Erica tetralix Cross-leaved Heath		
Oreopteris limbosperma Lemon-scented Fern			
Oxalis acetosella Wood Sorrel	Festuca ovina Sheep's Fescue		
Phegopteris connectilis Beech Fern	Festuca rubra Red Fescue		
Pinguicula vulgaris Butterwort	Hypericum pulchrum Slender St John's-wort		
Pinus sylvestris Scots Pine	Juncus acutiflorus Sharp-flowered Rush		
Plantago lanceolata Ribwort Plantain	Juncus conglomeratus Compact Rush		
Polygala serpyllifolia Heath Milkwort	Juncus effusus Soft Rush		
Populus tremula Aspen	Juncus squarrosus Heath Rush		
Primula vulgaris Primrose	Lysimachia nemorum Yellow Pimpernel		
	Menyanthes trifoliata Bogbean		
Prunella vulgaris Selfheal	Molinia caerulea Purple Moor-grass		
Prunus padus Bird Cherry	Myrica gale Bog-myrtle		
Pteridium aquilinum Bracken	Pedicularis palustris Marsh Lousewort		
Pyrola minor Common wintergreen	Pedicularis sylvatica Lousewort		
Quercus robur English Oak	Phragmites australis Reed		
Ranunculus acris Meadow Buttercup	Potamogeton polygonifolius Bog Pondweed		
Rhinanthus minor Yellow-rattle	Salix aurita Eared Willow		
Rubus saxatilis Stone bramble	Saxifraga aizoides Yellow saxifrage		
Salix pentandra Bay Willow	Triglochin palustris Marsh Arrow-grass		
Sanicula europaea Sanicle	Vaccinium myrtillus Bilberry		
Sorbus aucuparia Mountain Ash	vaconium myrando bilbotty		
Sorbus aucuparia Rowan			

Succisa pratensis Devil's-bit Scabious

Among the highlights of the 60 species for Black Wood on 3rd July 2011 were:-

Carex binervis Green-ribbed Sedge, Carex pallescens Pale Sedge, Gymnadenia borealis Heath fragrant-orchid, Gymnocarpium dryopteris Oak Fern, Hypericum pulchrum Slender St John's-wort, Lathyrus linifolius Bitter-vetch, Melampyrum pratense Cow-wheat, Oreopteris limbosperma Lemon-scented Fern, Phegopteris connectilis, Beech Fern, Pyrola minor Common Wintergreen, Rubus saxatilis Stone Bramble, Salix pentandra Bay Willow and Trientalis europaea Chickweed wintergreen

Among the highlights of the 29 species for Loch an Daim: 3rd July 2011 were:-

Arenaria serpyllifolia Thyme-leaved Sandwort, Carex pulicaris Flea Sedge, Carex rostrata Bottle Sedge, Dactylorhiza maculata Heath Spotted-orchid, Drosera rotundifolia Roundleaved Sundew, Erica tetralix Cross-leaved Heath, Menyanthes trifoliata Bogbean, Myrica gale Bog-myrtle, Pedicularis palustris Marsh Lousewort, Pedicularis sylvatica Lousewort, Potamogeton polygonifolius Bog Pondweed, Salix aurita Eared Willow, Saxifraga aizoides Yellow saxifrage and Triglochin palustris Marsh Arrow-grass

Ponds & Fields of Roby 9th July 2011 Leader: Rob Duffy

Twenty persons gathered at the NWC Car Park on a fairly good day for this summer. Immediate attention was drawn to the burgeoning Catalpa (*Catalpa bignonioides*) tree in the car park –origin unknown, as not apparently introduced by NWC staff and an unlikely place for an ornamental tree of which it is the only representative! The party headed through Court Hey Park taking in the newly sown "pond" perimeter on the border with Thornton Road. A riot of colour and a triumph in restoring a featureless depression prone to flooding. The party was led out of the Park via the foetid, but much-loved, brook, into the edge of suburbia and onto the derelict grounds of the Coronation sports and social club-an all too familiar feature of today's urban landscape. This led onto the huge wheat field which was dotted with damp hollows, manure heaps and overgrown and derelict ponds.

Surprisingly, the water flowing through the field to Belle Vale was crystal clear! Lunch was had at the M62 bridge next to the largest and clearest pond in the area. Over the bridge and up Carr Lane the party came to the heart of the never-to-be, borough of Roby, but there was a thriving medieval market here. Down the slope to Bowring Park, the party were impressed with its truncated driveway's Plane *Platanus x acerifolia* trees but less impressed that they were unable to claim a cup of tea amongst the throng in the stable block! The ornamental and walled gardens were sadly derelict and their future is uncertain. Two Dawn Redwoods Metasequoia glyptostroboides guarded the entrance to the golf course, allegedly the first municipal course in England. In the sunken garden a Wellingtonia Seguoiadendron giganteum stood proud and alone in the centre but coming out onto the walled garden it was joined by two companions at either end. Amongst these giants, Tree of Heaven Ailanthus altissima, Tree Cotoneaster Cotoneaster lactus and, clinging to life up the 16 foot wall, a dishevelled Fig Ficus carica tree grew. Further down, the party proceeded to the motorway roundabout. Half the party hoofed it back to the NWC while the other half investigated the mound Vera Gordon had taken the LBS to in June 1999. I noted in my diary that there were Bee Orchids *Ophrys apifera* and Vera was very proud of these (there does not appear to have been a Parnassia report). Unfortunately, the numbers and types of orchids seen was very disappointing but there was enough other stuff of interest.

Down, further still, into Court Hey Park and the NWC, only six made it to the café; happy (I hope) but relieved.

Rob Duffy

Eastham Rake Woods and Hooton, Wirral Way - Saturday, 16th July 2011 Leaders : Sheila and Peter Mason

Eleven people braved the weather forecast to meet at Eastham Rake and proceeded to Lowfields Woods, noticing on the way a sturdy spread of Enchanter's Nightshade *Circaea lutetiana*. Horse Chestnut trees were showing signs of disease (Leaf Blotch fungus, *Guigardia aesculi* or Leaf Miner moth, *Cameraria ohridella* perhaps), which was reported to the Ranger. Fallen trees made the woodland paths unnegotiable and we entered the fields from the estate via the M53 tunnel. A former orchid field was now heavily colonised by Common Fleabane *Pulicaria dysenterica* and mauve and white Marsh Thistle *Cirsium palustre* and only a few Common Spotted Orchids *Dactylorhiza fuchsii* were there. This was compensated by a very fine stand of Marsh Woundwort *Stachys palustris* just through the tunnel. This used to be considered the best variety of Woundwort for its healing properties. Another white thistle, this time Creeping Thistle *Cirsium arvense* was common here. A propensity for white varieties here at first led us to believe we had a white Tufted Vetch *Viccia cracca* but after some discussion no conclusion was reached other than that it was <u>not</u> Tufted Vetch. Likewise a St John's Wort appeared not to fit any description, although its 2-lined stem suggested *Hypericum perforatum*.

These fields have been left to grow wild and successful colonising plants grow in abundance, filling the area with colour. We noted Pineappleweed *Matricaria discoidea;* Hairy Tare *Vicia hirsuta;* Wild Angelica *Angelica sylvestris;* Lesser Stitchwort *Stellaria graminea*; Bog Stitchwort *Stellaria uliginosa;* Hoary Ragwort *Senecio erucifolius;* and Red Bartsia *Odontites vernus.*

The pond, seriously covered in duckweed, had no dragonflies on this occasion. Abundant Common Spotted Orchids, Branched Bur-reed *Sparganium erectum*, Lesser Bulrush *Typha angustifolia* and Water Plantain *Alisma plantago-aquatica* were in flower.

Time was pressing so we walked quickly through fields to Hooton Station (facilities included picnic tables!) just in time to miss a heavy downpour.

After lunch we walked down the Wirral Way, noting Yew saplings beginning to take over rough ground with Rosebay *Chamerion angustifolium*, Great Willowherb *Epilobium hirsutum*, Hemp Agrimony *Eupatorium cannabinum*, Common Toadflax *Linaria vulgaris*, and Hedge Woundwort *Stachys sylvatica*. Waste land behind the path which proved well worth investigating on our last visit, is now buried in huge mounds of earth, but with the Broad-leaved Helleborine *Epipactus helleborine* still in evidence on the verge of it. While the numbers of the Helleborine were well down this year, some of the specimens we found were growing strongly. Clumps of a vigorous Hawkweed was thought to be *Hieracium vagum*, the urban Hawkweed of Northern England. Hairy Brome *Bromus ramosa*, grew well under the trees and Water Figwort *Scrophularia auriculata*, was found in the ditch beside the path. The pond by Heath Lane bridge was almost dried up but still supported White Water Lilies *Nymphaea alba*, and Yellow Flag Irises *Iris pseudocorus* and Lesser Bulrush *Typha angustifolia* and *Salix alba* were growing strongly. A solitary Golden Melilot *Melilotus altissima* was also there. Without some attention, the way to the pond will soon become impenetrable.

Millers Dale - 30th July 2011 Leader: John Somerville

Twelve LBS members met on a sunny Saturday morning in the car park at Millers Dale Station. The railway line closed in 1967 and has left a superb walks east towards Monsal Dale and west towards Buxton. The station is now a visitor centre for the Peak District country park and provides toilets.

We started the morning by examining an area which had been sown by a wild seed mixture many years ago. Most of the plants we would find later on the walk but Great and Dark Mulleins, Pepper Saxifrage, Pale Toadflax and the white form of Jacob's Ladder were of great interest to all. The intention had been to spend only 30 minutes at this site but it was well over an hour later when we set off along the trail towards Monsal Dale.

Many additional plants were found in the next few hundred yards and we then came to some old lime kilns. It took another 30 minutes examining the plants at the limekilns before setting off on the trail again. The intention had been to carry along the trail and then drop down near Litton Mill to the small road running along the river Wye and stop at Litton Mill for lunch at about 12.30pm. Now running seriously late behind schedule we cut out part of the walk and dropped down at the first opportunity to the small road and came out by the Angler's Rest pub.

Now walking towards Litton Mill we had a large bank on our left and the River Wye on our right. There were some good plants on the riverside including Giant Bellflower but the bank to our left was a delight being covered with masses of wild flowers. Progress was very slow examining all the plants and five of our group had gone ahead and had disappeared out of sight. The seven remaining members were taking their time and finally reached Litton Mill at 1.30pm and found that the other five had already finished their lunch.

After another 30 minutes lunch was finished and we all set off back towards Millers Dale station. We were finding some excellent moths, butterflies and insects and we were lucky to have Chris Derri with us to identify them all. On passing the Anglers rest again we cut up a small track to find a small field with short turf and open limestone. The first plant we examined here was an excellent specimen of Large Rock Stonecrop. Amongst other small plants that liked this habitat were Field Madder, Limestone Bedstraw, Wild Thyme, Biting Stonecrop, Fairy Flax and Mouse-ear Hawkweed. Where the soil was deeper we found Agrimony and Musk Thistle.

We were only about 200 yards from the car park at Millers Dale Station which we reached at 3.30pm. The weather had been great and the day had been enjoyed by all.

Freshfield 15th October 2011 Leader: Steve Cross

On a sunny October day 17 members met at Freshfield station.

Field Meetings 2012

Graig Fawr and Bishop's Wood, Prestatyn- Saturday 19th May 2012 Leader: Peter Gateley

This limestone site is quite remote from train and bus services so around 15 members assembled at the National Trust car park just off Allt y Craig Road. From here we headed north, uphill, across limestone grassland with scattered dense scrub to more open shorter swards around the highest point of Graig Fawr. As the weather was cloudy and damp the views from the top were not as spectacular as might be expected but we did see plenty of plants typical of limestone habitat, such as Rock-rose *Helianthemum nummularia*, Musk Thistle *Carduus nutans* and Salad Burnet *Sanguisorba minor*. After passing the summit we descended to the north and then east into increasing scrub, stopping to admire specimens of Early Purple Orchid *Orchis mascula* before reaching a steep wooded cleft in the limestone scarp.

After crossing the road north into Meliden at the bottom of the valley we continued up and along the steep mainly west-facing slopes, sometimes in woodland, sometimes in dense scrub and also some cleared areas where the local authority is trying to maintain open limestone grassland. We lunched at the head of old quarry workings near Bryniau, enjoying more typical limestone plants, such as Burnet Saxifrage *Pimpinella saxifraga*, Crosswort *Cruciata laevipes* and Ploughman's Spikenard *Inula conyza*. From here we headed north along the scarp slope into the rich woodland of Coed yr Escob, or Bishop's Wood. In this habitat we noted a wide range of characteristic woodland groundflora, including Wood Melick *Melica uniflora*, Wood Sanicle *Sanicula europaea*, Bluebell *Hyacinthoides non-scripta*, Wood Anemone *Anemone nemorosa* and Primrose *Primula vulgaris* amongst many others.

After descending through the woods to the bottom of the scarp we walked through flatter country past Tan-yr-allt to the route of the old mineral line around the base of Graig Fawr. This route took us through the remains of past lead mining activities and allowed close views of a range of locally characteristic species that included: Spring Sandwort, also known as Leadwort *Minuartia verna*, Nottingham Catchfly *Silene nutans*, Hoary rockrose *Helianthemum canum* and Dark Red Helleborine *Epipactis atrorubens*. Skirting the base of the steep western face of Craig Fawr we made our way south-east and east returning to the car park through a further section of species-rich woodland habitat.

Gaw Hill, Ormskirk - Saturday 9th June 2012 Leader: Peter Gateley

Eventually 14 members assembled, via train and cars, at Ormskirk station on a dull and damp June Saturday. We set off through the town, via the flowery banks of Dyers Brook, to Coronation Park where recent management changes have allowed much more natural growth to develop. In the southern corner of the park what was once regularly mown damp grassland is now a tall lush sward full of native plants and much more valuable for local wildlife. At the time of the visit this area was bright with yellow masses of flowering Meadow Buttercup *Ranunculus acris* and contrasting bright pink drifts of Ragged Robin *Lychnis flos-cuculi* and there were also fine stands of Cow Parsley *Anthriscus sylvestris* in full frothy white flower. Less brightly colourful, but still of great interest nonetheless, were

the flowering grasses; June is an ideal month to study grasses and they became a theme for the day, with 19 species being noted in flower by the end of the walk.

From the park we crossed the A59 onto a section of footpath with an old hawthorn hedge that has been surrounded by housing, we looked at a range of typical hedge bottom weeds, including a robust fumitory that looked as though it may have been Purple Ramping Fumitory *Fumaria purpurea* that needed closer checking later (not done, *mea culpa*). We carried on through residential streets noting garden and pavement weeds and came out near Red Gate Farm into undulating agricultural land. We followed the footpath west and then around the edge of the covered reservoir on top of the hill into Gaw Hill Nature Reserve and had our lunch on top of Gaw Hill with extensive views across the Lancashire Plain to the west and north-west.

Amongst the network of hedges and plantations of the reserve there are rolling meadows full of wildflowers and flowering grasses with many basic common species looking at their best, including: Red Fescue *Festuca rubra*, Rough-stalked Meadowgrass *Poa trivialis*, Crested Dog's-tail *Cynosurus cristatus*, Ryegrass *Lolium perenne* and Yorkshire Fog *Holcus lanatus*. There were even a few orchids scattered amongst the flowering legumes in the grassy swards. To the west the slope steepens and the path crosses throughout-cropping sandstone with shallow acid soils and a range of distinctive acid-tolerant plants including: Heath Grass *Danthonia decumbens*, Mat Grass *Nardus stricta*, Early Hairgrass *Aira praecox*, Wavy Hairgrass *Deschampsia flexuosa*, Common Bent *Agrostis capillaris*, Creeping Soft-grass *Holcus mollis* as well as Heath Bedstraw *Galium saxatile* and Heath Rush *Juncus squarrosus*.

From here we continued down onto the flatter farmland, here we noted a range of typical field-edge plants along the paths, including: Cut-leaved Deadnettle *Lamium hybridum*, Field Pansy *Viola arvensis*, Black Bindweed *Fallopia convolvulus* and Field Speedwell *Veronica persica*. We followed the paths back up to the covered reservoir, pausing to admire the view of Liverpool backed by the Welsh hills, and then re-crossed the A59 and walked through the yard of Christ Church and back into the centre of Ormskirk admiring garden and hedge plants on the way, including Hornbeam *Carpinus betulus* and fruiting heads of False Castor Oil Plant *Fatsia japonica*.

The Birks of Aberfeldy - Saturday 7th July 2012 Leader: Peter Gateley

As in 2011 the trip to Scotland was planned over a weekend to allow the drier of the two days to be selected for the climb up Ben Lawers. In 2012 the forecast for Saturday was for wet weather so it was decided to tackle Lawers on the Sunday and a group of 10 members headed of to Aberfeldy to walk through the Birks of Aberfeldy, along the steep wooded valley of the Moness Burn. The deep valley afforded some shelter so that even though the weather continued to be wet we had an enjoyable walk and saw lots of wonderful woodland plants. The path was well laid out, with a good surface and provided an extremely pleasant looped walk with some spectacular views of waterfalls.

At the lower levels there is considerable planting of exotic trees, mainly conifers, but we soon got into old woodland with much oak and birches (or birks locally). We soon saw a wide range of typical woodland plants including Enchanters Nightshade *Circaea lutetiana*, Wood Sanicle Sanicula europaea, Wood Sedge *Carex sylvatica*, Wood Melick *Melica uniflora* and there was a considerable population of Wood Stitchwort *Stellaria nemorosa* in fine flower.

As well as the flowering plants there were masses of ferns in the shady damp woodland, notably Oak Fern *Gymnocarpium dryopteris*, Brittle Bladder Fern *Cystopteris fragilis* and Lemon-scented Fern *Oreopteris limbosperma* with its sori distinctively arranges around the pinnule edges. Another non-flowering plant noted with interest was the scarce Shady Horsetail *Equisetum pratense*. Other vascular plants seen included Goldilocks Buttercup *Ranunculus auricomus*, Common Wintergreen *Pyrola minor* and Marsh Hawkbit *Crepis paludosa*, but a special treat was reserved for the final downhill stretch back towards the cars where, amongst a sparse plantation of beech, was a scattered population of Bird'snest Orchid *Neottia nidus-avis* looking pale fawn and interesting amongst the damp leaf litter.

From Aberfeldy we headed back west towards Killin via the Bridge of Balgie where we stopped off at the post office with its fantastic coffee and wonderful cakes and other confections.

Ben Lawers - Sunday 8th July 2012 Leader: Peter Gateley

Sunday did prove to be the drier of our two days, so after breakfast our party of 12 set off from Killin for the National Trust for Scotland car park serving Ben Lawers. As in 2011 there were quite a few members who had not been here before, so progress up the lower slopes was slowed by there being so many interesting plants to look at on our way to the main corries. Quite near to the start of the walk the path crosses the rocky course of Edramucky Burn and here we caught up with fine examples of flowering Viviparous Bistort *Persicaria vivipera* and Yellow Saxifrage *Saxifraga aizoides* and a hillside full of fine fruiting Stags-horn Clubmoss *Lycopodium clavatum* amongst many others.

On the long trek up the flanks of Beinn Ghlas the rills crossing the path and drainage ditches along the edges provided habitat for a wide range of species, amongst the many we enjoyed seeing were Scottish Asphodel *Tolfieldia pusilla*, Chickweed Willowherb *Epilobium alsinifolium* and Starry Saxifrage *Saxifraga stellaris*. As we climbed higher, into the rockier areas below the col between Lawers and Ghlas, we added many more species to our list, notably Cyphel *Minuartia sedoides*, Alpine Mouse-ear *Cerastium alpinum* and Mossy Campion *Silene acaulis* all in fine flower as well as the more subtle delights of ground-hugging species such as Dwarf Willow *Salix herbacea* and Sibbaldia *Sibbaldia procumbens*.

We needed rest and sustenance before tackling the final steeper climb to the main corries, so we lunched by the shallow waterbody in the col below. From there we headed along the narrow sheep/botanists tracks to the most flower-rich rock faces. The whole corrie area was not as dry as it was last year so looked even more lush and inviting for us this year. Alas, we were still too early to find any of the diminutive annual Snowy Gentian *Gentiana nivalis*, although Barbara Allen did see it there two or three weeks afterwards. However, if we had been later we would have missed the wonderful show of flowering Rock Speedwell *Veronica fruticans* and possibly also the Northern Fleabane *Erigeron borealis* and Alpine Cinquefoil *Potentilla crantzii*, all looking very fine. We spent a happy hour or so looking up at ledges above us, into clefts and under boulders finding late flowering woodland plants, such as Opposite-leaved Golden Saxifrage *Chrysosplenium oppositifolium* and Wood Sorrel *Oxalis acetosella*, as well as a wide range of mountain grasses, sedges, ferns and flowering plants. We returned down the mountain, a tired but happy band!

Coombs and Hay Dales

Saturday 14th July 2012 Leader: John Somerville

Pat's Plateau and Green Beach – 11th August 2012 Leader: Patricia Ann Lockwood

The Sefton Coast always seems a popular location, and many people travelled considerable distances. We were allowed to park behind the Ainsdale Discovery Centre, which was very fortunate, as Ainsdale was very busy, the shore heaving.

In the morning we walked South to a very large slack, a favourite place of mine. In the afternoon we changed direction and walked North, and onto the Green Beach. Before getting there we saw a huge number of Northern Dune Tiger Beetles. A very rare species, only found in two locations in Britain. Also David Bryant spotted a large number of Natterjack toadlets, so we had to be careful where we put our feet. Another rare species. Below a list of plants worth a mention. In the morning: *Inula conyza* (Ploughmans Spikenard), Epipactis dunensis (Dune Helleborine), Dactylorhiza incarnata (Early Marsh Orchid), Gentianella campestris (Field Gentian), Pyrola rotundifolia (Round leaved Wintergreen), Parnassia palustris (Grass of Parnassus), Malva moschata (Common Mallow), Linum cartharticum (Fairy Flax), Scutellaria galericulata (Skullcap), Lythrum salicaria (Purple Loosestrife), Carlina vulgaris (Carline Thistle), Eupatorium cannabinum (Hemp Agrimony), Agrimonia eupatoria (Agrimony). In the afternoon: Trifolium scabrum (Rough Clover), Trifolium fragiferum (Strawberry Clover), Sagina nodosa (Knotted Pearlwort), Eryngium maritimum (Sea Holly), Blackstonia perfoliata (Yellow-wort), Samolus valerandi (Brookweed), Centaurium erythraea (Common Centaury), Centaurium littorale (Seaside Centaury), Centaurium pulchellum (Lesser Centaury), Calystegia soldanella (Sea Bindweed), Polygonum oxyspermum (Ray's Knotgrass), Triglochin palustris (Sea Arrow-grass), Oenanthe lachenalii (Parsley Water-dropwort), and lastly Oenanthe fistulosa (Tubular Water-dropwort).

Thank you so much to all of you who made the day so pleasurable.

Patricia Ann Lockwood.

Sutton Mill Dam, St Helens - Saturday 1st September 2012 Leader: Barbara Allen

A dozen members of the society turned out on what must have been one of the driest and sunny days of our meetings 2012. Starting at Lea Green Railway Station we investigated the car park and noticing a group of six Common Buzzards circling above, whilst finding a remarkable array of plants on the verges. Prickly Lettuce *Lactuca serriola*, Bastard Cabbage *Rapistrum rugosum*, Black Mustard *Brassica nigra*, sounds like a grocery list but there were many more there which took up most of the morning. On the way to Sutton Mill Dam another member of the Brassica family was found Ethiopian Rape *Brassica carinata* sometimes in bird seed and is now being found growing occasionally in our area.

Entering Sutton Mill Dam a twenty-six-acre wildlife Park via Clock Face Road into the

shade of many trees and shrubs the lake was fringed with Water Forget-me-nots *Myosotis* scorpioides, Brooklime *Veronica beccabunga* and Common Reed *Phragmites australis* to name but a few. This body of water also supports many wild water birds, and with a young angler catching a Perch this demonstrated that the lake, about three-hundred-sixty metres long does also contain fish.

After a well earned lunch by the `Wash` we continued to wind are way along side the stream that some times affords you a glimpse of a Kingfisher but today a much larger bird the Heron flew over. Alongside the path was Fly Honeysuckle *Lonicera xylosteum* a deciduous shrub and not a climber this has a pair of flowers in the leaf-axils followed by red berries, Early Goldenrod *Solidago gigantea* the first of our Goldenrods of the day, and again another alien possibly from bird seed was Canary-grass *Phalaris canariensis*.

Crossing over Leach Lane and into Hawthorn Road we followed the lush green path eventually onto an old railway trackbed, this was once a line going to Widnes nicknamed the `Diton Dodger` and Sutton Manor Colliery that last seen traffic in the late 80s. Here we had Creeping or Pale Toadflax *Linaria repens*, Common Toadflax *Linaria vulgaris*, Common Centaury *Centaurium erythraea* and Butterfly-bushes *Buddleja* aptly named as Peacock and Small Tortoiseshell were feeding from them. Holly Blue butterfly was making use of a prevalent species in St, Helens Hemp-agrimony *Eupatorium cannabinum* but in the second flight period the Holly Blue changes its main food plant from Holly *Ilex aquifolium* in spring to Ivy *Hedera helix* in autumn. The Common or English Ivy is often underestimated as to the important role it plays in the countryside providing shelter, nesting areas and food for wild life. The Birch Trees providing a canopy over the trackbed demonstrating how nature can soon reclaim back ground if left to its own devices.

Finally branching off the trackbed and passing through what once was a farmers orchard that still had remains of domestic apple trees it was noted our second Goldenrod of the day *Solidago canadensis* and dried pods of the Bee Orchid *Ophrys apifera* were growing on parts of the field. It was then a brisk walk back to the railway station passing the entrance of Sutton Mill Dam where there was a planted Spindle bush *Euonymus europaeus* with its distinctly four lobed fruits, the wood tended to be used to make spindles for spinning wool hence its common English name.

Dibbinsdale – 15th September 2012 Leader: John Crowder

What a wonderful day we had at Dibbinsdale with our leader John Crowder whom shown us around an old wood with mature Oak, Ash and even Yew. Some of the plants found known as ancient wooldland indicators such as Dog`s Mercury *Mercurialis perennis*, Holly *Ilex aguifolium* and Sanicle *Sanicula europaea* to name but a few.

Rostherne – 22nd September 2012 Leader: Tim Rogers

Would you believe we had another superb day! Nine members enjoyed not only the fine weather but also a spot of bird watching in wonderful surroundings afforded to us by our Leader Tim Rogers, thanks to him being a volunteer at Rostherne Mere. Majestic trees like Hornbeam *Carpinus betulus*, numerous fungi, as Common Puffball *Lycoperdon perlatum* and delicate Water Chickweed *Myosoton aquaticum* to name but a few. Many thanks to

Uncommon Trees of Court Hey Park - 13th October 2012 Leader: Rob Duffy

A meeting with a difference "Tree Orienteering". At the start of the day the weather was fine but sadly not to last as we set off in small groups to find and identify our locations of fascinating specimens. Chestnut-leaved Oak *Quercus casteinifolia*, Narrow-leaved Ash *Fraxinus angustifolia* and Amur Maple *Acer ginnala* to name a few of the twenty-three trees to be located. It was a fun way to learn and question your knowledge about the trees at Court Hay Park but was also grateful for their facilities when the heavens opened. We should like to thank Rob Duffy for organising this event and also for providing the warm refreshments that I for one certainly enjoyed.

Indoor meetings 2006 -2012

	2006	2007	2008	2009	2010	2011	2012
Jan	S. Lancs Flora DPE	Liverpoo I Botanic al collectio n	Plants of an Ancient Contine nt (incompl ete)	BioBank Helen Greaves	Asian Plant Hunters JV	Urban Wildflow ers SC	Plants of The Himalay as JV
Feb Marc h	AGM Alien Plants of the Sefton Coast Phil Smith	AGM Forest of Bowland EFG	AGM Orchids of Merseys ide SC	AGM Visit to Warringt on Museum	AGM Plants of N Lancs.	AGM Visit to LIVU Sidney Jones Library	AGM Plants of N Lancs. EFG
Nov	Holiday slides	Holiday slides	Holiday slides	Holiday slides	Fascinat ing Insects PG	Fungal ID Worksh op SC	Sedge Worksh op CS & NB
Dec		A Celebrat ion of Trees DB	Beachc ombing for beginne rs GR	British Arctic- Alpine plants	Fern ID Worksh op EFG	Atlantic Cloud Forest of Brazil SG	Flower Stories & Folklore

Alien Plants of the Sefton Coast by Dr Phil Smith - 4th March 2006

This talk described and illustrated the increasing numbers of alien or neophyte plant species to be seen along the Sefton Coast, all personally photographed and recorded by

the speaker.

Phil described the Sand Dunes of the Sefton Coast as hot beds of biodiversity.

According to recent counts there are 3,333 invertebrate species and 1,177 plant species along this stretch of coast. In the dunes themselves there are 1,055 plant species, 348 of these being aliens. In other words, taking the coast as a whole, aliens form 33% of the plant population, this increases to 40% at Kenilworth Road, a more populated area and decreases to 13% on the more secluded Birkdale Green Beach. Most alien species cause little adverse effect, but some aggressively compete with our native plants. Many have escaped from gardens but also, the illegal dumping of garden waste is responsible for the introduction of some of the more unwelcome aliens and also encourages spread (of aliens and also unwelcome natives) by adding nutrients to the soil.

Phil went on to describe many of the neophytes recorded at Sefton. Possibly the most familiar alien is the Evening Primrose or Dusk Beacon. Four species of Evening Primrose have been recorded, all introduced to the Sefton Coast:

Firstly, the Small Flowered Evening Primrose *Oenothera cambrica*, which is quite rare and has green buds and small flowers;

Secondly, the Common Evening Primrose *O. biennis*, the first to be recorded in 1801 and in fact far from common. It has green buds, lacks red based hairs, and has short stigmas;

Thirdly, the Large Flowered Evening Primrose *O. glazioviana* which has pink buds and is common along the coast;

And fourthly, the Hybrid Evening Primrose *O.biennis* x *O.glazioviana*, which now breeds true and is considered a species. It has green and pink-striped buds.

Originating in the Americas Evening Primrose was introduced into gardens in 1629 and escaped into the wild in 1650. One suggestion for its arrival on the coast is with ballast on imported cotton. The roots are said to be edible and the use of the seeds to produce the popular medicinal Evening Primrose Oil is a more recent development.

Sea Buckthorn *Hippophae rhamnoides* is one of the most aggressive of the aliens. Native to the East Coast, it was introduced here in 1900 to stabilise the sand dunes. It has very spiny shoots and bright orange berries. The demise of the rabbit population due to myxomatosis encouraged its spread and the subsequent choking of native plants. It also fixes nitrogen in its root nodules and this can be unfavourable for some plants. In its favour birds love the berries, including the blackcap which is thought to rely on them. Measures are being taken to contain its spread by cutting back one year and applying a herbicide the following year.

Some foreign trees were introduced to the coast in the late 19th century including the White Poplar *Populus alba* which spreads rapidly by root suckers and competes with native species. Pines were planted 100 years ago for timber and stabilisation but cause several problems: they exclude natives by their dense shade; they dry the slacks and lower the water table and they seed into open dune habitats such as dune heaths.

Other high impact neophytes include: Japanese Knotweed Fallopia japonica a Victorian garden escape which can form large invasive clumps; Russian Vine F. baldschuanica a vigorous scrambler from China known aptly as 'Mile a minute'; Giant Hogweed Heracleum mantegazzianum another garden escape which can cause photodermatitis, a skin rash developing on contact with the plant followed by subsequent exposure to sunlight; Snow-in-summer Cerastium tomentosum which spreads rapidly in dry areas; White Stonecrop Sedum album found in Ainsdale; Japanese Rose Rosa rugosa which is visually attractive but spreads by suckering and is viciously spiny- not a huge problem (yet); New Zealand Pigmyweed Crassula helmsii a water plant sold for garden ponds- the jury is still out on the

ecological effect of this alien.

As we go through the seasons many other alien species can be seen. Spring bulbs do well on the coast, liking well-drained soils and summer drought:

All three species of Bluebell can be seen: the Native Bluebell *Hyacinthoides non-scripta*, the Spanish bluebell *H. hispanica* and the Hybrid Bluebell *Hyacinthoides* x *variabilis*, with the latter being the most common on the Sefton Coast; A variety of Daffodils (*Narcissus* cultivars) appear on the dunes, Phil has counted 24 varieties of the late-flowering ones alone; Garden tulips *Tulipa gesneriana* are common on the fixed dunes and disturbed ground; Star of Bethlehem *Ornithogalum angustifolium* is occasional on dune grassland and disturbed ground in early May; Lily of the Valley *Convallaria majalis* is not native on the coast but found in some shaded places.

Several members of the Allium family are to be found including the Three-cornered Garlic *Allium triquetrum*, Chives *A. schoenoprasum* and Rosy Garlic *A. roseum* which can be found at Sand's Lake Ainsdale.

Other spring aliens include Snowdrops *Galanthus nivalis*, Glory of the Snow *Chionodoxa forbesii*, Grape-hyacinth *Muscari armeniacum*, Garden Solomon's-seal *Polygonatum multiflorum*, Tassel Hyacinth *Muscari comosum* from the Mediterranean and Blue Anemone *Anemone apennina* from Europe.

Moving into summer alien plant finds include Pink-sorrel *Oxalis articulate*, Red-hot-poker *Kniphofia uvaria*, Giant Montbretia *Crocosmia masoniorum*, Yellow Day-lily *Hemerocallis lilioasphodelus* and Orange Day-lily *H. fulva*, (the last two only being found once).

Dry summer conditions on the dunes favour various succulent species including several Spurges: Cypress Spurge *Euphorbia cyparissias*, Twiggy Spurge *E. pseudovirgata*, Mediterranean Spurge *E. characias* and Caper Spurge *E. lathyris*.

Several drought-tolerant Sedums can be found including Sedum 'Autumn Joy' (Sedum 'Herbstfreude').

The reduced leaves of Lavender-cotton *Santolina chamaecyparissus* mean that it can survive the dry conditions of the fixed dunes. And Tamarisk *Tamarix gallica*, an introduced shrub from the Mediterranean copes well with the salty winds at the Altcar Rifle Range.

To further illustrate the great variety of aliens to be found along the coast Phil showed slides of more species: Garden Aubretia *Aubretia deltoidea* seen once on the sand dunes at Crosby; Green Hellebore *Helleborus viridis* found in the wild on limestone, seen at the Altcar Rifle Range; Hoary Stock *Matthiola incana*, a native on sea cliffs in southern England, seen in May at Crosby Marine Park; Honesty *Lunaria annua* introduced from SE Europe; Primrose *Primula vulgaris*, a garden cultivar; Harpur-Crew's Leopard's-bane *Doronicum* x *excelsum* a very rare find and a new VC record found at Kenilworth Road;

Lilac Syringa vulgaris, a relative of olive and privet introduced from SE Europe; Flowering Currant *Ribes sanguineum*; Oriental Poppy *Papaver pseudoorientale*;

Common or Garden Peony *Paeonia officinalis* found at Marshside near the RSPB reserve; Ornamental Hare's-Tail Grass *Lagurus ovatus*, a casual from S. Europe, found at Ainsdale and Southport; Seaside Daisy *Erigeron glaucus*, a garden escape, found by Crosby baths;

Henbane *Hyoscyamus niger* a rare and poisonous find has been recorded twice since 2000 at Formby Point; Tuberous pea *Lathyrus tuberosus* a plant with edible tubers first found in the wild in Essex in 1859 has been established at Raven Meols since the 1920's;

Peach-leaved Bellflower Campanula persicifolia, a native of Europe; Several Crane's-bills

are present as aliens on the dunes: Bloody Crane's-bill *Geranium sanguineum*; Meadow Crane's-bill *G. pratense*; Druce's Crane's-bill *Geranium* x oxonianum and Dusky Crane's-bill *G. phaeum*.

In July the Shasta Daisy *Leucanthemum* x *superbum*, a garden hybrid can be seen; The splendid Cardoon *Cynara scolymus* var. *cardunculus* found at Hightown. Needing a very hot dry summer the Sunflower *Helianthus annuus* was photographed at Birkdale's Green Beach in 2003 but not since;

Hybrid Monkshood *Aconitum* x *cammarum* found at the side of the Coast Road in Birkdale;

Red Bistort *Persicaria amplexicaulis*, a rare Himalayan species found at Crosby Marine Park; Field Wormwood *Artemisia campestris maritima* a new plant for Britain in 2004 found at Crosby; Various Cotoneasters spread by berry-eating birds one *C.hurusawanus* recorded at Birkdale Sandhills in 2003 had not been seen previously in the wild in Britain.

In conclusion, the Sefton Coast is a rich source of Flora for all to enjoy and is particularly valuable in one of the most urbanised parts of Britain. Many of the non-natives are interesting and attractive, but some do cause problems requiring money and manpower to put right. We all have responsibility not to add to these problems.

Phil's talk was accompanied by his excellent slides of all the species mentioned and was a fascinating insight into the alien world on our doorstep. The talk was greatly appreciated by 20 members.

Maria Knowles

Indoor Meeting 13th January 2007 Liverpool Botanical Collection 1802-2007 by Mike Brown

The Liverpool Botanic Garden was opened in 1803 and was located at a 10 acre site in Liverpool city centre, in an area bounded by Myrtle Street, Olive Street and Laurel Street. It was inspired by William Roscoe lawyer, politician and poet. Roscoe also went on to become president of the gardens. Trading ships brought back plants, as incidental cargo, and as valuable consignments from all over the world and soon wealthy merchants were stocking their conservatories with exotic plants, and the botanic garden collection grew in size and stature. By the 1830's the collection had outgrown it's site and in 1836 it was moved to a more spacious location at Edge Lane, Wavertree and was there for 100 years. In 1841 its maintenance was transferred to the Liverpool Corporation. Some plants were lost in the blitz and after this satellite locations were established including Harthill Gardens, Greenhill Nursery and Calderstones Park. Harthill was the council's plant production nursery to which some of the collection was dispersed. However, the nurseries were later demolished in 1984.

The Sefton Park Palm House is another location where plants from the botanic garden collection are housed. The Palm House was built in 1896 and was 100ft high. In the 1990's it fell into disrepair but was temporarily reopened with plastic windows. It was then restored and renovated by the Sefton Park Palm House Trust and was fully reopened in 2001; even the original cast iron hanging baskets were reused. The beds are organised into continents and contain many interesting plants including: a date palm which survived the period of disrepair, sugar cane, banana, cycads, cacti and an olive tree.

There are 3 plant collections in Liverpool which are designated as National Plant Collections. These are *Codiaeum*, *Coleus* and *Dracaena*.

As well as these, Liverpool holds one of the largest municipal collections of Orchids and

the largest municipal collection of Bromeliads.

Future plans for the botanic garden collection include the development of the glasshouses at Croxteth Park, where the collection will go on show to the public, and the Fragrant Project which will promote the Liverpool botanical garden collection through art, poetry, displays and presentations.

Mike's talk was accompanied by photographs of the plants he spoke about and was enjoyed by 21 members.

THE FOREST OF BOWLAND Summary of talk by E.F. Greenwood, 10 March 2007

The talk started by explaining what was meant by the Forest of Bowland. This was defined as the upland area bounded by the Yorkshire boundary in the east, the M6 in the west, the Lune valley in the north and the Ribble valley in the south.

It is a remote area with few but ancient settlements and with few roads or footpaths crossing the hills. Until recently shooting estates and water catchment needs kept the area private. Historically few botanists had explored the area. Around 1900 Wheldon and Wilson explored the western fells (VC60), Joseph Pickard botanised around Newton and priests at Stonyhurst College recorded in the lower Hodder valley. No more work was done until the late 1960s in the west and the 1980s in the east.

To understand the flora and vegetation it is necessary to understand the changes that have taken place since the last glaciation. The impact of climate change particularly increasing oceanicity leading to bog formation (replacing forest) and the increasing impact of humans in clearing woodland and introducing grazing animals. However the forest laws limited the impact from the 11th to the 18th centuries but it was not until the mid 19th century that sheep became important and moor management for grouse started. Until then grazing in Bowland had been largely by cattle.

These influences gave rise to the present vegetation and flora, which were illustrated with slides. The main habitats covered were summit blanket bogs, heaths and bracken on hill slopes, raised and valley bogs including a variety of flushes ranging from acidic to basic, woodland, meadows and other grasslands, rock exposures and quarries and reservoirs. Each habitat had unique features but the special role of an oceanic, formerly hyperoceanic climate gave rise to some of the more interesting features of the flora and fauna.

The talk concluded with thoughts on the future pointing out that climatically the gradual loss of oceanicity over centuries was profound whilst nitrogen pollution in recent decades had also caused changes with the decline of sensitive species. Climate warming was scarcely discernible but possible outcomes of increased warming were postulated.

A Celebration of Trees by David Bryant 8th December 2007

David showed over 100 slides of trees he has visited, mostly on his bicycle, some near to his home in Bootle and others in various locations around Britain. Some of the more famous trees include:

The Camperdown Elm, a natural mutant of Wych Elm, discovered by the Earl of Camperdown near Dundee in the mid 19th century, David's photo was of one of the two in Derby Park Bootle; The Bowthorpe Oak at Bourne in Lincolnshire, hollow with a girth of 42ft; The Hornbeam and Beech in Hatfield Forest pollarded as part of woodland management; The Tortworth Chestnut near St Leonard's Church in Gloucester; The Much

Marcle Yew at St Bartholomew's in Hertfordshire; The Llangernyw Yew near Denbigh approximately 4000 years old; The Pulpit Yew at Nantglyn in which slate steps and a handrail have been constructed to give access to a speaker's podium.

Many of David's photos showed less 'famous' but no less special trees such as: Sycamores around a farm in Upper Swaledale; a rare subspecies of Birch in the Findhorn Valley; a 'stunted bonsai-like ash at Gaitbarrow and a row of Lombardy Poplars forming the backdrop to the cricket at Sefton Park Cricket Club.

25 members and non members enjoyed David's talk.

Many of David's photos will feature in his book 'In the Footsteps of Eric Hardy' due to be published by Cambridge University Press in February 2008.

Orchids of Merseyside – 8th March 2008 by Steve Cross

27 members present. As Peter Gateley was ill and could not give his presentation, our thanks go to Steve Cross who competently stepped in to give a wonderful talk on our local orchids.

Steve illustrated his talk with lots of colour photos of many different orchid species which he has been recording over the years. These included the Common Twayblade, *Listera ovata* which is superabundant on the SSSI Altcar Rifle range as it often reproduces vegetatively. He then compared it to the far less common Lesser Butterfly-orchid, *Platanthera bifolia* last found on the Sefton coast in 1957 and only a single specimen on Altcar in 2000.

Two other Orchid success stories are those of the Bee Orchid, *Ophrys apifera* and the Green Winged Orchid, *Orchis* morio. The Bee Orchid does very well on calcareous soils and is a fairly common sight on our coastal grassland and dune slacks. In Merseyside, the only site of the Green-winged Orchid is the Altcar Rifle Range. It was first found here in the mid-1980's and is doing very well with 20000 flowering spikes having been recorded. It is a very variable plant with white to dark purple flowers and is pollinated by solitary bees.

Next, we heard about the Common Spotted-orchid, *Dactylorhiza fuchsii* which is pollinated by hoverflies and bees and hybridises with Southern Marsh-orchid, *Dactylorhiza praetermissa*. This is the most widespread and abundant orchid of once farmed fields where it is quick to colonise, but is outcompeted as other species get a hold. In 1987, Steve recorded 16000 specimens from the Rimrose Valley, Merseyside. The hybrid between the Common Spotted and Southern Marsh orchids is *D. x grandis*. This is a very robust plant showing lots of hybrid vigour; it can grow to 1.09m with 30cm long flowering spikes.

The Early Marsh-orchid, *Dactylorhiza incarnata* is another very variable plant with 6 subspecies. Of these, subspecies *coccinea* with its pink flowers and rather 'pinched' look is the most abundant in the dune slacks of the Sefton coast, flowering in June.

Other species highlighted were the Pyramidal Orchid, *Anacamptis pyramidalis*, which is pollinated by moths and butterflies, Dune Helleborine, *Epipactis dunensis* (or *Epipactis leptochila* var. *dunensis* according to Stace) and Northern Marsh-orchid, *Dactylorhiza purpurella* which in Merseyside, is reaching the Southern end of its distributional range.

At the end of the talk, Joan Vincent read an article she had written about Keith Watson who recently passed away. Brought together from her own memories of Keith and some

from his family, it was a lovely, heartfelt dedication. We shall all miss Keith's kindness, his knowledge, and his enthusiasm for the LBS.

LBS Holiday Slides 8th November 2008

Peter Gateley in the chair and 14 members present. Members were treat to a wealth of wonderful slides from the UK, Europe and Asia.

Peter started the ball rolling with his slides from May 2007 when he visited Bergerac, France. We saw Bastard Balm, Lungwort and Wild Gladiolas. Here there were lots of orchids to be found, many of them ending up as cut flowers in the local restaurants which had vases of wild orchids adorning the tables. Peter had lovely slides of the Pyramidal, Fly, Early Spider, Burnt –tip, Butterfly, Bird's-nest and Woodcock orchids. Other plants included the Meadow Clary, Vipers Grass, Blue Houndstongue and Wild Service Tree. This area of France is known for its Prunes and we saw a picture of a lovely Plum orchard too.

Next, he whisked us back to the UK. Barnack Halls and Hollows, near Peterborough, is an area famous for its' Pasque Flowers. Peter showed us lovely slides of Deadly nightshade, White Bryony, clustered Bellflower and a Musk thistle with a conopid fly, which parasitises bees, on its flower heads.

On to a slide showing a strange landscape of 'humps and hollows, where Squinancywort and Knapweed Broomrape (on *Centaurea scabiosa*) were both found. The humps and hollows are the remnants of a Neolithic industrial past. This area is subject to a grazing management plan to keep the Birch trees down.

Mary Dean took us to North Norway to see some species of Carex and other genera. The first slide was of *Carex salina*, quite a distinctive species with culms shorter than the leaves. This is a new species to the UK, being found on the West Coast of Scotland. We also saw *C. maritima* with its flowering spikes on the surface of sandy soil. From the Lofoten Islands we were shown *Dryas octopetala*, *Silene acaulis*, Dwarf Cornel, *Carex canescens* and *C. nigra* and *Drosera intermedia*.

From Altcar, **Steve Cross** showed *Hypochaeris glabra* with its tiny flowers, Adder'stongue, Pink water-speedwell and Field madder. Steve reported that he had been involved in the Dune Helleborine recording scheme and that 1711 plants had been found in the Altcar pines and 50,000 flowering spikes of orchids have been recorded there this year.

Next, **Joan Vincent** took us on a tour of Borneo. We were shown wonderful slides of lush Dipterocarp forest, Mount Kinabalu, Rhododendrons, Gingers, fantastic scenery and many plants including orchids such as the Ground orchid *Amdea graminifolia*, and Rothschild's orchid, for which legal protection is being sought in Borneo. Pitcher plants, Begonias and the magnificent stag's-horn fern were all shown. Joan explained how there were many endemics on the Island and that certain families such as the Apiaceae simply fade out when you get close to the Wallace line, which is to the east of Borneo. Lastly Joan showed a great slide. She'd been hoping to see this plant in flower and towards the end of the trip spotted a hand-written sign pointing out its location. A *Rafflesia* was nearby. Recalling how Keith Watson had found the same flower for Attenborough's team to film for the series 'The Private Life of Plants' we saw it in all its splendour; made even more memorable as it's Latin name was *Rafflesia keithii* – how fitting.

Lastly Wendy Atkinson showed some slides from Bantry Bay, West Cork. These included some general views and plants of the Islands Bere and Dursey. Noteworthy plants included *Ophioglossum vulgatum*, *Huperzia selago*, *Hymenophyllum wilsonii*, *and Pinguicula lusitanicum* from Bere and *Cerastium diffusum* from Dursey.

British Arctic-Alpine Plants, 12th December 2009 Peter Gateley,

26 Members present and Steve Cross in the Chair.

Peter gave a very informative and well-illustrated talk on the Arctic-Montane and Boreoarctic Montane elements of the British Flora.

British Arctic-Alpines fall into one of 8 groupings and examples were shown from each group. Peter helpfully produced a list of all the species in each group which was handed out to members. He explained how some plants such as Oysterplant and Sea-pink, which are found on our shoreline, and woodland plants such as Opposite-leaved Saxifrage also grow on mountains and are Arctic-Alpines.

Plants from Cwm Idwal, Wales, Pen-y-Ghent in the Lake District and the mountains of Scotland such as Ben Lawers were abundantly illustrated. It was a very enjoyable talk and sparked a discussion into a possible LBS field meeting to Scotland to see them for ourselves.

Fern Identification Workshop, Eric Greenwood,11th December 2010

Eric began his identification workshop with some helpful information on Fern biology, their life histories and the botanical terms used to describe them.

With the aid of books, fresh material, herbarium sheets, 35mm slides and digital images we were given a comprehensive guide to the key features of lots of our native NW ferns. Eric covered many species and subspecies of groups including the Spleenworts, the Male and Scaly Male Ferns, the Buckler and Shield ferns.

Eric even prepared microscope slides of *Polypodium* sporangia and with the aid of a video microscope he was able to point out to us the difference in the number of cells which are characteristic of the Polypodies. All in all it was a very interesting and informative workshop.

Fungus Identification, Steve Cross, 11th November 2011

Steve began by showing members a selection of fungal identification guides that would be of use in the field. We also had an array of fungi to look at. He then went on to talk about the various features of the fungi to look for such as size, shape colour, gill structure, cap shape and habitat which will aid identification.

Members were then treated to a slide show of different fungi which illustrated the features highlighted above. These included Boletes which don't have gills, Russulas with brittle gills and Milk-caps with their milky secretions.

Other fungi illustrated included the more readily identifiable species such as Earthstars, Puffballs, Inkcaps, Morels and Tar Spot. Members were then invited to identify some of the fungi on display and those that members had brought in.

Thanks to Steve for a very interesting workshop on a subject many of us need help with.

Atlantic Cloud Forest of Brazil, 10th December 2011, Sheila Grey

Sheila's talk centred on an area of the Brazilian rainforest in the Organ Mountains which she has been lucky enough to visit a couple of times. Members were privileged to see a vast array of slides from Sheila's latest trip to this wonderful place.

The Atlantic Coastal Rain Forest of Brazil, in the state of Rio de Janeiro is a very threatened habitat. It is estimated that of the 3000-mile-long original coastal forest, only 4% of it remains in small fragments and often in mountainous areas. In 1974 David and Izabel Miller bought two of these fragments of forest in order to save them. In 1994 the Rio Atlantic Forest Trust, or RAFT for short, was set up as a charity to support the conservation of the fragmented forest and in 2010 it became a private nature reserve. From their house in the forest they run an ecotourism business offering people holidays to enjoy and learn about all the rainforest there has to offer, especially the orchids.

Sheila explained that the mountains are of granite and the soil there is made up of leaf mould, and on the damp slopes coffee and sugar is grown. The presence or absence of orchids in this area is an indication of biodiversity and here there are 100's of orchids to be found. We saw species of *Scuticaria* with its rat's-tail leaves and *Sophronitis* - a key plant which grows on mountain ridges and on high mountain fields. Other orchids included species of *Oncidium, Octomeria, Epidendron, Pleurothallis* and *Maxillaria*. Many of the orchids clothed the trees growing epiphytically along with many bromeliad species. Other images were of Begonias, mosses, lichens and fungi. The fauna was not left out of talk either. Sheila showed us many slides of spiders, moths, butterflies, praying mantis and a pumpkin toadlet which only comes out once the RH reaches 100% and is very rare. All in all it was a very interesting insight into an area few of us have been.

Plants of North Lancashire, 10th March 2012, Eric Greenwood

Eric explained that this was to be a talk on the history and current status of the Flora of North Lancashire, charting how the areas geological past and human influence has changed the landscape. Eric also highlighted some of the areas rarer plants.

The Flora of North Lancashire evolved after the last ice age had swept the landscape clean of plants. It has a hyperoceanic climate arising from the influence of the Atlantic combined with cool summers and can be seen in the prescence of all 3 spp of Filmy Fern in this area. As temperatures rose this gave rise to a wet landscape of fens and carrs, but this disappeared about 500 years ago. The mosses, raised bogs and moors are dwarf shrub areas and are for the most part man-made habitats. In between these are woodlands in the Ribble valley, and at Arnside and Silverdale, but not on the Fylde plain. Some Yew woodland exists on limestone areas and valley woodlands support a rich woodland flora with Bluebell woods in the West.

Human influence is very visible on the tops of the moors. Huge areas were cut for peat and this created the Bowland Fells. On uncut areas, however, rarer plant species such as Bog Rosemary and Cloudberry are to be found.

Native plants are to be found in the North – in places such as Silverdale and Warton, with places such as Lytham St Anne's, Slaidburn and the River Lune Valley being local hotspots. Rarer species are found at Over Wyresdale which is not a typical hotspot. A Lancashire speciality is *Myosotis stolonifera*, almost an endemic, but also occurs in Spain. Flushes on the moors are real gems supporting Sphagnum, Sundews and even Blue-eyed Primrose, but the rivers are quite species poor.

At Leck and Slaidburn, Mossy Saxifrage is abundant in some areas forming part of the Artic Montane element of the Flora, whereas in the West the more Oceanic and Mediterranean species are found such as Sea Bindweed at Morecambe Bay.

Eric interspersed his talk with figures he'd collated about the Flora. For example, 45% of the native species occur in Woodlands, whilst 35% are found in fens, bogs and aquatic environments, with 17% occurring in coastal habitats. This area has gained some 167 species of plant, however, it has lost 51 species. The Flora is a relict of a highly oceanic climate due to interference from felling, draining, pollution and building on the land. There are not many comparable areas in the world apart from maybe Chile which makes this an area to be treasured.

Obituaries

Vera Gordon 1918-2006

With the death of Vera Gordon on 14th September 2006 the Liverpool botanical community and the North West of England more widely have lost someone who for very many years has been a pivotal figure, just as this society has lost one of it's longest-serving vice-county recorders as well as one of its newest Honorary Members.

Born on 29th May 1918, Vera was brought up in Liverpool's northern suburbs, first in Bootle and later in Waterloo and continued to live at the same address in the latter for almost her entire adult life. A Liverpudlian to her core, she had all the warmth, helpfulness and lively humour for which the city is renowned, and to these qualities were added the special personal ones of immense physical energy and a tirelessly enquiring mind. Both her parents and her only brother were keen ramblers and through that she was introduced to the countryside at an early age, acquiring an interest in wild flowers during family holidays in the Lake District and North Wales. From primary school in Bootle she won a scholarship to the grammar school there, and she would surely have gone on to university had she been born half a century later.

As it was, her formal education ended at sixteen and she went to work in the accounts department of a local firm of dry-cleaners — only for the Second World War to break out a few months later. Having fondly eyed the Women's Land Army as her way of contributing to the war effort, she was deeply disappointed that her accounts experience proved to have earmarked her inescapably for similar office work in the Royal Ordnance Department. The obverse side of that coin, however, was that she acquired the security of the civil service thereby, which subsequently enabled her to transfer to a career more to her liking as a clerk in the local magistrates' court.

Meanwhile her father's membership of a photographic society had brought him the acquaintance of Dr. C. Theodore Green, the author in 1933 of a second edition of the Flora of the Liverpool District, and at the latter's insistence Vera was encouraged to join the city's long-standing Botanical

Society. Barely eighteen, she must have found that body initially rather awesome, with it's goodly sprinkling of Edwardian veterans who had built up over the years a breadth of expertise guite normal in their day but by then becoming all too rare. The doyen, W.G. Travis, a collaborator in his youth of the by then legendary J.A. Wheldon, was typically as well-versed in bryophyte, lichens and microfungi as he was in flowering plants and ferns, and for thirty years had been compiling on the Society' collective behalf a much-needed Flora of South Lancashire, the densely populated (and so long and heavily-botanized) vice-county 59. A young enthusiast with energy to spare was nevertheless more than welcome, and the very next year she found herself elected to the Society's Council and the year after that one of the two honorary secretaries. Fifty-eight years later she was still serving in that second capacity, a record of continuity interrupted only by terms as President and Vice President. Throughout that exceptionally long period she played the principal part in holding that small society together, for without her efficiency and friendly informality it might well have petered out.

In 1950, on the top of a double-decker bus bound for one of the Society's field meetings for which we were the only two to have braved the heavy rain, Vera learned of the recrudescence that the Botanical Exchange Club had undergone in it's new guise as the B.S.B.I. In common with many field botanists in the North, the Liverpool ones had long held aloof from the B.E.C. on account of its continuing identification in their eyes with the nineteenth century tradition of reckless collecting; once Vera joined, however, and began passing around her copies of the new BSBI publications, all the other leading members speedily followed her example.

Thereafter Vera was a frequent attender, and active participant, at BSBI field meetings, enlivening them with her infectious laughter and exemplary persistence in recording however atrocious the conditions. One that proved particularly memorable for her was that in West Cork in 1964. To get there, she had to make a lengthy bus ride on which to her delight she found herself included in inimitable Irish rustic gossip and chatter; then, once the meeting was in progress, her sharp eyes spotted an unfamiliar plant with small white flowers which was to turn out to be another native Sandwort *Minuartia recurva*, new to the British list.

By then her BSBI involvement had been substantially extended by her appointment as Recorder for South Lancashire, in which increasingly onerous capacity was to serve for thirty-six years. Additionally, when a short-lived tier of "District Secretaries" was introduced in 1960 to deal with the growing flood of enquiries of a less strictly scientific nature, she willingly shouldered responsibility for that secondary task in the group of vice-counties that made up Watson's "Mersey" Province.

Around the same time the teaching of plant taxonomy at Liverpool University experienced a marked revival, consequent upon the appointment to the staff of Dr. Vernon Heywood and his active involvement in the massive *Flora Europaea* project. This intensified the need for a guide to the local flora for placing in the hands of students, and as a result the long-accumulating *Flora of South Lancashire*, which had been languishing because of the latterly frail health and then decease of Travis, had new life vigorously breathed in to it. Vera was the natural choice as secretary of a new committee that was set up

to use the manuscript of that as the basis for a volume of a more modern character that would be a more realistic publishing proposition. To her also fell much of the time-consuming checking of the many post 1939 records and the rounding up of additional ones that were found to be needed, though that formed only one ingredient in the eventually seven years of combined effort out of which the much-modified Flora at last emerged in to print, in 1963, with Vera's name justly featuring alongside those of Heywood and Dr.J.P.Savidge as joint editors.

Such was the ability and care Vera displayed in that prolonged undertaking that the university saw her as the obvious person to revitalise and curate it's herbarium, but on being sounded out she reluctantly concluded that, with a non-transferable civil service pension in prospect, such a move involved too great a sacrifice financially. The University was not to forget her, however, for two decades later, in 1987, it conferred on her an honorary *M.Sc.* Legend has it that the University's imposing Daimler sent to her home to carry her off to the degree ceremony created more of a sensation locally than almost anything else.

Further recognition followed. In 2001 the Liverpool Botanical Society elected her to honorary membership, and four years after that the BSBI did so as well – appropriately at an AGM held in Wales, where in the north of which she had spent a great part of her life enquiringly striding.

It was as a great walker, indeed, that Vera will be remembered by the greatest number of people above everything else. As the years went by Britain proved too confining for her energies and many parts of the world, as distant as Australia and as remote as the Caucasus, attracted her as well. Often that was with a botanical group, in which her untiring helpfulness and increasingly wide knowledge was ever at her companions' disposal; but botanizing, with its unavoidably slow pace, was not enough to absorb her seemingly inexhaustible supply of energy and she varied those occasions with more arduous challenges such as the famously testing Appalachian Trail. Other favourite outlets were Scottish dancing (at which she was accomplished enough to become a teacher of it at evening class), gardening (alpines were her speciality) and photography, this last an enthusiasm passed on to her by her father and at which, like him, she came to excel.

Alert and reasonably active almost to the end, she was able to attend an indoor meeting of her adored "LBS" as late as six months before her death. Four further months were then spared her before finally having to exchange her house for a nursing home near Ormskirk, where not long after her death took place.

Geoffrey Keith Watson 1946 – 2008

A member of Liverpool Botanical Society since 1974 Keith held a number of posts within the society including President (2004-7) and editor of the newsletter Parnassia. He died, aged 61, of a heart attack on 18th February

2008, having gone to bed with rucksack already packed ready in his room for the next day's trip.

Keith grew up in Scarborough with two younger brothers John and Eric. At the age of 14 he suffered an attack of meningitis that almost killed him, after this he became rather shy and withdrawn. Academically though he did well and went to Newcastle University leaving in 1973 with a Ph.D. in bacteriology. He then moved to the Wirral to work as a researcher for Unilever at Port Sunlight. Keith worked on low-temperature washing powders and toothpaste (and he said it was him who came up with idea of putting in the stripes). During this time he travelled to conferences around the world on behalf of the company.

A keen and knowledgeable natural historian with interests in butterflies and other animals as well as plants. He was a member of B.S.B.I. as well as various other natural history societies. A keen photographer he illustrated many of his talks to LBS with some wonderful images.

He had many other interests including chess, at which he was reckoned to be very good. He was treasurer of the Wirral Chess Club for 29 years.

Keith was quiet and never sought the limelight and many were surprised to learn that in the early 1980's he had acted as advisor and guide on the "Life on Earth" series of David Attenborough in Borneo in the finding of open flowers of *Rafflesia*. Holidays were taken in many parts of the world but he was happy recording the plants and other wildlife of Wirral, Cheshire and North Wales. Always helpful and eager to show an interesting find to everyone; but always very meticulous about being sure of an identification as he was never without C.T.W. or Stace in his rucksack.

Many members went to the service at Landican Cemetery on Friday 29th to pay their respects.

He will very much be missed as we have lost a gentleman, a stalwart of the society and a good botanist.

Steve Cross

Anthony David Bradshaw: 17th January 1926 – 21st August 2008

Prof. Bradshaw was one of the great Liverpool people, as was evidenced by him being awarded, shortly before his death, the first ever Liverpool Citizen of Honour Award, by the Lord Mayor. He also received much wider recognition; in 2006, the Environment Agency published a poll of its top 100 eco-heroes of all time. Up with Charles Darwin was the name of Tony Bradshaw, a pioneer of restoration ecology. Tony had made his name as an evolutionary biologist and his work on the evolution of tolerance to heavy metals in plants growing in contaminated soils remains a clear example of evolution in action; Darwin would have approved.

One of his books (co-written with MJ Chadwick) *The Restoration of Land; The ecology and reclamation of derelict and degraded land* has been a 'bible' for professional ecologists all over the world since its publication in 1980.

Although being born outside the area, and having an international reputation as a botanist and ecological researcher and practicioner, he remained loyal and dedicated to Liverpool. Tony Bradshaw was born in Richmond, Surrey, he studied botany at Cambridge and then worked on his PhD at Aberystwth. After lecturing at Bangor he came to Liverpool University in 1968 to take the chair of Botany, he has lived and worked here ever since. After retirement, he became Emeritus professor of Botany at Liverpool; he was involved in setting up the first of the Groundwork Trusts, in St Helens, and was an active supporter and major influence on the National Wildflower Centre and was a founder member of the national Institute of Ecology and Environmental Management. Locally, his latest enthusiasm was for the ecological restoration and management of St James's Garden, the historic park in the grounds of Liverpool's Anglican cathedral, where he worked until quite close to his death.

It was a suitably mournful grey and wet day on 5th September when masses of friends, admirers and colleagues approached the dark bulk of Liverpool Cathedral. On nearing the doors the mood was lightened by the porch strewn with colourful blossoms of cornfield annuals, collected and spread by Tony's friends from the Wildflower Centre. His willow-woven coffin, also decorated with wildflowers, immediately reminded you of Tony's environmental principles and the heart-felt readings, beautiful music and many tributes spoke volumes of the love and great respect shown for him. Tributes from friends not present were read by his three daughters, including great praise and regret at his passing expressed by Sir David Attenborough, epitomising Tony's renown far beyond Liverpool.

P.S. Gateley

Knowing Vera

Most of us know her as a brilliant enthusiastic botanist with an abundance of energy, travelling world wide, but I knew all about her other hobbies and interests which I am pleased to share with you.

Vera was a gardener and tended her plants with loving care, keeping her lawns back and front well manicured. Woe betide any cat that ventured in. She adored dogs, especially Pollyanna and Pollyanna reciprocated. She cut the edges of her lawns with a small pair of scissors.

She started baking at a young age and never did she buy a cake of a BISCUIT. She was famous for her scones and Jean Bentley says they were the best she'd ever tasted.

She was a GATHERER – apples from Hightown (Vera knew where there was a tree) and blackberries from Fazakerley; the area now built upon. The fruit

was always weighed when we got home. She was given plums and damsons and made lots of jam and never bought any. On one occasion when we were travelling between Widnes and Speke Vera asked Douglas to stop the car. There were hundreds of mushrooms growing on the central reservation and we both bent our backs and did them justice. The mushroom was *Agaricus campestris* (Field Mushroom). Vera telephoned me later giving me details of the weight. We spent hours on the shore, especially in the winter or after a storm, filling Tesco bags with coal. I provided the bags. Sometimes I would leave the car by Crosby Baths but mostly we were on foot with a full bag in each hand and a rucksack bulging. She weighed every lump when we got home. So now dear reader when you see me on a field meeting with a bent back, you will know the reason why.

She was outstanding at embroidery, some of her work exquisite. She knitted all her own jumpers and cardigans herself as well as for her beloved friend Ann. Not just plain knitting but complicated Fair Isle patterns and open designs and cable etc. She made all her own clothes and had huge amounts of material from lightweight cotton to heavy corduroy.

She was very proud of her Scottish ancestry, just loved going to Scotland ("nowhere like it in the world Pat") and taught Scottish Country Dancing almost every Monday evening.

Vera was a very good artist and enjoyed water colours but didn't have the time!! She had an average of 4-5 hours of sleep a night. I once asked her if she hadn't been a botanist what would she have been, a one word reply-mountaineering. She inherited the love of the great outdoors from her mother and father. The love of her life – her brother Ron.

Patricia A. Lockwood

Vera Gordon and the Liverpool Botanical Society

It was January 1935. The lecture room on the third floor of the Hartley Botanical Laboratories fell silent. Members of the Botanical Society who had been chatting in groups rushed to take up their seats as the sound of heavy footsteps coming up the stairs reached them. The Committee had had their usual monthly meeting in a stylish second floor room and now entered the upstairs lecture theatre as members rose from their seats. The President took his place at the front, the main secretary had a seat on her own and the front row was always left free for the Committee.

On this particular day the President had declared the meeting in session, minutes of the previous meeting had been read and carried and Colonel Theodore Green stood up to say "I am proposing Miss Vera Gordon for membership of the Liverpool Botanical Society". Vera then duly stood up to be introduced to members and this was all recorded in the minutes. One month later the proposal was seconded as required and a further month passed before the proposal could be put to the meeting to be voted on. The April

bulletin of that year then recorded that Miss Vera Gordon was a new member of the Society. It was an impressionable experience for a young botanist, still a schoolgirl. Vera had known Colonel Green through membership of the Photographic Society, where her father had described her interest in plants to him.

Then as now, the society held winter indoor meetings and summer field excursions, but there were other events too. The annual soirée for example, was organised by the tiny, elderly Miss Warhurst. Since she was Secretary of the Associated Learned Society which included besides the LBS, the Geographical and Geological Societies and the Liverpool Field Club, she was able to organise two joint meetings a year. The L.B.S played a considerable part in these evenings. The treasurer Mr. Routledge for example entertained the group for many years singing solos. Vera's particular contribution was making sandwiches in the University Museum Laboratories. This was clearly before the days of health and safety regulations.

Field meetings often involved coach travel so members needed to book before the meeting. These normally took place on Saturday afternoon, since so many members worked up to lunchtime in those days. The meetings frequently went on a as late as 9 o'clock in the evening however. Although over the years, as working practices changed, the meetings gradually became all-day affairs. Even so, members such as Horace Green were most reluctant for any change in practice. Other trends have been a move away from a male dominated Society, when ladies often made up less than one quarter of the L.B.S.

The war obviously had a big effect on the Society. Older members retired and many others moved away from the centre of Liverpool. Vera took over as secretary in 1940, replacing Miss Alborne the minutes secretary and Miss Fell the bulletin secretary. One of Vera's duties was to prepare the monthly bulletin of the Society. It was then sent to a lady in Birkenhead who was paid for typing with a certain ribbon, allowing the manuscript to be ironed on to a pad known as a cycloskein. Two hundred copies were then made from this. Vera helped by Anne Swinney would then spend two evenings each month addressing envelopes, sticking the halfpenny stamps and finally posting off the bulletins to all members.

After the war Vera played an increasing role in the Society. In 1956 when several members of the Society decided to help Mr. Travis with his Flora, Vera took on the enormous task of checking old records, collecting new ones and acting as secretary to the Flora Committee. Thanks to her and others, details of Vice County 59, the only English vice County without a Flora at the time, was now described in *Travis's Flora of South Lancashire*, published in 1963.

It is not always realised how many institutions immediately requested this Flora. Universities across the U.K., in North America, Europe and Australasia together with famous Botanic Gardens in St. Louis, or one of Europe's oldest

surviving Gardens that of Leiden, Holland etc. all making up an impressive total.

Present members will no doubt think of Vera as a most knowledgeable and enthusiastic leader on field trips. There can be few paths anywhere in this area which she had not walked and enjoyed. Regular members will have many memories of early spring visits to Caergwrle or Loggerheads, summer along the Lancashire coast sand-dunes, or fungal forays in Freshfield or Erddig with occasional trips further afield like Silverdale. In indoor meetings she shared her world-wide experiences with us, introducing us to the Flora of many countries with the help of her beautiful slides. She has given lectures on many of her favourite spots from Turkey, Greece, Poland, the Dolomites, South Africa, Tien Shan Mountains and many British locations.

Vera's contributions to the botany of this area have also been acknowledged by others. In 1987 she was awarded an honorary degree by the University of Liverpool and she continues to be invited to all their main events and degree ceremonies. Her degree was followed by a half-hour interview focusing on Vera's lifelong interest in plants, broadcast on Radio Merseyside. In 2005 the BSBI finally made Vera an honorary member in recognition of her wonderful contribution as a recorder, describing her as the ideal member due to her work over an exceptionally long period of time, fun to be with on field trips and someone with a real enthusiasm for plants.

Over the years Vera has had an influence on many people. In his retirement interview last year Dr. John Dransfield paid tribute to the L.B.S. for their part in starting him on his career, leading from Cambridge University and on to Kew, where he has long been recognised as a world authority on palms. Letters among Vera's papers include notes from many well-known botanists. One from 1960 in a schoolboy hand describes plants he has found in the Bolton area for instance – a lovely early contribution from Roy Lancaster. Vera's contacts with the eccentric botanist known as "weed king of the north" the Reverend Shaw could certainly form an article in itself.

As secretary of the L.B.S. for 60 years, Vera never abandoned the high standards she brought to the position. Council minutes and every indoor meeting clearly written up, every field meeting faithfully described in the bulletin – either written up by her or collected from the leaders by early December of each year, with assistance given to those who asked for it. With the bulletin reduced to one issue per year, this with the annual programme was always completed and distributed at the January indoor meeting or posted to absent members. This continued until the introduction of Parnassia. The L.B.S. has therefore seen many changes over the 100 years of its existence. Today we can remember that Vera Gordon has been an active member for just over 70 of those years, as well as a highly respected botanist nationally. It is great to have her here today and to say thank you for such a huge contribution to the success of this Society.

Joan Vincent

Early Memories of Liverpool Botanical Society

It's probably fifty years since I joined. My friend Betty Hall had taken a parttime job as assistant to the Science mistress at our old school, Marjorie Thornton. Being a member of L.B.S she suggested Betty might like to join. Relatives and friends were welcome to attend field meetings.

At my first experience of tagging along with them I met a very pleasant lady, Mrs. Stell. She told me that on the previous months meeting they had found eight things to eat from the fields and hedgerows, and would I like to guess them. I hazarded wild strawberries, hazelnuts and young dandelion, which were right, but I don't remember the others; maybe things like mushrooms, sloes, and perhaps medieval savouries like Good King Henry, garlic mustard and fat hen.

In due course I became a member and some individual meetings stand out in the memory because of some particular revelation. One such one was Ainsdale; on the way to the salt marshes Vera led us through a grassy area to see Moonwort. I'm sure this memory is fixed because of my sheer admiration for her unswerving steps to that one plant.

Likewise, much later Guy Sloman was mooching round the old railway area at Fazakerley and pounced on something totally insignificant among the general overgrowth of docks and thistles.

Other meetings were dominated by a particular plant. Llandudno is forever connected with Nottingham Catchfly, seen for the first time before even going up the Orme and seeing the Wild Cotoneaster.

Terrain in relation to its flowers was always fascinating; Bloody Cranesbill on limestone pavement, masses of fleabane on the Fylde coast, orchids on old industrial sites, the scent of Sea Aster on the shore at Hale.

At least one field meeting became memorable through disaster. A young member called Chris led a party of five or six to the Buxton area. We were first appalled at walking through the moon landscape created by ICI (in plundering limestone), but Chris had wildly underestimated the ground to be covered and the meeting finally turned into a route march of 12 or 13 miles, to a train for Manchester, with no time to look at anything.

You could always depend upon Anne Swinney to call a halt for lunch at a suitable spot. One that always comes to mind was a meeting led by Jan Zawadski, when we were taken to see Tufted Loosestrife. The weather was very showery and there seemed no other sheltered spot except the slope under the motorway. Accordingly we scrambled up the concrete and remained dry there if precariously perched. Whenever I see the old Victorian waiting room at Manchester Victoria and it's present-day splendour I just remember that day when the half-drowned rats dripped all over it's radiators.

Contacts

President: Peter Gateley

Vice Presidents: Eric Greenwood

Steven Cross

Hon. Secretary: Wendy Atkinson

Hon. Treasurer: Peter Tipping

Hon. Librarian: Donna Young

Hon. Editor: Steven cross

Please send all articles and contributions for Parnassia to:

Steven Cross 58 Kingswood Avenue Waterloo Liverpool L22 4RL