

LIVERPOOL BOTANICAL SOCIETY

BULLETIN 100

JANUARY 1994

PRESIDENT	Mr E.F. GREENWOOD M.Sc. (until Jan. 1994)
VICE-PRESIDENTS	Dr J.R. EDMONDSON, Dr A. GUNN.
HON. SECRETARY	Miss V. GORDON, 23 Alder Grove, Waterloo, Liverpool L22 2AL
HON. TREASURER	Miss J. BENTLEY, 16 Waterford Road, Oxton, Wirral L43 6UU
HON. LIBRARIAN	Mr M. PALMER, Liverpool Museum, Liverpool L3 8EN
HON. EDITOR	Miss J. VINCENT, 34 Burden Road, Moreton, Wirral L46 6BQ

INDOOR MEETINGS 1994/95

These are held at the Museum, William Brown Street at 19.30. Council meetings are at 19.00.

FEBRUARY 8th 1994	Mr Douglas Lockwood - Environmental aspects of the work of the Merseyside Development Corporation.
MARCH 8th	Dr Hugh McAllister - A talk on Siberia.
OCTOBER 11th	Dr Angus Gunn - In the Botanical Library of the Museum.
NOVEMBER 8th	Holiday Exhibits 1994 - All members are invited to contribute.
DECEMBER 13th	Miss Vera Gordon - Spring in Morocco.
JANUARY 10th 1995	Annual General Meeting and Résumé of 1994 Field Meetings. All members are invited to participate. Please contribute photographs, specimens or notes.
FEBRUARY 14th	Dr John Edmondson - Serpentine Flora.

FIELD MEETINGS 1994

APRIL 9th 1994	Loggerheads. Leader: Miss V. Gordon. 08.56 train from Liverpool Central to Chester, alight at Hooton at 09.19 for the 09.28 F11 bus to Mold Bus Station. Change here for the 10.30 bus to Loggerheads, arriving at 10.42. For confirmation of current times ring 0352 704035.
MAY 7th	Ainsdale Dunes. Leader: Mrs P. Lockwood. 09.51 train from Liverpool Central to Southport, alight at Ainsdale at 10.23.
MAY 21st	Parbold to Appley Bridge. Leader: Mrs E. Stephenson. 09.06 train from Liverpool Central to Southport, arriving 09.46 then take the 09.55 train to Wigan and alight at Parbold. Book Appley Bridge return. Car users may park at Appley Bridge and take the 10.06 Southport train to Parbold, arriving at 10.12.
JUNE 4th	Various sites in Wirral. Leader: Dr K. Watson. 09.51 train from Liverpool Central to West Kirby, alight at 10.09 at Moreton where the leader will meet the party.
JUNE 18th	Backford. Leader: Miss J. Bentley. 10.18 1C Chester bus from opposite Hamilton Square Station, Birkenhead, alight at Backford (The Happy Eater) about 11.05.

FIELD MEETINGS cont'd

- JULY 2nd Fiddler's Ferry Power Station. Leader: Mr P. Gateley.
09.04 A1 Warrington bus from Hood Street gyratory, Liverpool, or take the same bus from Hunts Cross at 09.40 and alight at the entrance to the Power Station Cuerdley Cross. (Half-hourly service).
Dogs are not allowed on the site.
- JULY 23rd Dee Shore & Ness Gardens. Leader: Miss M. Wilson.
09.21 train from Liverpool Central to West Kirby, alight at Bidston then take the 09.41 Wrexham train alighting at Neston at 09.55.
- AUGUST 13th Littleborough. Leaders: Misses Franks & Tolfree.
09.27 train from Liverpool Lime Street via Manchester, alight at Littleborough at 10.50.
Return trains hourly.
- SEPTEMBER 3rd Ribble Marshes. Leader: Mr P. Gateley.
09.51 train from Liverpool Central to Southport, arriving at Southport Station at 10.31, where the party will meet before taking a bus to Crossens.
- OCTOBER 1st Caergwrle with a difference. Leader: Miss V. Gordon.
09.21 train from Liverpool Central to West Kirby, alight at Bidston for the 09.41 Wrexham train, and arrive at Caergwrle at 10.22.

N.B. Members should please note that bus and train times for all the field trips should be verified on current time tables. Winter times only i.e. up to May 28th, are available at the time of publication. Food should be carried on field meetings.

Members are reminded that subscriptions for 1994 are due in January and should please send them to the Hon. Treasurer, otherwise it will be assumed that the membership is terminated.
Annual subscription rate: £1.50.

REPORTS OF FIELD MEETINGS 1993

17th APRIL. HOPE. Leader: Miss V. Gordon.

On a warm, sunny day spring flowers included Primroses, Wood Sorrel, Wood Anemones, Wild Hyacinth, Wood Violets (Viola riviniana and V. reichenbachiana), Townhall Clock (Adoxa) and Golden Saxifrages (Chrysosplenium oppositifolium and C. alternifolium) so the party of 17 followed the River Alyn and then high-banked lanes up Hope Mountain. On the acid hill top the Blaeberry (Vaccinium myrtillus) was in flower. Toothwort on the Alyn bank was just past its best. With "apologies for inconvenience caused" by British Rail two other members were delayed but followed a similar route.

8th MAY. WIGAN. Leader: Mr. P. Gateley.

The Douglas Valley quickly opens into green space from Wigan Town Centre; though wild in aspect much planting has been carried out, allowing comparisons to be made between the Alders, Alnus cordata, A. glutinosa and A. incana. Bird cherry (Prunus padus) was in full flower in scattered plantings on the valley sides and masses of Bluebells were still a fine sight under the expanding beech leaves of Haigh Plantations, where drifts of russet bud scales had accumulated in places. As well as finding woodland species, there were patches of open acidic grassland and water's edge and aquatic plants were to be seen along Douglas banks, scattered ponds and the Leeds and Liverpool canal. A bathing male sparrowhawk joined us for lunch by one of the woodland ponds where Water Crowfoot (Ranunculus aquatilis) flowers seemed to outshine the blowzy Rhododendron blossoms.

5th JUNE. GREAT ORME. Leaders: Mrs W. McCarthy & Mr J. Benson.

On a lovely summer's day with no hint of the disastrous flood which followed just four days later, a party of 28 members and friends enjoyed seeing most of the Great Orme's special plants. Lunch was taken among a carpet of Bloody Cranesbill (Geranium sanguineum), Kidney Vetch (Anthyllis vulneraria) and Spotted Cat's Ear (Hypochaeris maculata), with Small Scabious (Scabiosa columbaria), Hoary Rock Rose (Helianthemum canum), Nottingham Catchfly (Silene nutans), Horse-shoe Vetch (Hippocrepis comosa) and many others on the rocky ledges above. Spiked Speedwell (Veronica spicata ssp. hybrida) was just beginning to flower. Three plants of the sinister-looking Henbane (Hyoscyamus niger) attracted many peoples' attention. A small debate took place during the tea-break - were the dried up Cerastiums we were looking at Dwarf Mouse-ear (C. pumilum) or Little Mouse-ear (C. semidecandrum)? Both were flowering there in March and April. Also present here were Narrow-fruited Cornsalad (Valerianella dentata) and Field Madder (Sherardia arvensis), with Dark Red Helleborine (Epipactis atrorubens) just below.

26th JUNE. LEEDS & LIVERPOOL CANAL. Leader: Miss M. Wilson.

A party of 12 followed the canal from Sandhills to Rimrose Valley. Fringed Water-lily (Nymphoides peltata) was the dominant water plant most of the way but in places a more recent invader Lagarosiphon major was competing successfully with it. In open patches of water usual canal species such as Potamogeton crispus, P. pectinatus and P. perfoliatus were seen. In places at the edge of the canal were long colonies of the hybrid Reed Mace Typha x glauca. On the canal bank the Broomrape, Orobanche minor was frequent in patches as well as Marsh Orchids (Dactylorhiza fuchsii, incarnata, praetermissa, purpurella) and their hybrids.

10th JULY. HALL ROAD TO HIGHTOWN. Leader: Miss V. Gordon.

19 members walked along the coastal embankment, dunes and foreshore to Hightown and back by inner dunes. Usual coastal species included fine plants of Viper's Bugloss (Echium vulgare) and a few remaining Bee Orchids. A stretch of artificial shingle was invaded by Yellow - Horned Poppy (Glaucium flavum), Rock Samphire (Crithmum maritimum) and Sea-kale (Crambe maritima). In a damp reed bed Yellow Iris (Iris pseudacorus), Common Meadow Rue (Thalictrum flavum) and Garden Angelica (Angelica archangelica) were photographed. On the beach we walked over the submerged forest and tree trunks which fell thousands of years ago, in order to see the Glasswort (Salicornia dolichostachya). On the bank of the River Alt the long-established colony of Euphorbia esula was seen. Orchids on the return journey included Helleborines (Epipactis phyllanthes, E. leptochila ssp. dunensis and E. palustris). Pyramidal Orchid (Anacamptis) and Marsh Orchid (Dactylorhiza incarnata). Other species of note were the Sea Bindweed (Calystegia soldanella) and Sulphur Cinquefoil (Potentilla recta).

24th JULY. SANKEY VALLEY, SOUTH OF EARLESTOWN. Leader: Mrs P. Lockwood.

11 members made their way down Sankey Valley, with frequent stops to see interesting plants in the remnants of the old Earlestown canal. They included Carex paniculata, Bidens tripartita, Verbascum nigrum, Knautia arvensis, Agrostis gigantea and Potentilla x mixta (P. anglica x reptans). Some fine large trees of Robinia pseudoacacia on the M62 embankment were duly admired as well as good tufts of Milium effusum in Red Brow Wood.

14th AUGUST. HUYTON. Leader: Mr P. Gateley.

Our journey to the source of the Alt began in a small tract of "fossilised" countryside right in the middle of Huyton; old hawthorn dominated hedgerows, and unmaintained, diverse swards of former fields and gardens held a wide range of species, with native scrub developing in places, notably Blackthorn (Prunus spinosa) and young Oaks (Quercus robur)

with fine collections of galls. The Alt springs from a soggy field lying in a shallow basin surrounded by clayey slopes. The area is a public open space with wetland created and drier parts planted and managed as wildflower meadows displaying a wide range of colourful species e.g. Meadow Cranesbill (Geranium pratense) and Purple Loosetrife (Lythrum salicaria). Stadt Moers Park was reached along the banks of Mill Brook (flowing in the opposite direction to the Alt to join Ditton Brook), allowing close views of Grass Vetchling (Lathyrus nissolia) in leaf and fruit. This route led into further wildflower meadows, well maintained, very diverse mixtures with many white-flowered Knapweeds (Centaurea nigra) noted amongst the normal population. Stadt Moers itself has some rich areas of water, with Unbranched Bur-reed (Sparganium emersum) and Hop Sedge (Carex pseudocyperus) looking particularly fine, and a range of man-influenced plant communities with many interesting species including Elecampane (Inula helenium).

28th AUGUST. SHOTTON TO CHESTER. Leader: Dr K. Watson.

The recently re-discovered Slender Hare's-ear (Bupleurum tenuissimum) was admired on the salt marsh near the railway bridge over the Dee at Shotton, and found at intervals for at least half a mile towards Chester. The hybrid Knotweed (Fallopia x bohémica) was common in places along the path with Spiny Restharrow (Ononis spinosa) also recorded. Burdocks (Arctium minus) were compared and ssp. pubens recorded. Giant Hogweed (Heracleum mantegazzianum) was common towards Chester, with Broad-leaved Ragwort (Senecio fluviatilis) as we left the Dee and joined the Shropshire Union Canal. California Brome (now Ceratochloa carinata), Arrowhead (Sagittaria sagittifolia) and Orange Balsam (Impatiens capensis) were found on the canal, and the meeting ended with an unscheduled hectic visit to see Dittander (Lepidium latifolium) near the Northgate arena at Chester.

18th SEPTEMBER. HESWALL SHORE TO THURSTASTON. Leader: Miss J. Bentley.

Over 300 species were recorded during this meeting, which also coincided with the highest Dee tide of the summer, covering the Sea Aster and Spartina. En route to the shore the hedges were full of the scarlet berries of White Bryony (Bryonia cretica). Nodding Bur-marigold (Bidens cernua) was found near the Sailing Club. After calling at the Thurstaston Visitor Centre our party of 12 returned to Heswall via the Wirral Way, the Dungeons and the field paths, after checking that the Maidenhair Fern was still doing well.

2nd OCTOBER. DIBBINSDALE. Leader: Dr K. Watson.

The party found a good range of fungi in Spital fields and woods west of the Dibbin, including Ink-caps (Coprinus atramentarius & C. comatus), the Weeping Widow (Lacrymaria velutina), the Mycenae (Mycena galericulata, inclinata and galopus) and the Oak Milk Cap (Lactarius quietus). Returning from the Dibbinsdale Road through Marford's Wood, Cramp Balls (Daldinia concentrica), Purple Russula (R. atropurpurea), Blewit (Lepista nuda) and Candlesnuff fungus (Xylosphaera hypoxylon) were found. After lunch, fungi were few but Betony (Stachys officinalis) and Devil's-bit Scabious (Succisa pratensis) were admired on the way to St. Patrick's well. Finally, the party had tea at Woodslee pond where Water Soldier (Stratiotes aloides), Nuttall's waterweed (Elodea nuttallii) and Rigid Hornwort (Ceratophyllum demersum) were found.

REPORTS OF INDOOR MEETINGS 1993

JANUARY. The A.G.M. was followed by a résumé of 1992 field meetings when slides recalled the places visited and plants seen.

FEBRUARY. Miss Gordon showed slides of plants seen during a holiday in the Canadian Rockies in late July and early August. Habitats included the banks of Bow River at Calgary, the 8,000 ft. flat top of Plateau Mountain, Bow Lake and Peyto Lake and a Skunk Cabbage Reserve. In British Columbia the Big Cedar Rainforest Reserve was a sharp contrast to the Osoyoo Desert and the mountain meadows near the snow-line at Revelstoke and in the Cascade Mountains.

MARCH. Dr Hugh McAllister gave his talk on Santolinas illustrated by slides and living specimens. Santolina chamaecyparissus ssp. insularis from Yugoslavia is the commonest cultivated species in Britain. Taxonomic problems were encountered with other species. Flora Europaea's ssp. squarrosa includes 3 chromosome races, morphologically different. A plant with long pinnae which appears to be S. pinnata is there called S. rosmarinifolia ssp. canescens which typically should have nearly simple leaves. The horticultural S. neapolitana keys out as S. chamaecyparissus ssp. tomentosa and S. etrusca from Genoa could be a form of S. neapolitana.

OCTOBER. Mr Fred Rumsay gave an account of two and a half years research on Trichomanes speciosum. Maps showed World and British distribution. Its life history was described from spore dispersal, slow growth of long living filamentous gametophytes, the numerous glistening male antheridia and the fewer less distinctive female archegonia. When the sporophyte is produced growth is only 2-3mm. a year for 3 years. Distribution maps showed the gametophyte more widespread than the sporophyte. Various theories were discussed why reproduction is so poor. Research continues. Slides illustrated stages of the fern's growth and some habitats.

NOVEMBER. Members holiday exhibits. Mr Greenwood's slides illustrated his holiday in the Loire Valley. Mr Gateley had been to St. Leonards and the Downs and showed a selection of seaside and chalk hill plants from there; he visited Snowdonia in June and Ben-y-Vrachie and Glen Clova in July. Miss Gordon's fortnight in the Lycian province of Turkey produced a series of Turkish mountain plants.

DECEMBER. Rachel Janes' talk on Azolla filiculoides was illustrated with maps showing stages of its distribution in Britain, graphs of growth and survival rate compared with temperature, and slides of stages in growth. Sexual reproduction showed it to be an advanced fern with microsporangia and megasporangia with complex dispersal structures. Germination of sporocarps was unpredictable and survival depended on temperature and desiccation though they could exist in sediment for years. Because of Azolla's erratic appearances and fast growth, control methods were being studied to limit problems caused to navigation, fishing, drainage etc. In its native West North America it had its own predators and in rice-growing areas it is used as a nitrogen-fixer.
