

Edited by R. Gwynn Ellis

No. 66

Dept. of Botany, National Museum of Wales

Cardiff CF1 3NP



Thlaspi alliaceum ex-cult. Maldon, Essex, del. Brian Wurzell © 1994 (see page 33)

ADMINISTRATION

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(Please quote membership number on correspondence concerning membership or subscriptions – your membership number is on the address label of your mailings, in the List of Members in *BSBI Year Book 1993* or for changed addresses and 1993 new members in *Year Book 1994*).

HON. FIELD SECRETARY (Enquiries on Field Meetings) Mrs Elinor Wiltshire
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IMPORTANT NOTICE

BSBI WALES QUADRENNIAL MEETING and 32nd ANNUAL GENERAL MEETING, 1994

Notice is hereby given that a meeting of members of the Society, normally resident in Wales, will be held at Normal College, Bangor, Gwynedd on Saturday July 9 at 4.30 p.m.

AGENDA

1. Election of Chairman and member to serve as Representative on BSBI Council
2. Election of Hon. Secretary, Hon. Treasurer and members of Committee for Wales
3. Any other business

Nominations of members for election as Chairman and Representative on Council must be in writing, signed by two members normally resident in Wales, and accompanied by written consent of the candidate to serve if elected. Such nominations, and nominations for members and officers of the Committee for Wales, should be sent to the Hon. Secretary of the Committee for Wales, Mr R.G. Ellis, Department of Botany, National Museum of Wales, Cathays Park, Cardiff CF1 3NP, to arrive not later than May 30th 1994.

MARY BRIGGS, Hon. General Secretary

CONTRIBUTIONS INTENDED FOR

BSBI NEWS 67

should reach the Editor before

JULY 28 1994

COMMENT

BSBI AND CONSERVATION

John Patmore asked in the last edition of *BSBI News* (65: 27) what the role of the BSBI in conservation should be. His question is timely because of recent developments which will affect our role in the future.

There is no doubt that the Society's priorities are now, and always will be, to gather information on the flora of our islands and to alert the active conservation agencies – the NCC in its various forms (now called the Country Agencies), the Wildlife Trusts, the National Trust and so on – of threats which are developing to species and their habitats. This means that the publication of the *Scarce Plants in Britain Atlas* is perhaps the most eagerly awaited publication of the Society in the last decade, and why we believe that the preparation and publication of a new *Atlas* should be our most important contribution between now and the end of the century.

Many members are also currently assisting with the new Red Data Book Project and in preparing County Rare Plant Registers.

These priorities were clearly identified in the Society's *Strategy for the Conservation of Wild Vascular Plants* adopted by Council in November 1991. But that *Strategy* also recognised that the prevention of further losses to our flora can only be effected through a co-ordinated effort by all the conservation agencies. The *Strategy* recommended the setting up of a secretariat within the Joint Nature Conservation Committee (JNCC) to review the data produced by BSBI to determine priorities and initiate action for protecting and acquiring sites, for strengthening legislation and for mounting an educational programme.

Though this idea was welcomed there was no immediate prospect of it being put into effect (the new JNCC/four country agencies bureaucracy was not designed for quick decision making) so the BSBI set up an informal Strategy Working Party which members of other conservation bodies were invited to join. This has met frequently since December 1991 and has involved on a regular basis: JNCC, English Nature, Plantlife, RSNL, RSPB and WWF and, more recently, the National Trust.

Amongst issues it has handled have been Guidelines for the Preparation of the County Rare Plant Registers, Growing Wild Flowers from Seed, the Conservation of Biodiversity, the wider use of the BSBI's Translocation Panel and, perhaps above all, has stimulated participants to produce their own Plant Conservation Strategies.

Plantlife has now commissioned Hugh Syngé to prepare a *Prospectus for a UK Plant Conservation Strategy* which is expected in May, whilst Margaret Palmer of JNCC has completed a *Strategic Framework for the Conservation of Wild Plants in Great Britain and Northern Ireland* on behalf of English Nature, the Countryside Council for Wales, Scottish Natural Heritage and the Department of the Environment for Northern Ireland (the Country Agencies).

For the BSBI this last has two important implications. First, our role as information gatherers is formally and significantly recognised, whilst there is an understanding that some financial support is necessary for all organisations involved in such work. Second, JNCC will now establish and service a Plant Conservation Working Group with representatives from the Country Agencies and from Plantlife Link: BSBI will be represented on that Group.

So we have achieved one of our main aims and our Strategy of 1991 is now out-of-date. The Conservation Committee has asked a group of our members chaired by Clive Jermy, to prepare a new Strategy and reassess the priorities of the Society in the light of developments in the statutory and the voluntary sectors, and to take account of changing environmental threats and opportunities presented by things like the government's road-building programme, set-aside and the EC Habitats Directive. It must also review critically the monitoring needs of the conservation agencies in the 21st century and, with the Records Committee, discuss how the Society's recording might change to meet those needs.

Ultimately the priorities for conservation action of all the other agencies depend upon the sound foundation of information which the BSBI alone can deliver: let us be prepared

FRANKLYN PERRING, President

DIARY

N.B. These dates are supplementary to those in the 1994 Calendar.

1994

APRIL

27 London Natural History Society Meeting (see page 42)

MAY

20-30 National Farm Walk Week (see page 43)

JULY

2-3 Franklyn & Margaret Perring 'at home' (see page 41)

24-AUG. 5 *International Compositae* Conference, RBG, Kew (see *BSBI News* 65: 47)

See also page 68 for dates of 1994 Botany Tours at home and overseas

EDITOR

EDITORIAL

Confusing Fitz[g/G]eralds. I have been asked to point out that members should take extra care when writing to an R. Fitzgerald in Ireland. There are two ladies with much the same name who are continually getting each others mail.

Letters intended for Miss Rosemary Fitzgerald (note the lower case g), who is the recorder for v.c. H7 S. Tipperary should be sent to 606 River Forest, Leixlip, Co. Kildare, Ireland, whereas letters intended for Lady Rosemary FitzGerald (note the capital G), who is the recorder for v.c. H12 Co. Wexford should always be sent to her English address: Beggar's Roost, Lilstock, Nr BRIDGE-WATER, Somerset TA5 1SU. Lady Ro. says that the forwarding service is very efficient and she always receives her mail addressed in this way

Typography. I am most grateful to those members who wrote in response to my queries about punctuation and use of initial capitals in my last editorial. All considered that English names looked better with initial capitals, at least when used in a formal sense, and most thought they should always be spelt this way. There were some very eloquent arguments in favour of this. More on this in the next issue but I could not resist including now a little story from Arthur Chater. He wrote: 'After reading your editorial and John Palmer's article in *BSBI News* 65 I had a confusing dream and I am still not sure how many species of *Cerastium* I saw in it. The khaki-brown mouse-ear was scattered in the field I was walking through, but the grey mouse-ear in the field was the common mouse-ear. The common mouse-ear on the wall I passed was a sticky mouse-ear, and this wall mouse-ear looked quite unlike the field mouse-ear, which was a little mouse-ear but not nearly as small as the dwarf mouse-ear on the Shetland sand-dunes I then found myself in. This Shetland mouse-ear was obviously a sea mouse-ear, but it suddenly lost its hyphen and I woke with a start when I realised that a Sea Mouse has no ears. If any more hyphens had got lost and I had gone on dreaming, I suppose the next thing I saw would have been snow in summer.'

Apology. Due to pressure of work, I was so late in organising this issue of *BSBI News* that I had no time to send some proofs or even acknowledge some contributions. I apologise to those contributors affected and accept responsibility for all errors that remain.

BSBI Membership Survey. The results of this survey were to be published in this issue but I ran out of space! They will appear, in full, in September.

EDITOR

HON. GENERAL SECRETARY'S NOTES

Congratulations to:

Professor Robin Sibson, on being appointed Vice-Chancellor of the University of Kent. BSBI Historian, Dr David Allen writes 'probably only the second member to rise to such an illustrious academic height.'

Professor William T. Stearn, on the award of the Engler Medal in Gold by the International Association for Plant Taxonomy, at the International Botanical Congress in Yokohama. This was the first medal in Gold, which will be awarded once in six years for outstanding contribution to Taxonomic Botany. Replying, Prof. Stearn spoke about Engler, mentioning his reputation for being a slave driver, adding that although very honoured to receive this medal he was thankful that he did not have to work for Engler.

Mrs Joyce E. Smith, BSBI Recorder for v.c.17 Surrey, awarded the MBE for services to the environment as Secretary to the Surrey Flora Committee. Well deserved, as Joyce has been secretary to this committee for 32 years – not only keeping the Surrey plant records and taking part in much of the recording herself, but also contributing advice and firm comments on numerous local planning applications.

Vaughan Fleming, Highly Commended for two plant slides of Fungi in the British Gas Wildlife Photographer of the Year 1993 Competition – known for the very high standard of the entries. Vaughan's slides were of *Coriulus versicolor*, growing in a damp but bright area of Epping Forest which encouraged the growth of rich green algae in the more 'hairy' growth rings of the brackets surface, resulting in an unusually colourful example of an otherwise common fungus; and an *Unidentified Slime-mould* in the highly mobile fluid plasmodial stage. This very large specimen covered the side of a fallen branch over an area of about 25 square inches and seen in isolation looked like the torso of the 'Creature from the Black Lagoon', except that it was bright yellow/orange.

and **Marson Peet**, who has spent very many hours computerising Lincolnshire plant records for the v.c. recorder Mrs Rene Weston, and the Lincolnshire Trust, presented with the County Prestige of Merit Award for Conservation – an award which acknowledges the thanks of a county to 'behind the scenes' workers.

Tony Primavesi, a BSBI *Rosa* Referee, has been checking *Rosa* specimens from Herbaria at Cambridge **CGE**, Dublin **DBN**, Cardiff **NMW**, Leicester **LTR**, Liverpool **LIV**, Oxford **OXF** and the very large collection of Wolley-Dod specimens at the NHM London **BM**. Tony tells me that for this task he has written the word *Rosa*, and his name, on labels at least twenty thousand times! No medals, but we send our appreciation and admiration.

Bryan Fowler, currently Recorder for v.c. 39 Staffordshire, writes of his predecessor, the late Eric Edees, 'he will be greatly missed by the amateur botanists young and old for his friendly and patient advice.'

The late Jim Milner, left a black pre-war cigarette tin 16 cm × 12 cm, with perforations at each end and labelled 'J.P. Brunker of Dublin' – author of the *Flora of Co. Wicklow*. This mini vasculum was given to Jim in 1938 and fitting comfortably into his coat pocket – and with the capacity to hold a surprising number of small plants without damage – was taken on many field meetings at home and abroad.

MARY BRIGGS, Hon. General Secretary

RECORDERS AND RECORDING

Amendment no. 1 to List of BSBI Vice-county Recorders in *BSBI Year Book 1994*

Nick Stewart, now living in Ireland, has resigned from v.c. 87 W. Perth. We send thanks for his eleven years as Recorder – in which he was part author of *Checklist of the Plants of Perthshire*.

New appointments: we welcome

- v.c. 86 Stirlings: Mrs Edna W. Stewart, 33 Woodland Street, Milngavie, Glasgow G62 8NS
v.c. 87 W. Perth: Mr Neale W. Taylor, 2 King Street, Stanley, Perth PH1 4ND

Changes of address:

- v.c. 5&6 S. & N. Somerset: Paul & Ian Green, have moved to Farwells, Wayford, Crewkerne, Somerset, TA18 8QG
v.c. 74 Wigtowns: Dr Alan J Silverside, Dept. of Biological Sciences, University of Paisley, Renfrews, PA1 2BE
v.c. 103 Mid Ebudes: Dr Agnes Walker, 31 Westbourne Gardens, Glasgow G12 9PF
v.c. H14 Laois: Dr P.J. Foss, 75 Poddle Park, Kimmage, Dublin 12, Ireland

Amendment no. 1 to Panel of Referees and Specialists in *BSBI Year Book 1994*

David McClintock has retired as Referee for **ALIENS**, *Garden Plants*. David has helped many members with these for many years and we send him our warm thanks and appreciation. David will continue as referee for Bamboos and Heathers.

Changes of Address

Dr John R. Akeroyd – **POLYGONACEAE** (see list): 49 Kelvedon Close, Kingston-upon-Thames, Surrey KT2 5LF

ROSACEAE

Mrs Jeanette Fryer – *Cotoneaster*: Cornhill Cottage, Honeycritch Lane, Froxfield, Petersfield, GU32 1BE

Mr P.J.M. Nethercott – *Sorbus*: 6 Hazelwood Court, Hazelwood Road, Bristol BS8 1PU

Rev. A.L. Primavesi – *Rosa*: Ratcliffe College, Fosse Way, Ratcliffe On the Wreake, Leicester LE7 4SG

ASTERACEAE

Dr P.F. Yeo – *Aster*: The Store House, Gretton Road, Harringworth, Northants NN17 3AD

Corrigenda and Changes to *BSBI Year Book 1994*

- p. 7 Hon. Meetings Secretary address amendment:
Ailsa Burns, 3 Rosliston Road, Stapenhill, BURTON-upon-TRENT, Staffordshire DE15 9RJ
- p. 9 REGIONAL FIELD SECRETARY, SCOTLAND:
Mr G.P. Rothero, Stronlonag, Glenmasson, by DUNOON, Argyll PA23 8RA
- p. 9 Editorial Panel Watsonia: Dr R.R. MILL
- p. 12 Royal Botanical Gardens, Kew
- p. 18 Field meeting Sunday 26th June:
Leaders new address:
Mr P.R. & Mr I.P. Green, Farwells, Wayford, Crewkerne, Somerset TA18 8QG

MARY BRIGGS, Hon. General Secretary

BLACK POPLAR IN BRITAIN and plans for its conservation

Concern for the decline of the Black Poplar in Britain, largely stimulated by the pioneering work of Edgar Milne-Redhead and the BSBI's Survey (see *Watsonia* 18, 1-5) has resulted in the setting up of an Action Group including conservationists, arboriculturalists and black poplar enthusiasts who met at the Linnean Society on 9th December. I represented the BSBI. The Group aims to reverse this decline and provide a framework for action which will promote the meaning and importance of this tree in our landscape and will ensure the protection of its genetic variation.

Action Proposals

1. Mapping, recording and monitoring

There is a need to continue mapping and recording the localities of all the remaining native Black Poplars. Recent work by the Tree Council, in conjunction with the *Daily Telegraph*, has shown that there may still be more trees to locate and record. As almost all subsequent conservation work rests on having an accurate understanding of the distribution and numbers of trees, mapping, recording and regular monitoring remains a priority.

In collaboration with Biological Records Centre, a recording sheet has been drawn up to be sent out to all those interested. They will be returned to John Stokes of the Forestry Commission at Westonbirt Arboretum, Tetbury, Gloucestershire. It is possible that he will need to enlist the help of the v.c. recorders in some cases if he is unable to visit the site himself or needs further verification. Confirmed records will then be sent to Biological Records Centre to be included in the database on Black Poplar.

2. Planting and nursery stock

There is an urgent need to be able to provide trees for planting which are of known native origin and the aim is to encourage a number of nurseries to maintain stocks of bona-fide, accurately labelled native stock for establishment in a variety of situations. These nurseries could be partnerships between local authorities, Wildlife Trusts and the Tree Council, and organisations that may be able to provide land such as the Forestry Authority, Woodland Trust, National Trust and private individuals.

3. Conservation of genetic variation

Because of the preponderance of male trees in the population and the importance of the small number of females, it is imperative that the majority of genomes are conserved if the range of genetic variation is to be maintained. With between one and two thousand trees involved a lot of new planting space will be needed though. It is intended to initiate a study of variation in native Black Poplar as a basis for giving advice on the minimum number of trees which must be conserved to retain at least 90% of the genetic variation in the next generation of trees.

Collections of material will need to be established and a start has been made at the Forestry Authority Research Centre at Alice Holt and the Cambridge University Botanic Garden. There is a limit to the number of trees which can be accommodated so such organisations may also collect and monitor trees which are planted elsewhere.

4. New Planting and natural woodland

Because of the cultural significance and meaning of Black Poplar across its range, particularly in certain parts of the Midlands and East Anglia, any widespread planting might be seen as undermining its value and interest. However there are large areas of the country within its natural range and along

river corridors where the tree is either very infrequent or entirely absent. Much of the lower Thames Valley would fit this category.

Nowhere in Britain does Black Poplar now occur in native woodland typical of its river flood plain habitat: in only a few sites do male and female trees grow together. To address this absence the Action Group suggests that a suitable site is obtained on which to create a 'native' forest, prone to inundation, and planted with a range of trees, shrubs and herbs typical of such woodland and including a large number of genetically distinct male and female Black Poplars.

5. Cultural aspects of the tree

Because of the great interest in this mysterious and wonderful tree, it is proposed that a small book is published illustrating its ancient history, its utilitarian past, and its uncertain future, but dwelling particularly on its cultural role in local communities.

It is hoped that the conservation of Black Poplar will be a co-operative project involving all the main conservation organisations including the BSBI. Grant aid will be sought from the WWF, the country agencies and private sponsors to support the work.

FRANKLYN PERRING, President

ASTER TRIPOLIUM ON AN INLAND ROAD VERGE

Aster tripolium (Sea Aster) has been recorded along both verges of the A63 ('Clive Sullivan Way') to the West of Kingston-upon-Hull, GR 54/05.25 - 54/08.27, (v.c. 61). The author, a frequent user of this road, has not seen this species growing here in years before 1993.

More plants were seen, over a greater length, on the verge of the East-bound approach to Hull than of the West-bound carriageway. Plants were also seen in large numbers on the verge of an inclined slip road at its junction with the East-bound carriage, suggesting that growth here was favoured by the run-off of salt used to de-ice the road surface. Another noteworthy observation was that the plants appeared to be growing most densely under and around roadside crash-barriers, signs, and other artefacts.

This observation suggests that growth is favoured by factors such as the accretion of silt, salt and seed from spray and dust deflected downwards by these structures as well as the simple physical protection through prevention of roadside vegetation cutting. The central reservation is of concrete and there is yet insufficient accreted silt there to support plants of this stature.

On the West-bound carriageway, the few plants were concentrated at the eastern (Hull) end of the road.

It will be interesting to note how long this species survives and to see if any other maritime species can be found in 1994.

PETER J COOK, 15 Park Avenue, WITHERNSEA, Humberside, HU19 2JX

HAWKWEED KEY - UPDATE

A number of minor improvements have been made to the database of the *Random-access Guide to Selected British Hawkweeds* published by the National Museum of Wales and Field Studies Council in 1992. Purchasers can obtain a copy by returning their original disk, as proof of purchase, together with return postage, to the author at the address below.

JIM BEVAN, 23 Priory Street, CAMBRIDGE CB4 3QH

SAFE CUSTODY OF VOUCHERS

An earlier note (*BSBI News* 52: 10-12 (1989)) gave guidance on the circumstances in which a voucher should be taken to support a record. Such vouchers may need to be re-examined, possibly after the original collector is dead and there is a real risk that they may either be untraceable or destroyed unless arrangements have been made for them to be kept in a properly curated herbarium.

Those who have valuable vouchers in their possession should consider their long-term security, which may not be best achieved by leaving them to their family. Ideally the collector should arrange with a reputable institution for them to accept the vouchers as a gift in their lifetime or as a bequest. The terms should be agreed in writing and if it is to be a bequest his executors must be left with appropriate instructions.

In choosing a suitable institution the collector should consider how well its existing collections are curated and whether there is any likelihood of the policy changing about maintaining the herbarium.

DAVID J. McCOSH, Hon. Secretary, Records Committee

THE SCOTTISH RARE PLANT PROJECT

Over the last two years the Scottish Rare Plant Project has carried out a considerable amount of field monitoring and survey work on several nationally rare plants including: *Polygonatum verticillatum*, *Moneses uniflora*, *Lychnis viscaria*, *L. alpina*, *Rorippa islandica* and *Carex buxbaumii*. It is impossible to continue to set-up monitoring schemes for further species yet re-monitor populations. As with all monitoring work where there is any subjectivity at all in methodology, it is important to avoid frequent changes in the plant monitors. If any botanist would find monitoring a population of a rare species in Scotland, especially those listed above, interesting, I would be pleased to explain the methods used and provide any training as necessary. Many thanks to those members who have been such a help over the last two years.

PHIL LUSBY, Project Officer, Royal Botanic Garden, EDINBURGH EH3 5LR

TUTSAN (*HYPERICUM ANDROSAEMUM*) IN ESSEX

On 10th October 1992, whilst following a sinuous deer track in the depths of a coppice panel in Hatfield Forest in Essex, I came across a small plant of *Hypericum androsaemum* (Tutsan) growing between tussocks of *Deschampsia caespitosa* (Tufted Hair-grass). The plant consisted of two trailing and one erect stem which was about 45 cm tall. One of the trailing stems was dead but the others were in leaf and the erect stem ended in an unopened flower bud. Nearby plants included *Rubus fruticosus* (Bramble), *Glechoma hederacea* (Ground-ivy), *Malva moschata* (Musk Mallow), and frequent *Hypericum hirsutum* and *H. perforatum* (Hairy and Perforate St John's-wort). The understorey consists of sparse Maple stools which were coppiced in 1989. The nearest standard trees were Oaks 10 metres to the east and west.

In the 19th Century *Hypericum androsaemum* was considered by Gibson (1862) to be widely distributed although 'rather local' in Essex. Buxton (1898) records it from thickets in Epping Forest although it was not common. However, by the mid-20th Century it seems to have become extinct as a native plant and has only been noted as a casual since (Jermyn 1974; Tarpey & Heath 1990).

I am not clear why this widely distributed plant should have become extinct in the county. Certainly a lot of hedgerows have been grubbed and the plant is on the edge of its climatic range, preferring the damper west of the British Isles. However, shady woodland thickets survive and its historical Essex sites remain, including Epping Forest. Its tolerance of shade would also seem to have given *Hypericum androsaemum* some advantages over other woodland plants during this Century's decline in coppicing, pollarding and, in the case of Epping Forest, grazing.

The most probable explanation for the appearance of *Hypericum androsaemum* in Hatfield Forest is the spread of its seed from a garden by birds (see Robson 1990). Nonetheless, finding the species in its native habitat at least half a kilometre from the nearest house was exciting. It held out the prospect of its natural re-establishment as an Essex plant. Disappointingly, however, by autumn 1993 the plant had died and I could not find any others in this area of coppice. There is the faint hope that it might re-establish itself and I'll be keeping a lookout for it in Hatfield and Epping Forests.

In the meantime, reiterating Dr Robson's (1990) query, I would be interested to know if any reader has seen birds taking the berries of *Hypericum androsaemum*. Also does anyone have any good explanations for the species' decline from areas where its habitat seems to remain?

References

Buxton, E.N. (1898). *Epping Forest*. Fifth edn revised. Edward Stanford. London

Gibson, G.S. (1862). *The Flora of Essex*. Pamplin, London.

Jermyn, S.T. (1974). *Flora of Essex*. Essex Naturalist's Trust, Colchester.

Robson, N.K.B. (1990). British and Irish St John's-worts. In: *A Guide to Some Difficult Plants*. The Wildflower Society.

Tarpey, T. & Heath, J. (1990). *Wildflowers of North East Essex*. Colchester Natural History Society.

JEREMY DAGLEY, English Nature, Harbour House, Hythe Quay, COLCHESTER CO2 8JF

HYDROCHARIS MORSUS-RANAE IN V.C. 54

In 1993 a large flowering population of *Hydrocharis morsus-ranae* appeared in one of the lakes on the Burton Pits N.R. just outside Lincoln City. The species has not been recorded in SK/9.7 since 1965 - 'From a drain to the W. of the City'. Neither has it been recorded from either of the two Lincs. v.c.'s since the late 1960s. As there had been substantial earth works and disturbance to the banks of the pit in 1992 perhaps dormant material or seed was responsible for the population explosion.

RENE WESTON, Lindhris, Riseholme Lane, RISEHOLME, Lincoln LN2 2LD

SPIRANTHES SPIRALIS IN V.C. 53

Three rosettes, unidentified, appeared in the lawn of Mr and Mrs R. Heath at Pinchbeck in Spalding in 1992 (grid square TF/2.2). In 1993 three flowering spikes of *Spiranthes spiralis* were seen. Of great interest is that twelve years previously a rescue operation for *Spiranthes* was mounted when the strong colony at Tydd Gote (TF/4.1) was endangered by River Bank operations. Mrs K. Heath was a member of the party which transferred plants to the higher level bank and to Cambridgeshire Botanical Gardens. It has been suggested that about 12 years is a likely span from seed to flowering and seemingly seed might have been accidentally transferred in soil to the lawn in Pinchbeck.

I also remember a large population of *Spiranthes* appearing on the front lawn of University College Cardiff, Cathays Park, in 1953 and there have been other reports of this species in lawn habitats.

RENE WESTON, Lindhris, Riseholme Lane, RISEHOLME, Lincoln LN2 2LD

GLOBAL POSITIONING SYSTEMS

Have any members tried these devices for checking exactly where they are when, for example, crossing grid lines in an expanse of featureless moor? They work by analysing signals from satellites and, in the more accurate 'DGPS' version, use correction signals from land-based stations. The best can give you accuracy to 3 metres but this is an expensive route to follow. Accuracy of 10 m would be acceptable to me, but to only 100 m would introduce too much error when mapping plants in tetrads or 1 km squares.

The yachting fraternity uses these devices and I believe that there are versions available for hill-walkers which have OS grid references as their output. If anybody has had experience with this approach in botany, I would be most interested to hear from them.

A recent article in *The Times* suggests that within ten years, tiny satellite receivers for this purpose will be available at no more than £50. This type of technology often grows faster than predicted, so perhaps by the end of the decade we shall have no excuse for inaccurate grid references!

STEPHEN J BUNGARD, Kirngarth, Aislaby Road, Eaglescliffe, STOCKTON-ON-TEES, Cleveland TS16 0JJ

ROSE HYBRIDS IN FIFE AND KINROSS

During 1989 I was pleased to learn that a BSBI Handbook on roses was planned. I intimated to Chris Preston that I would be happy to provide records for v.c. 85 as I had attended a *Rosa* course at Kindrogan in 1978 and had been introduced to the complex nature of roses by Gordon Graham. Although I'd not done a lot in my own v.c. of Fife and Kinross I felt that, with a good bash at them during the autumn of 1990, I could at least produce some worthwhile records. So I spent every Saturday from mid August until November 'doing' the 20 or so 10 km squares, by quadrants. It soon became evident that the seven main Scottish taxa were present in most squares, i.e. *Rosa canina*, *R. caesia* (ssp. *caesia* and *glauca*), *R. sherardii*, *R. mollis*, *R. rubiginosa* and *R. pimpinellifolia*. But in many instances it was clear that the species were far from pure, while in some cases it was impossible to allocate a name at all; in other words, there was manifest evidence of hybridity(1).

In the autumns since 1990 I've continued to check roses in the particular squares in which I've been recording. In many areas, having decided on what species were present, it proved possible (in my opinion) to say that hybrids between them were also often nearby; so I have been able to compile a list of at least those which seem to be reasonably common. What I did not do, was to separate *canina* into its various groups, as described in the now published *Handbook* (2) because until it appeared I was not fully aware of their differentiating features. This is a pity as it has meant a blank in the maps for v.c.85, when in fact *canina* is one of the commonest roses to be found.

I also regret not submitting some of my, admittedly putative, hybrid records. I was a bit taken aback on looking though the new *Handbook* to find that there were a considerable number of hybrids for many v.c.s, most described as 'nondirectional records' – a phrase I did not know, but which Chris Preston has been kind enough to explain means that the male and female parentage has not been indicated by the recorder. For the record, some of my material was checked by Gordon Graham (GGG) but unfortunately the determinations were not passed on to BRC; I am confident the others occur in v.c. 85 (although I cannot give parentages). The numbers refer to the species no. in the *Handbook*:-

5×18 *pimpinellifolia* × *rubiginosa* (on Map 9 but not in the text); 12×13a and 12×13b *canina* × *caesia* ssp. *caesia* and *glauca* (both probably correct, per GGG); 13a×12 *caesia* ssp. *caesia* × *canina* (conf. GGG) and 13b×12 *caesia* ssp. *glauca* × *canina*; 12×16 and 16×12 *canina* × *sherardii* (Map 21); 12×17 and 17×12 *canina* × *mollis*; 12×18 *canina* × *rubiginosa* (probably correct, per GGG); 13×18 *caesia* (s.l.) × *rubiginosa* (det. GGG); 16×13 *sherardii* × *caesia* (s.l.); 16×17 and

17×16 *sherardii* × *mollis*; 17×13 *mollis* × *caesia* (s.l.); 17×18 and 18×17 *mollis* × *rubiginosa*; 18×16 *rubiginosa* × *sherardii* (in Stace 1975 (3)). And there are almost certainly others, more difficult to determine.

References

- (1) Ballantyne, G.H. (1991). A rose by 49 other names? *BSBI Scottish Newsletter* **13**: 20-22.
- (2) Graham, G.G. and Primavesi, A.L. (1993). *Roses of Great Britain and Ireland*. BSBI Handbook No. 7.
- (3) Stace, C.A. (ed.) (1975). *Hybridization and the flora of the British Isles*: 226

G.H. BALLANTYNE, Branksome, 193 Nicol Street, KIRKCALDY, Fife

PLANT TRANSLOCATION, HABITAT FRAGMENTATION, SEED DISPERSAL AND CLIMATE CHANGE

Since the last century (e.g. Anon. 1897) the pros and cons of plant translocations in the British Isles have regularly been discussed, often with passion. The current debate in *BSBI News* fails to fully take into account the implication of habitat fragmentation in relation to dispersal ability of plant species and climate change. Throughout vegetation history climate has changed, and plants have had to migrate along climatic gradients in order to survive. Often species have been able to survive in regions of unfavourable climate (e.g. too dry, wet or cold) in small, but climatically favourable, geographical areas called plant refugia. Such refugia were common during the last ice age and modern equivalents may be found, for instance, for arctic species in the British Isles. Following further climate change these species would either become extinct or spread once again.

Modern habitat fragmentation results in the creation of islands of seminatural vegetation which are in fact not dissimilar to the plant refugia mentioned above. The difference is that whenever climate changes, either naturally or as a result of global warming, most species will be unable to migrate to climatically suitable habitats. The mode of dispersal of particular species will determine their ability to hop from island to island. Bird-dispersed and some well-adapted wind-dispersed species will be more likely to migrate whereas other species will fail to do so.

If the observed increase in CO₂ results in global warming as predicted, then in Britain the majority of plant species will have to migrate northwards or upslope. Furthermore if the climatic changes are extensive and rapid the likelihood that a species moves successfully will decrease. As a result we will be left with the choice of either losing many species or we will have to help those which are unable to migrate across man-made landscapes.

In Britain the future distribution of most species is likely to reflect their ability to cope with modern man-made landscapes rather than natural environmental factors. If we sit and watch, we will be able to find out which species are capable of migrating through a man-made countryside and also witness a decrease in species richness as well as species extinctions. At the same time the spread of introduced species, chiefly ornamentals, into semi-natural vegetation from surrounding areas will accelerate leading to an increase in the relative importance of exotic species.

In order to maintain a diverse native flora, some degree of plant translocation may be desirable. It should involve only species unable to disperse between islands of semi-natural vegetation. Plants which can propagate vegetatively should be considered separately from obligate sexually reproducing species. In the latter group of species, individual plants can be translocated. If conditions are suitable they will produce seeds and regenerate, otherwise they will disappear. For plants which can propagate vegetatively as well as sexually, it may be advisable only to artificially disperse seeds rather than translocate plants. This would prevent the establishment of populations which are unable to produce seeds, which in natural landscapes would only spread locally and fail to migrate.

There are good justifications for limiting the translocations of exotic species, chiefly because some of them become invasive. The translocation of some native species may present similar problems. However the pros and cons of plant translocations in the British Isles are not clear-cut because of man's ever increasing impact on nature.

Reference

Anon. (1897). Ignorance and introduction. *Jr. Nat.* 6: 82.

PIERRE BINGGELI, 41 Glenmanus Road, PORTRUSH, Antrim BT56 8HU

THE *POTENTILLA ERECTA-REPTANS* GROUP – SOME PRACTICAL HINTS FOR IDENTIFICATION

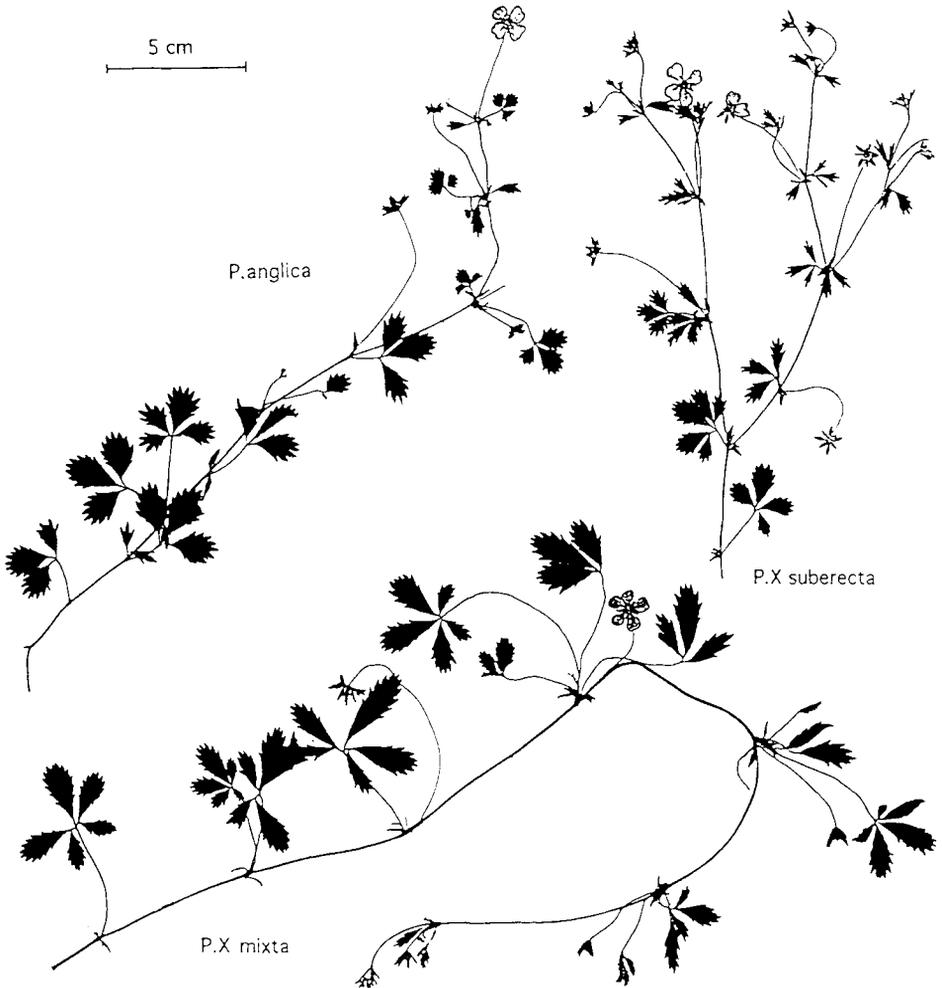
Last September I gave a talk on this subject at the Recorders' Conference in York, and received a number of requests for written notes. The following is a summary of the points that the Recorders found most helpful, for the benefit of all members who have problems with this very common, yet difficult, group.

P. erecta (L.) Rausch. (Tormentil), $2n=28$, and *P. reptans* L. (Creeping Cinquefoil), $2n=28$, are closely related members of the genus *Potentilla*. Although each shows a considerable amount of infraspecific variation, they present no real difficulty in identification. *P. erecta* has ternate, sessile or subsessile cauline leaves with large, divided, stipules. There is one leaf per node and the leaves become progressively smaller from the base of the stem to the terminal, flower-bearing region. The growth habit is erect and the plant does not root at the nodes. The flowers are 4-merous (5-merous flowers are occasional, generally early in the flowering season) and seed is regularly set.

P. reptans has 5(-7)-nate leaves (ternate leaves are a rare aberration), with small, inconspicuous stipules and long petioles, although this is a very variable character which depends upon the height of the surrounding vegetation. Most nodes bear more than one leaf and the leaf size remains more or less constant throughout the growing season. The long runners root readily so that large areas may be colonised by a single clone. The flowers are 5-merous. Although the plants are fertile, seed set often fails because of a genetic self-incompatibility mechanism, which means that pollen from one clone cannot fertilise its own flowers.

P. anglica Laich. (Trailing Tormentil), $2n=56$, is a textbook example of an allopolyploid species, which arose by hybridization between *P. erecta* and *P. reptans* coupled with a doubling of the chromosome number. It is intermediate between the two parental species in morphology but also has some features which are directly attributable to its higher chromosome number. *P. anglica* has a mixture of 3-, 4- and 5-nate leaves, the proportion of 3s to 5s varying considerably from plant to plant. Small, simple leaves also occur. The stipules are intermediate in size and shape between those of *P. erecta* and *P. reptans*. Each node bears one to several leaves with petioles of variable length. The stems are procumbent; the leaflet number, leaf size and petiole length all decrease through the growing season so that a plant may look more like *P. reptans* in early summer but more like *P. erecta* later on. *P. anglica* roots at the nodes, but less readily than *P. reptans*. The flowers have 4 or 5 petals and seed is set regularly. Differences due directly to the higher chromosome number are that the leaflets tend to have a lower length: breadth ratio than those of *P. erecta* and *P. reptans* (although this is not sufficiently obvious to be a reliable diagnostic character), and the pollen grains are larger. The presence of additional sets of chromosomes also causes the self-incompatibility mechanism to break down. A single, isolated specimen of *P. anglica* is therefore able to set seed as a result of self pollination, making seed fertility a good diagnostic character.

The separation of *P. erecta*, *P. reptans* and *P. anglica* is straightforward but the frequent occurrence of natural hybrids confuses the picture. *P. × suberecta* Zimm., $2n=42$, is the hybrid between *P. anglica* and *P. erecta*. *P. × mixta* Nolte ex Reichb., $2n=42$, is the hybrid between *P. anglica* and *P. reptans*. Both of these are quite common but the hybrid between *P. erecta* and *P. reptans*, $2n=28$, is exceedingly rare.



Potentilla anglica, *P. × mixta* and *P. × suberecta*, all © B. Harold 1994

Both *P. × suberecta* and *P. × mixta* have a mixture of 3-, 4- and 5-nate, petiolate, cauline leaves and 4- and 5-merous flowers. This clearly distinguishes them from *P. erecta* and *P. reptans*. The problem then becomes the separation of *P. anglica* and its hybrids. *P. × mixta* is very like *P. reptans* in its growth habit, with long runners, rooting at the nodes, and little diminution in leaf size from base to tip of the stem. It is almost totally sterile and behaves as a vegetative apomict, spreading along roadsides and paths. It is frequently found in isolation from any of the other members of the group.

P. × suberecta is much more like *P. erecta*, with a predominance of ternate leaves on short petioles. There is generally only one leaf per node and the leaf size decreases from base to tip of the stem. *P. × suberecta* does not normally root at the nodes and therefore does not spread vegetatively. It is partially fertile and usually sets a few seeds per flower head.

In practice, the greatest difficulty is in distinguishing between *P. anglica* and *P. × suberecta* and I am sometimes unable to put a positive identification on herbarium sheets that I am sent to referee. Seed and pollen fertility and pollen size are usually the deciding factors. However, if a plant is not setting seed, can one be sure that it was not simply immature? As a rule of thumb, I look for three withered flowers beyond the flower that is currently open. The oldest of these should contain swollen carpels if the plant is fertile. Pollen must be examined microscopically (×10 objective). One or two anthers are taken from an unopened bud which is old enough for the petals to have turned yellow (the anthers of open flowers are generally almost empty), and squashed gently in a drop of water, or, if available, acetocarmine stain (0.5g carmine in 100ml 45% acetic acid). Good pollen preparations can even be obtained from old herbarium sheets. Sterile grains are empty and shrunken, viable ones are rounded and stained pink by the acetocarmine. The complete sterility of *P. × mixta* is easily confirmed by pollen examination, but *P. anglica* and *P. × suberecta* may still be confused since *P. anglica* may have as little as 30% good pollen whilst *P. × suberecta* may have as much as 60%! The pollen grains of *P. anglica* are larger and more even in size, however.

For the botanist in the field, distinguishing between *P. anglica* and *P. × suberecta* is less of a problem than for the referee, who may only have one herbarium sheet to look at. *P. × suberecta* does not spread vegetatively and is therefore only found in proximity to both parents. If *P. erecta* is not in the vicinity, the plant is almost certain to be *P. anglica*. On the other hand, if *P. erecta* is growing nearby the plant could be either *P. anglica* or *P. × suberecta*. A closer inspection of the area will almost certainly reveal both, because *P. erecta* and *P. anglica* hybridize quite readily when they meet.

Reference

Harold, B. (1988). *Potentilla erecta* (L.) Rausch. / *P. reptans* L. / *P. anglica* Laich. and their hybrids, pp 49-51, in *Plant Crib*, BSBI

BRENDA HAROLD, Farthings, The Green, Sarratt, RICKMANSWORTH, Herts. WD3 6BP

LESS RARE SPECIES AND HABITATS

Whilst I certainly agree with the general sentiments of John Patmore's letter (*BSBI News* 65), I am somewhat alarmed at the conclusions, and feel strongly that the BSBI does not have a direct role here.

Each county or area in England, Scotland and Wales has an office of English Nature, Scottish Natural Heritage or Countryside Commission for Wales. Each county or area also has a County Naturalists Trust. Many or most are actively engaged in identifying, surveying, and notifying County Wildlife Sites, SNCI's or whatever is the latest name for these 'Second Tier' sites.

For the BSBI, with no paid staff, and certainly with an emphasis on knowledge of species, to enter this arena, would be unnecessary and, I suspect, impossible. The BSBI does not have a comprehensive plant database. It does have access to, and of course contributes substantially to that at BRC, Monks Wood. But even that is not yet in any way comprehensive.

I feel that the main role for the BSBI is to make certain:

- a) that the relevant country agencies or County Trusts **know** what rare plants or assemblages are where, and
- b) to try and make certain these bodies reciprocate.

This is a difficult job. Some agencies and Trusts are forthcoming, others secretive; some will send data, most insist on our amateur recorders going to them; still others cite the Data Protection Act, and there is more talk about charging our recorders for species data supplied – when we have always supplied everything free!

To achieve a consistent and workable relationship directly with a multiplicity of offices is unlikely to be feasible.

However, at 'Head Office' level, it might be possible to get some agreement on procedures, assuming that we had a volunteer with the time, or the money to pay someone to organise this. It is not an easy problem to solve, but we are working on it.

DAVID PEARMAN, The Old Rectory, Frome St Quintin, DORCHESTER, Dorset DT2 0HF

THREATS TO LESS RARE SPECIES AND HABITATS

I would like to add support to John Patmore's note on the continuing threat to habitats and species outside SSSI, SNCI and other designated sites. I agree that the BSBI has a crucial role to play in ensuring that the localities of rare plants do not continue to be destroyed through ignorance or neglect. There are several common problems which the BSBI could help to address.

The planning authorities rarely have up to date (if any) information on the location of notable plants.

Landowners are often unaware of the presence of notable plants in their care and of the management required for their survival.

Recorders are often all too well aware of colonies of notable plants which are declining through neglect or inappropriate management but the information rarely gets passed to those who may be able to influence the situation.

I would suggest that a valuable step forward would be the production of county inventories of notable plant localities. To be most practical each inventory would list only the most important colonies of the top 30 or so plants which are of particular importance in the local context. Such information can be readily compiled from existing records and the knowledge of local recorders. The inventory could provide the basis for regular monitoring of the health of the colonies and highlight any particular requirements or threats to the sites. Such a document if regularly updated could provide a useful tool to planning authorities for the formulation of planning policies as well as helping to target the resources of county wildlife trusts, English Nature and other bodies.

GRAHAM STEVEN, English Nature, Foxhold House, Crookham Common, NEWBURY RG15 8EL

WHEN DOES *ARMERIA MARITIMA* START TO FLOWER?

According to the Biological Flora account of *Armeria maritima* (Woodell & Dale 1993) British coastal plants begin flowering in mid-May, with saltmarsh plants tending to flower a week or two later. When I queried this statement with Dr Woodell, I gathered it was based mainly on east-coast experience. I have been keeping records of first-flowering dates for some 50 years, and my experience is that on the west coast *Armeria maritima* (Thrift) begins flowering at any time from mid-March onwards – my earliest date is March 17, 1958, at Stack Rocks, Pembrokeshire – and that by mid-April flowering is always well under way. I have one other March record and nine April records for the west coast between Co. Antrim and the Isle of Wight. My only east-coast record is for Blakeney Point, Norfolk, on April 27, 1955.

I do not visit the coast in March or April every year, but on the west coast I am always confident of finding *Armeria maritima* in flower by April. Does anybody else have this experience of finding it in flower on the west coast distinctly earlier than in the east? Or is the difference, as Dr Woodell suggests, between saltmarshes and rocky habitats?

Reference

Woodell, S.R.J. & Dale, A. (1993). Biological Flora of the British Isles: *Armeria maritima* (Mill.) Willd. *J. Ecol.*, **81**: 573-588

RICHARD FITTER, Drifts, Chinnor Hill, CHINNOR, Oxon OX9 4BS

THE SECOND OXFORDSHIRE *ORCHIS SIMIA* SITE

So far as I know the only printed reference to the second Oxfordshire site of the Monkey Orchid *Orchis simia* is in the preface to the second edition of the New Naturalist *Wild Orchids of Britain* by V.S. Summerhayes (1968), where it is said to have been found in 1965. Acting, so far as I can remember, on information supplied by E. F. Warburg, I saw this plant in flower on May 22nd, 1971, and May 28th, 1972, and found it in a non-flowering state in 1973 and 1974. By 1975, however, it had disappeared, apparently unable to compete with the tall vegetation which had grown up inside the wire cage intended to protect it. I continued to visit the site for a few more years without it reappearing, so that it now seems reasonable to reveal that it was at the head of thecombe between Bald and Shirburn Hills and actually just inside the Aston Rowant NNR.

Inquiries among present and former Oxford and Oxfordshire botanists have so far failed to come up with the name of the person who actually found it. It seems not to have been Dr Warburg. Does anybody know who it was?

RICHARD FITTER, Drifts, Chinnor Hill, CHINNOR, Oxon, OX9 4BS

DITTANDER NEAR OLD HOSPITALS

In *BSBI News* **58**, Mr Sturt discussed the possible connection between a colony of Dittander (*Lepidium latifolium*) at Chichester and the site of a very old hospital.

In the Dartford area (v.c.16) I have, in the last ten years, found established colonies of Dittander in wildish places in the grounds of three different, widely separated, oldish hospitals. This is more than a coincidence, surely, since Dittander does not occur elsewhere in the area nor by the estuarine Thames in v.c. 16. Moreover, there are as far as I am aware, no other records (adventive or native) from the West Kent vice-county. (None appear in *Atlas of the Kent Flora* 1982, for instance, though this leaves out a lot of v.c.16).

The hospitals referred to are:

- a) Bexley Hospital, on the SW side of Dartford Heath, where the plants grow about 150 metres from the buildings. (Opened in 1898).
- b) Joyce Green Hospital, on Dartford Marshes, where the plants occur about 70 metres from the buildings. (Opened 1902).
- c) The old G.L.C. Southern Hospital at Darenth where the plants grow about 250 metres from the buildings (and are associated with *Trifolium fragiferum* (Strawberry Clover)). (Opened in 1890 but now demolished).

The position of all these colonies makes it impossible to believe that they were ever gardens, or near gardens, but although they could have originated from past garden rubbish dumped out in the wild parts of the extensive grounds, this seems rather unlikely to have happened in three separate locations.

At the moment I can contribute nothing more to this interesting problem.

JOHN R. PALMER, 19 Watermill Way, South Darenth, DARTFORD, Kent DA4 9BB

ALTHAEA HIRSUTA IN V.C. 54

Twenty-seven plants of *Althaea hirsuta* were recorded from Broughton Woods SE/9.1 in July 1993 by Mrs. V. Wilkin and I. Weston. The plants were found in ruts on a track originally designed for timber extraction. The species had been recorded in 1979 by V.W., E.J. Gibbons and V. Pennell in this complex of woodland but an earlier record was made in 1935 by the Lincs Naturalist Union (*Trans. LNU* 1935 p. 42). Then a most unusual series of plants were seen. These proved to be aliens mainly from the Mediterranean area. Mr James Beveridge in 1935 reported that thirty years previously many pheasants were raised in the wood and their food was mainly imported. As the area in which the plants were then found was one which had just been felled and replanted it was inferred that seed had lain dormant until 1935.

This species is a very rare casual in Lincs. and has survived in Broughton Woods for nearly a century.

RENE WESTON, Lindhris, Riseholme Lane, RISEHOLME, Lincoln LN2 2LD

SCARCE PLANTS PROJECT

SCARCE PLANTS PROJECT

This is merely to report that the text and maps were handed over to JNCC on 17th February 1994. They hope to complete designs and refereeing by mid-April, allowing us to incorporate comments by end April. Then JNCC would aim to get a final proof to us by July and have book printed by September.

The Atlas will consist of short introductory chapters, text and maps concerning the 325 species investigated and special maps on about 80 of those, showing more detailed coverage on populations, later cut offs and other information. The book will probably be of the same size as the recent *Flora of Wiltshire*, and contain about 700 pages. We hope members will feel it sets a new standard in Atlas Production, building on that of the recent Bryophyte Atlases.

We trust the retail price will be in the order of £25 to £30, and there will definitely be a pre-publication offer, hopefully in the next issue of *BSBI News*.

DAVID PEARMAN & CHRIS PRESTON

NOTES AND ARTICLES

LINARIA VULGARIS IN TROUBLE IN V.C. 45

In *BSBI News* 62 for December 1992, page 16, Mr G. Knight of Haverfordwest, Dyfed, describes populations of *Linaria vulgaris* (Common Toadflax) in that district with most of the plants blackened, distorted and dying. This was observed by Mr Knight at several sites in 1990, 1991 and 1992, where usually there had been 'glorious displays' of flowers. In 1993, Mr Knight sent me some affected plants. Microscopic examination of the blackened flowers showed they were being destroyed by a

fungus, a downy mildew – *Peronospora linariae* Fuckel. This fungus is rare, there being perhaps only one record of it on this host in the British Isles – from Norfolk in 1944. (See Francis, S.M., & Waterhouse, G.M. (1988) List of Peronosporaceae reported from the British Isles. *Trans. Brit. mycol. Soc.* **91**(1): 1-62. I will deposit the herbarium material at the International Mycological Institute and prepare a more detailed note for the *Mycologist*. One would expect the first symptoms to be pale yellow patches seen on the upper surfaces of the leaves with 'fluff' – the fungus, growing out of the leaf on the lower surfaces of the leaves beneath the yellow patches. It would be useful to know of other members who have seen affected plants. I am willing to examine **pressed, dry material, NOT in a plastic bag**, if members enclose a stamp for a reply. It is clearly of importance that the spread of this disease is not encouraged. Downy mildews require the arrival of spores from affected plants followed by the persistence of wet films at the surfaces of leaves. Perhaps first described from *Chaenorhinum minus* – Small Toadflax, in Germany in 1867, this fungus is found in Ireland on *Cymbalaria muralis* – Ivy-leaved Toadflax, though there do not seem to have been any records since 1936.

TOM PREECE, Kinton, Turners Lane, Llyncllys Hill, OSWESTRY, Shropshire SY10 8LL

Mr Knight has asked whether Tom Preece would be willing to examine specimens of other wild plants with problems. Tom is recording the fungi of wild plants in Shropshire, but is willing to examine wild plants from anywhere else if he is contacted before the specimens are sent to him. Tom points out that, apart from pests and gall-formers diseases of wild plants are caused by viruses, bacteria and nutritional disorders as well as fungi and he will have to refer problems which are not caused by fungi to others. However he is willing to start along these lines if members wish it. It is obvious (or is it in view of continuing problems aired in *BSBI News*?) that any free help for members in this way will be dependent on members sending a stamp for a reply!

EDITOR

The Failing Flower

The failing flower lived a loveless life.
When scoffers held it and, inevitably
Mocked at its ineffectuality,
Then the tame plant fell from strife.
Dead and unloved, gone and derided,
I hope, but feel it won't come back,
Because their laughter paves with tarmac
The habitat wherein it simply resided.
Yet Lazarus, who from the other side
Returns to where he once was born,
Entreats my heart to now be less forlorn –
Be it fictitious or a fact that he had died.
So I will look with loving eye
At the weak plant that cannot die.

Written on 27th and 28th November 1993

JOHN BENSON, 15 Anglesey Road, LLANDUDNO, Gwynedd LL30 2QB

ENGLISH NAMES PLEASE

As a naturalist since the age of eight, now a nonagenarian, and still recording, may I make a plea on behalf of the vast number of people interested in our wildlife, for English names as well as Latin to be used in our books on plants.

The majority of members of the various societies on field days rarely have any Latin, and to have plant names given to them in this way is just 'double Dutch' to many. Similarly, when Latin alone is quoted in books, they find identification very difficult. What is simpler than a Flora such as Keble Martin's, Latin name first, followed by the English one in large print, even Bentham and Hooker did it this way.

I think what I call the 'professional amateur' or 'amateur professional', the back-bone of the BSBI, must realise that it is the 'pure amateurs' who are the great supporters of our societies these days, it is their money which keeps them running.

As children, we first learn the English names of plants, and in old age it is again the English names that are remembered more easily than the Latin.

We call a fox, a fox, in books on mammals, not *Vulpes*, so why not call a dandelion, a dandelion, not *Taraxacum officinale*. These days, books on plants should contain both Latin and English names. We have given our flora such wonderfully descriptive names as Lambs tongue, Enchanter's nightshade, can we not stick to these except when 'science' is involved, I am sure that is what most people desire.

PEGGIE PITKIN, Nafford Lodge, Eckington, PERSHORE, Worcs. WR10 3DJ

EUROPEAN NAMES OF WILD FLOWERS

I have been following, with interest, the debate on 'English Names' and Michael Scott's 'Thoughts on a Scandinavian Flora' (*BSBI News* 65) prompted some investigation. His pleasure at finding 'not a contrived hyphen in sight' stems mainly from the fact that the Scandinavian languages generally merge their adjectives and nouns into one word. This leaves satisfactory indexing somewhat difficult as the adjective usually precedes the noun. It can also lead to enormously long words in the spheres of technology!

However, the colloquial use of local names is a delight in any language, especially as they are not always based on botanical taxonomy. For example, the Norwegians have:

	Engfiol	(meadow violet)	<i>Viola canina</i>
	Fjellfiol	(mountain violet)	<i>Viola biflora</i>
	Marsfiol	(March? violet)	<i>Viola odorata</i>
	Skogsfiol	(wood violet)	<i>Viola riviniana</i>
and:	Nattfiol	(night violet)	<i>Platanthera bifolia</i>
	Månefiol	(moon violet)	<i>Lunaria rediviva</i>

The French rarely use composite words

Violette des chiens	(violet of the dogs)	<i>Viola canina</i>
Violette des bois	(violet of the woods)	<i>Viola riviniana</i>

Michael Scott also picked out *Antemaria dioica*, **kattfot** in Swedish, **kattfot** in Norwegian, **pied-de-chat** in French, **katzenspötchen** in German and, of course, **Cat's-foot** in English (sometimes!).

With our increased opportunities for travel we, as Europeans, are likely to meet the need for a knowledge of common names in different languages. It is worthwhile considering that the rules of nomenclature for English names should be drafted, amongst other things, to aid the foreign botanist (as well as ourselves) to comprehend our system readily. Let us hope that our European colleagues take the same approach. The Latin names are universal in the world of botany – but don't mean much to the country folk whose aid we need to enlist in order to help us in our field activities.

The essential fact that comes through a study of common names is that many have origins in the distant past. Ours may be Celtic, Latin, Anglo-Saxon, Viking or French. Should we be trying to standardise them? One thing is for sure, there are very few 'English' names in the modern sense of the word. Is not the charm of the local name its very variability and, indeed, its history? In the old Norwegian communities, where the inhabitants of the shoreline of each fjord had their own names for everything, it is still difficult to reduce the possibilities to an acceptable list of common names for wild flowers in Norwegian. Your correspondents indicate that this is also true in the United Kingdom, to a greater or lesser extent.

The insertion of hyphens into common names serves to aid in a logical system of classification and indexing, vital to any work on the subject. Lord Lucas, *BSBI News* 65, goes to the heart of the matter. The management of the modern computer database means that an index can be written to comply with whatever rules the author selects. The punctuation is only important if the author puts that into the system. The other purpose for hyphenation seems to be as the vehicle for a binomial system. As R.J. Cook says, also in *BSBI News* 65, 'There is little point in the development of a bi (or even) trinomial system for common names', a view with which I have much sympathy. I agree, wholeheartedly, with the review of English names and applaud the work involved, but I must join the band who would like to see the punctuation modified. May the debate continue!

JULIAN BROWSE, Le Moulin de Folleville, 35460 St Ouen-la-Rouërie, France

IT HAPPENS TO US ALL . . .

1.4.94

Dear Fred,

Do you remember you told me where to find *Vertigo verticalis* some 3 or 4 years ago? Well, I was passing that way during my holiday in Scotland and had a couple of hours to spare and remembering that you had said it was only a ½-hour from the road and very easy to find I thought I would go and look for it.

Things didn't start too well, because the lay-by where you told me to park isn't there any more due to a road widening scheme. That meant that when I did find a parking place there was no way of finding the fence post that I was supposed to line up with the tree to get me to the lochan from which I had to head for the mountain. Anyhow I had a guess at which post it might have been, but there were rather more lochans than I expected. And I suppose it was the wet summer that had produced 5 little burns running down the hillside where you said there were two and that I should walk between them.

I expect it was the wet ground that slowed me down and so it took me an hour to get to the foot of the mountain, which didn't seem to quite fit your description. About this time it started to rain and so when I lined up the boulders you had told me about, one of them turned out to be a dead sheep and I had to start again. Wet glasses are difficult to see through.

In the end I managed to get to the cliff face you had described but the rain was getting heavier and the cloud was quite thick, which is probably why I didn't get any *Vertigo* even though I searched for an hour. However, I did find something even better, a little white-flowered plant which I couldn't identify; I think it is something quite new so have photographed it and sent a specimen to the v.c. recorder. So I was quite pleased even though I was very wet when I got back to the car and I had

been away 5 hours. My wife and the friends she was staying with weren't pleased though and had all gone out for a meal when I arrived. And when I said I may have discovered a plant new to science all they said was 'Oh?'. I think I shall call it *Euphoria scotica* and publish my findings soon.

Best wishes,

John.

P.S. Coincidentally, I have just, as I was going to stick down this letter received a reply from the v.c. recorder to whom I sent the specimens. He says they are the local, very common form of *Cardaminopsis petraea*. I don't think he knows what he is talking about, but maybe I had better double check.

P.P.S. If you need instructions on finding any of my local plants, do let me know, I'll be only too pleased to send you directions.

To all those friends who have helped me – thank you, your instructions were never like this! But the weather has been.

ALAN SHOWLER, 12 Wedgwood Drive, Hughenden Valley, HIGH WYCOMBE, Bucks.
HP14 4PA

PLANT LIFE IN POLLARDED WILLOWS

I was interested in Jack Oliver's account of 'higher plant' epiphytes found on six adjacent crack willows (*Salix fragilis*) by the River Kennet at Marlborough (*BSBI News* 65).

I have a great affection for these hospitable trees, which are hosts not only to a variety of higher and lower plants but also to many insects, birds and animals which use them as permanent or temporary homes or resting places. In 1989 and 1990 I spent many interesting and happy hours wandering among pollards of both crack willow and white willow (*S. alba*) on the banks of the Rivers Evenlode and Windrush in west Oxfordshire, in low-lying areas of north-west Gloucestershire, in the Somerset Levels, and in parts of the Teme and Corve valleys of Shropshire. After examining nearly 400 trees (140 of these, beside an unimproved watermeadow, are owned by an international airline pilot who pollards them himself, on a ten-year rotation) I found I had recorded 74 vascular plant species growing on or in the crowns, bark or hollow trunks. There were 3 ferns, 7 grasses, 36 herbs, 15 climbers and shrubs, and 13 trees.

The ferns were *Dryopteris dilatata* (Broad Buckler-fern), *D. filix-mas* (Male-fern) and *Polypodium vulgare* (Polypody), and the most uncommon of the grasses was *Festuca gigantea* (Giant Fescue). Among the more interesting and unusual herbs were *Arctium minus* (Lesser Burdock), *Cardamine pratensis* (Cuckooflower), *Cymbalaria muralis* (Ivy-leaved Toadflax), *Digitalis purpurea* (Foxglove), *Eupatorium cannabinum* (Hemp-agrimony), *Filipendula ulmaria* (Meadowsweet), *Galeopsis tetrahit* (Common Hemp-nettle), *Geum urbanum* (Wood Avens), *Glechoma hederacea* (Ground-ivy), *Hypericum perforatum* (Perforate St John's-wort), *Mercurialis perennis* (Dog's Mercury), *Moehringia trinervia* (Three-nerved Sandwort) and *Scrophularia auriculata* (Water Figwort). The last-named was growing halfway up the trunk of a crack willow, in a fissure in the bark, where a seed had probably lodged during winter floods.

There were three species of *Ribes*: *R. nigrum* (Black Currant), *R. rubrum* (Red Currant) and *R. uva-crispa* (Gooseberry); the latter, its ripe fruit always dangling just beyond reach, was almost as common as *Rosa canina* (Dog-rose), *Rubus fruticosus* (Bramble), *Sambucus nigra* (Elder) and *Taraxacum* sp. (Dandelion). Also in this group were *Bryonia dioica* (White Bryony), *Cornus sanguinea* (Dogwood), *Ligustrum vulgare* (Wild Privet), *Lonicera periclymenum* (Honeysuckle), *Rubus caesius*

(Dewberry), *Solanum dulcamara* (Bittersweet) and *Tamus communis* (Black Bryony). And one autumn, beside the River Leach in Gloucestershire, I found fruiting stems of *Rosa canina* and *Symphoricarpos albus* (Snowberry) hanging decoratively together over the water from the crown of a crack willow.

The thirteen tree species – some a mere few inches tall, others up to about 10ft in height – were *Acer pseudoplatanus* (Sycamore), a diminutive *Aesculus hippocastanum* (Horse-chestnut), perhaps sprouted from a 'conker' hidden in the pollard by a small boy and then forgotten, *Corylus avellana* (Hazel), *Crataegus monogyna* (Hawthorn), *Fagus sylvatica* (Beech), *Fraxinus excelsior* (Ash), a flowering *Malus sylvestris* (Crab Apple), *Prunus spinosa* (Blackthorn), *Quercus robur* (Pedunculate Oak), *Sambucus nigra* (Elder), *Sorbus aucuparia* (Rowan), *Taxus baccata* (Yew) and a species of *Ulmus*, probably *U. procera* (English Elm).

During these explorations I was saddened to find a number of long-neglected pollards whose limbs were torn and broken by storms or had collapsed altogether under the weight of tall, massive branches the trunks could no longer support. It was disappointing, also, to find very few young trees replacing the old and dying, or being introduced into places where they have always been a traditional, and evocative, part of the landscape. Is this the case generally?

ANITA JO DUNN, Flat 2, Sandford Mount, Charlbury, OXFORD OX7 3TL

F.A. LEES NOTEBOOKS: NEWLY ACQUIRED BY BRADFORD MUSEUMS

Eight notebooks written by F.A. Lees (1847 - 1921), author of *The Flora of West Yorkshire* (1888), have been given to Bradford Art Galleries and Museums by Mrs Marjorie Sledge. Lees sold his herbarium and library, including many annotated 'Floras' and pamphlets (Lees, 1910 and Bradford Public Libraries, 1909), to Bradford in 1906.

Dr W.A. Sledge gave his own British herbarium to Bradford in 1982 to complement the herbarium of a Yorkshire botanist who he had met, and been inspired by, in his youth. He also gave the museum Lees' extensive, complete manuscript entitled '*The Vegetation of Yorkshire and Supplement to the Floras of York.*' Only the records from this have been published (Lees, Ed. Cheetham and Sledge, 1941).

The notebooks are very relevant to the herbarium as the lists of plants seen on outings sometimes give more location details than appears on the herbarium sheets of the plants collected at the time. Though very mixed in dates and contents, as indicated, they cover the following periods:

1870 - 1875	Yorkshire, Durham, Capri, Mentone; and dates of earlier excursions
1870 - 1877	Excursions and various 'floras'
1877 - 1881	Yorkshire and Lincolnshire; 1880 Botanical Record Club members list etc.
1893 - 1898	Yorkshire excursions; description of Irish Hepaticae from Moore & Luerssen (1879)
1901 - 1909	Birds and insects, as well as botanical notes
1909 - 1911	Extracts from publications, especially the <i>Journal of Botany</i>
1913 - 1914	Extracts from, and notes on, items in various publications
1918 - 1920	Mainly botanical extracts from journals and newspapers

Frank Horsman and David J. Tennant have kindly informed me that Leeds Central Reference Library (1905 - 1909, 1910 - 1921 and 'The F.A. Lees Botanical Diary') and the Dept. of Plant Sciences, University of Cambridge (1886 - 1892) have further notebooks for the years indicated; and I would be pleased to know if members are aware of any others. A 'fourth' notebook covering 1882 to 1885 could be anticipated from the information I have at present.

References

- Bradford Public Libraries (1909). *Catalogue of the Lees botanical collection in the reference library*.
Lees, F.A. (1888). *Flora of West Yorkshire*. London, Lovell Reeve & Co.
Lees, F.A. (1910). *Description of the Lees herbarium and library*. Bradford Public Libraries
Lees, F.A. Edited by Cheetham, C.A. & Sledge, W.A. (1941). *A supplement to the Yorkshire floras*.
A Brown & Sons.

MARGARET M. HARTLEY, Bradford Art Galleries and Museums, Cliffe Castle Museum, Spring
Gardens Lane, KEIGHLEY BD20 6LH

THE FORGOTTEN ISLAND – 2

I agree entirely with Professor Webb's sentiments expressed in *BSBI News* 65 regarding the poor deal meted out to Ireland under the title 'The Forgotten Island'. Many people, largely English, I'm sorry to say, think of Wales, Scotland and Ireland as merely incidental. But we naturalists know better! Even nowadays, with travel and television enlightening people, I'm often amazed that so many don't realise how big Scotland is. And as many also know, Wales would be as big as England if it were flattened!

I must admit that I have only been to Ireland twice, for long holidays, and it is only laziness that has prevented me going more frequently, but it is a superb land, full of scenery, culture and natural history. It is to our credit that organisations like the BSBI and the BTO know no boundaries, and the same applies to many sporting interests and broadcasting too. Long may they flourish.

KEITH H. HYATT, 1 Tremcelynog, Rhandirmwyn, LLANDOVERY, Dyfed SA20 0NU

THE FORGOTTEN ISLAND – 3

Like Prof. David Webb (The Forgotten Island, *BSBI News* 65) I, too, deplore the neglect of Irish plant-locations in biological and ecological literature, as well as the widespread misunderstanding of the term 'British Isles'. A certain member of my own family (who shall be nameless) holds the unshakeable conviction that Ireland does not belong to the British Isles and no amount of explanation can convince her of the error of this belief! Also, I have just noticed that the January issue of the TROBI Newsletter (Tree Register of the British Isles) suffers under the same misapprehension. In an article on the front page headed 'Sponsor a Redwood for TROBI', the opening paragraph contains the words '... in suitable locations in the British Isles and Ireland'. How, then, are we to interpret the initial letters TROBI?

The title of the magazine *British Wildlife* is misleading in a slightly different way in that it carries a hint of political, rather than geographical, division which is fortunately unobserved by the wildlife of these islands!

Since Prof. Webb cites *Betula pendula* and *B. pubescens* as examples of the neglect of Ireland in the two journals which he mentions, my advice to all who are interested in the identification of these two confusing (and confused) species and in their history and habitats in Ireland would be to turn to Dr E.C. Nelson's recent book *Trees of Ireland Native and Naturalized* (1993) for enlightenment. The author devotes considerable space to an informed discussion on ways of distinguishing the two species (not so easy as you might think!) and there are also sections on the history, uses, propagation and folklore of Birches in Ireland.

This note did not set out to be a plug for Dr Nelson's book – nevertheless, I do unreservedly recommend it. In addition to the Birches, the highly readable text deals with 29 other trees found in Ireland today and all are illustrated by Wendy Walsh's sumptuous watercolours. Need I say more?

CAROL HORA, 51 Eastern Avenue, READING RG1 5SQ

DIALECT PLANT-NAMES

I have been following the correspondence on English plant-names with some interest, and am pleased to note that there seems to be a growing feeling that regardless of the need for standard English names, other names are also considered to be of interest. What these other names should be called is a matter of some debate. 'Common' is inappropriate, for many of them are far from common. 'Local' seems inappropriate, for some of them are used by people engaged in a particular occupation, rather than living in a particular locality. Therefore, I think 'dialect' names might be best.

Regardless of what these names are called, there are a surprisingly large number of them around, and there are many which do not appear in print. Perhaps it would be interesting for such names to be recorded in *BSBI News*, and with this in mind I provide a list of a few of the names which I have been sent recently in connection with my work on plant folklore. I would be pleased to receive any similar dialect names which members may have come across, so that these can be included in future issues.

Bobby buttons – *Galium aparine*, cleavers: 'a favourite game in late summer was throwing the seedheads on to one's clothes.' [Cinderford, Gloucestershire, November 1993].

Cat's milk – *Euphorbia amygdaloides*, wood spurge. [Cinderford, Gloucestershire, November 1993].

Dell seeds – *Pinus pinaster*, maritime pine, cones: 'the cones would be used to give a quick blazing fire – I have heard them called dell seeds.' [St Day, Cornwall, January 1994].

Peashooter – *Fallopia japonica*, Japanese knotweed: 'As a child in north Wales in the 1950s this plant featured in our efforts at making peashooters – we called the plant *the peashooter*, a name which persists as in "there are peashooters growing down by the river". However, fieldwork amongst school children in the 1980s in north Wales failed to elicit one example of such use'. [Cardiff, January 1994].

Segs – *Iris pseudacorus*, yellow iris. [Cinderford, Gloucestershire, November 1993].

Sweethearts – *Galium aparine*, cleavers: 'When we used to rear turkeys under a hen we scoured the lanes for cleavers (sweethearts) as a source of early greenstuff.' [Charmouth, Dorset, January 1994].

ROY VICKERY, 12 Eastwood Street, LONDON SW16 6PX

THE DISTRIBUTION OF THE OXLIP *PRIMULA ELATIOR* IN CAMBRIDGESHIRE

A 32-page paper with this title by Chris Preston of ITE, Monks Wood, which was published in the 1993 issue of *Nature in Cambridgeshire*, is now available as a reprint. It presents the results of a survey of Oxlip sites in the vice-county of Cambridgeshire (v.c. 29) in 1991-92, setting them in the context of earlier records. Introductory sections on the Oxlip in Europe and Asia and in Britain are followed by accounts of the sources of Cambs records from 1660 to 1990 and of the 1991-92 survey. Localities are listed alphabetically within each 10-km square. First and last records for each site are always given, but, for well-recorded sites, single records for the periods 1860-1929, 1930-1949 and 1950-1990 have usually been selected. Subsequent sections discuss the Oxlip as an ancient woodland plant in Cambs, changes in its distribution between 1660 and 1992, the Oxlip in East Cambs (about which little has previously been written), and the future of the Oxlip in Cambs. There are three pages of references and two maps, of the distribution of the Oxlip in the British Isles by 10-km squares and of its distribution in v.c. 29 by 1-km squares.

A copy of the paper may be obtained from F. & M. Perring, Green Acre, Wood Lane, Oundle, Peterborough PE8 5TP, by sending £1.00. *Nature in Cambridgeshire* (which is regularly quoted in

BSBI Abstracts) is published annually each summer (price £3.00 by post). Any reader wishing to subscribe regularly should inform its Editor at the address below.

PHILIP OSWALD, 33 Panton Street, CAMBRIDGE CB2 1HL.

THE FLORAL FORMULA

Every now and then I come across the floral formula, and each time the same questions come to mind. Are floral formulae susceptible to any useful analysis or synthesis by which we might tease out some inner truths about the angiosperms? Could we deduce for instance a plant's evolutionary status, its relationship to other plants (living or extinct), or in fact anything at all? Does every genus have its own unique formula, every formula cannot have a flower, where are the boundaries and where the gaps? What formulations are forbidden? Can anything be deduced about monocots and dicots?

The usual answer has been that the formula is just a shorthand way of representing flowers, so we are not in the realm of serious science at all. Do we know who developed the floral formula and what was hoped of it? In recent times has anyone done any computer analysis, or made a mathematical model, if not would the effort be worthwhile? It has been suggested that the plant kingdom, subject as it is to random change by mutation, is too chaotic for this kind of treatment to be useful.

How disappointing if the floral formula is little more than a backwater, a mere paper-saving curiosity. Perhaps someone out there has some more exciting answers, if so I should love to hear of them.

DIANA WILLMENT, 31 Numa Court, Brentford Dock, Middx TW8 8QG

UNIDENTIFIED PLANTS ON TV

There appears to be a persisting low priority to name plants appearing in TV nature programmes, whereas animals get fulsome recognition.

Is this a genuine reflection of public indifference to flowers or a chronic failure of balance in programme producers? It seems to me that if wild plants are to be widely enjoyed, studied and conserved, they must first be identified. Perhaps botanists are shy revealers of their passions or perhaps inadequate complainers. Should a letter-writing campaign commence?

[See *BSBI News* 48 for more on this topic. Ed.]

JOHN ROBERTS, 17 Woodcote Road, LEAMINGTON SPA, Warwickshire CV32 6PZ

LATE FLOWERING HOLLIES

I was most interested in Pamela Taylor's comments on late flowering hollies (*BSBI News* 62). Unfortunately I have not observed this phenomenon locally, however, I would like to comment on the retention of berries on hollies.

Within half a mile of my house there are three hollies that retain their berries well into the new year. Two of these might be considered to have domestic connotations since they are in hedges bordering private property. The third is in a field hedgerow several hundred yards from the nearest dwelling. The retention of holly berries is unusual in the local context where we have a large number

of hollies many of which berry profusely in September. Here I must take issue with Professor Stace (*BSBI News* 63) in disputing his comment on holly berries being unattractive to birds, since by mid-November all berried hollies, including those growing in woodland, have been stripped of their fruits by birds – mainly blackbirds and thrushes. Consequently it is almost impossible to have berried holly for Christmas unless berried branches are netted against the birds.

Why then do the birds **not** eat the berries on those three bushes mentioned above? This sounds like a good project for a biochemical botanist!

M.J. DOYLY, Huckworthy Mill, Walkhampton, YELVERTON, Devon PL20 6LP

RED DATA BOOK PROJECT

SPECIES FOR ADOPTION

There has been a good response to our trawl for authors published in the January 1994 issue of *BSBI News*, and many thanks to all those who offered to write accounts of species. More than 160 are now 'adopted', and there are a few others pending. The list is now much reduced, but about 80 species remain, not counting apomicts!

A deadline of December 1994 was set for the completion of all species accounts, but I am hoping that authors won't wait until the last minute before sending their copy! It would be helpful if many could be completed by the end of the summer.

Some potential authors have been uncertain whether in adopting a species, they would be required to know the plant in all its locations, or to visit them all for this project. They should be assured that this is not the case. However, many of those who have adopted a species will indeed know the plant in all or most of its British sites.

Species remaining for adoption are given in the table on page 28

JNCC Rare Plants database

Thanks to all vice-county Recorders who have returned the county printouts from the old NCC Rare Plants database, appropriately annotated. Information from v.c. Recorders is particularly valuable in enabling us to bring the JNCC database up-to-date. We will send printout of our current data to all vice-county Recorders shortly and look forward to further returns. As well as correcting any erroneous records, it would be helpful to know which records are certainly 'extinct'.

Fieldwork 1994

We are grateful to the BSBI for arranging two field meetings this year for the survey of rare species. Both should provide valuable data. JNCC will have limited funding to support fieldwork, by way of travel expenses. If you feel that the record of a particular species might benefit from field survey in your vice-county, or that individual (usually older) records need following up, please let me know as soon as possible.

MARTIN J. WIGGINTON, Joint Nature Conservation Committee, Monkstone House, City Road,
PETERBOROUGH PE1 1JY, tel. 0733 62626.

Anisantha tectorum
Anthoxanthum puelii E
Anthyllis vulneraria ssp. *corbieri*
Calamagrostis scotica V
Carex depauperata E
Carex filiformis
Carex muricata ssp. *muricata*
Centaurium scilloides
Cerastium nigrescens
Cicerbita alpina
Coincya wrightii
Cotoneaster integerrimus V
Crepis foetida E
Cystopteris dickieana E
Cytisus scoparium ssp. *maritima*
Damasonium alisma V
Dianthus gratianopolitanus V
Dryopteris cristata V
Echium plantagineum V
Eleocharis austriaca
Epipactis youngiana
Erica vagans
Eryngium campestre V
Euphorbia hyberna
Festuca longifolia
Filago lutescens V
Genista pilosa
Genista tinctoria ssp. *littoralis*
Helianthemum apenninum
Helianthemum canum ssp. *levigatum*
Herniaria ciliolata
Hieracium spp.
Hierochloa odorata
Hypochaeris maculata
Juncus capitatus
Juncus filiformis
Koeleria vallesiana
Lavatera cretica
Leersia oryzoides V
Limonium spp.
Maianthemum bifolium
Minuartia stricta V
Muscari atlanticum V
Neotinea maculata V
Ophrys fuciflora V
Orobanche caryophyllacea E
Orobanche purpurea V
Oxytropis campestris
Oxytropis halleri
Peucedanum officinale
Pilosella peleteriana ssp. *peleteriana*
Pilosella peleteriana ssp. *subpeleteriana* V
Pilosella peleteriana ssp. *teniscapa*

Poa flexuosa
Potentilla fruticosa
Pulicaria vulgaris V
Ranunculus ophioglossifolius E
Rhinanthus angustifolius V
Romulea columnae V
Rosa agrestis
Rumex aquaticus
Saxifraga cespitosa
Saxifraga rivularis
Scirpoides holoschoenus
Scirpus triquetus E
Sisymbrium irio
Taraxacum spp.
Tetragonolobus maritimus
Thlaspi perfoliatum V
Trifolium bocconei
Trifolium incarnatum ssp. *molinerii*
Trifolium strictum
Trinia glauca
Veronica spicata *spicata* V

CONSERVATION NEWS

'COUNTRYSIDE SURVEY 1990' AND THE CONSERVATION OF PLANTS

When in the 1980s the Nature Conservancy Council catalogued habitat loss in *Nature Conservation in Great Britain*, the publication had great impact and influence. Now the Department of the Environment has published the results of a survey carried out in 1990 which has the potential to be as important. This is why BSBI's Conservation Committee has decided to bring the survey to the attention of members through the pages of *BSBI News*. This is not a review of the report, being intended to alert interested members to the publication and to its relevance to plant conservation. I have already spotted my first reference to the survey, in the 'ENDS' report for January 1994.

The report has been published as a highly technical main report of 174 pages and a much more accessible summary report (25 pages). The main report is so impenetrable as to be baffling at first, but it repays close attention as many interesting findings are hidden away in its tables and figures. The summary report faithfully highlights the key findings and is much easier to follow.

The botanical parts of the survey were carried out by the Institute of Terrestrial Ecology. The immediate importance of the survey is that part of it is in fact a re-survey – 256 of the 508 one km squares were also surveyed in 1978. In addition 384 squares were surveyed for land cover in 1984. The really interesting botanical findings concern the comparisons between the previous surveys and 1990.

Because the same individual features were surveyed in the original and the repeated surveys, it has been possible to report not only on gross changes such as habitat loss, but also on more subtle changes in the character and quality of vegetation.

So, what does the report have to say about changes between 1978 and 1990? The good news is that the total area of semi-natural habitats changed little after 1984 (it is not clear if there was a small overall reduction or increase). This is in contrast to the well-documented losses since the 1940's.

Sadly, most of the rest is bad news. I have noted a few of the key points below.

Between 1984 and 1990:

- there was a big reduction in hedges of various kinds: 64 000 km or 23% were lost, including over 35% of Welsh hedges.

Between 1978 and 1990:

- there was a decrease in diversity as measured by numbers of species per plot.
- there was a 29% drop in species numbers in arable fields.
- semi-improved grassland plots in 'pastoral' landscapes showed a decrease of 3 species per plot, or 14%.
- this decrease was particularly of species associated with unimproved meadows, such as 'base-rich meadow plants', of which nearly 1 species per plot was lost.
- there was an increase in 'old permanent pasture plants' in the landscapes classified as 'marginal uplands'.
- a significant loss of species of woodlands was recorded in all landscapes except those characterised as arable.
- a reduction of 44% or 8.4 species per plot was recorded from woods in the marginal uplands.
- woodland plant groups had shifted to those more characteristic of disturbed and grassy habitats.
- in the surviving hedgerows there was a big decrease of woodland and meadow plant groups and an increase in arable types.
- roadside verges suffered losses of species of 'base-rich meadows' and 'old permanent pastures'.
- in plots on streamsides, there was an overall increase in overgrown grassland.
- these plots showed a widespread loss of aquatic and many wetland groups of species.
- in pastoral and upland areas, streamside plots lost about 3 species per plot, with losses in most species groups.

Distribution of biodiversity in the countryside:

- the survey shows that, in 1990, linear features such as hedges, verges and streambanks contain important concentrations of species which have become absent or rare in the surrounding countryside.

By now many BSBI members will be saying to themselves that they already know all this from their own field experience. The Countryside survey is different from individual perception: it is numerical and it covers the whole country. For someone like myself who started botanizing since 1978 it is very sad to realise what I have missed in terms of the species-richness of Britain.

The analysis of vegetation quality in the Countryside Survey complements the BSBI's own work on the distribution of species. When the Atlas survey is repeated, it will be interesting to see how far the dilution of populations demonstrated in this report is matched by reductions in geographic range.

Countryside Survey 1990. Dept. of the Environment. 1993. £12.00

Countryside Survey 1990: summary report. Dept. of the Environment. 1993. £6.00

Both available from Publications Sales Unit, Block 3, Spur 2, Room 1/2, Government Buildings, Lime Grove, EASTCOTE HA4 8SE

VICKY MORGAN, Hon. Secretary, Conservation Committee.

WELL DONE EVA

We were pleased to hear via the Hon. General Secretary that, last year, Eva Crackles organised successful opposition to a plan by Humberside County Council to build a car park in the disused railway station at Harswell. The site has a diverse flora. Support for Eva came from the Council for the Protection of Rural England, the Mayor of Boothferry and botanists in Hull, Essex and Wiltshire.

VICKY MORGAN, Hon. Secretary, Conservation Committee.

CYPRIPEDIUM CONSERVATION REPORT 1993

The native plant of *Cypripedium calceolus* flowered well this year and appears to have recovered totally from the damage sustained in 1991. One bloom was produced on the first natural seedling to flower. This seedling was first recorded in 1984. The laboratory grown seedlings introduced to the site some time ago continue to survive and are regularly monitored.

The site remains under strict protection and it is pleasing to note that the number of visitors continues to fall. The committee wishes to thank all those of you who refrain from visiting the site and asks those who know the location not to divulge it to others. Most visitors referred to botanical friends as their source of information.

The Sainsbury Orchid Conservation Project at Kew has had outstanding results in germination in the laboratory from the 1992 & 1993 seed sowings. Experiments in weaning laboratory raised plants are now being carried out in the north as well as at Kew.

Contrary to recent reports in the press there have been no introductions of laboratory raised plants at new sites.

MARGARET LINDOP. E.N. *Cypripedium* Committee.

CYPRIPEDIUM CALCEOLUS RECORDS

The E.N. *Cypripedium* committee is collating a list of herbarium records of *C. calceolus*. Below is a list of the museums which have already been contacted. If you know of any other sources where records are, or may be, held would you please send the information or contact me by phone.

Ampleforth College.
Bagshaw Museum, Batley.
Bankfield Museum and Art Gallery, Halifax.
Belle Vue Museum, Halifax.
Blue Coats, Christs Hospital School.
Bootham School Natural History Society, York.
Bradford Cartwright Hall
Bristol Museum.
British Museum of Natural History.
Cambridge University Museum.
Cliffe Castle Museum, Keighley.
County Archives Department, Northallerton.
Craven Museum Skipton.
Darlington Museum.
Doncaster Museum and Art Gallery.
Dorman Memorial Museum, Middlesborough.
Edinburgh Botanic Gardens.
Hancock Museum, Newcastle-upon-Tyne.
Ipswich Museum.
Kew Royal Bot. Gardens Museum.
Lancaster University Museum.
Leeds University Bot. Gardens Museum.
Linnean Society.
Liverpool Museum.
Malham Tarn Field Centre.
Manchester University Museum.
Municipal Museum and Art Gallery, Rotherham.
National Museum of Wales.
Norwich Museum.
Oxford University Museum.
Passmore Edwards Museum.
Penrith Museum.
Preston Scientific Society.
Saffron Walden Museum.
School of Plant Biology, Bangor.
School of Botany, Dublin.
Tolson Memorial Museum, Huddersfield.
University of Durham, Durham.
York University.
Yorkshire Museum, York.
Birmingham Museum.

MARGARET LINDOP, 36, Woodland Hill, LEEDS LS15 7DG Tel. 0532 646513

TIDYING UP OUR WALLS

I have just discovered that the colony of *Asplenium trichomanes* (Maidenhair Spleenwort) on a low wall in the station courtyard at Princes Risborough, Bucks, the only one known to me within ten miles, has been sprayed out of existence by the zeal for tidiness of British Rail. A similar fate befell the only colony of *Ceterach officinarum* (Rustyback) known to me within ten miles, when it was scraped off a low exterior garden wall in Aston Rowant, Oxon, by the householder. A third recent wall extinction is of the well known *Phyteuma scheuchzeri* (Oxford Rampion) on a wall in Parks Road, Oxford, which I have known since 1959, but could not find after 1988. Two other interesting local wall plants managed to reappear after recent cleansing blitzes: *Asplenium adiantum-nigrum* (Black Spleenwort) on Radnage Church, Bucks, where a single tiny plant survives, and *Erinus alpinus* (Fairy Foxglove) at Princes Risborough Manor.

If all these are known to me within this small area, how many more such plants must be being lost all over the country all the time?

RICHARD FITTER, Drifts, Chinnor Hill, CHINNOR Oxon OX9 4BS

ALIENS

ALIEN NEWS

YEAR OF THE BULLWORT

Ammi, Ammi, Ammi . . . 1993 will be remembered as the summer when *Ammi majus* (Bullwort), from total obscurity, became strangely frequent in the London area. A gracefully spreading, carrot-like umbellifer, specimens suddenly emerged from the dereliction of Canning Town to the elegance of Hampstead, from the tranquil sanctuary of Tottenham's oldest cemetery even to the affluent bustle of the Cumberland Hotel foyer, Marble Arch. Hospital grounds, parklands and weedy gardens produced it. An urban paving stone briefly sustained a brave seedling of it. For a single season, perhaps no more, a plant which I had never before observed in our city became an almost regular member of the metropolitan flora. To my eye, its bright white flower clusters carry the subtlest tinge of slaty coldness which from a short distance, may distinguish them from the similarly subtle tinge of creaminess characteristic of *Daucus carota* (Wild Carrot). It further differs from *Daucus* in its basal and lower cauline leaves bearing very variable *Sium*- or *Cicuta* shaped lanceolate leaflets as well as by its fruit (Stace 1991).

Reference

Stace C.A. (1991). *New Flora of the British Isles*. Cambridge

BRIAN WURZELL, 47 Rostrevor Avenue, Tottenham, LONDON N15 6LA

PENNIES FROM MALDON

Thlaspi alliaceum, Garlic Penny-cress, is well documented as a central and south-east European alien established in at least two English counties. Classically it has, for many years, been observed near Beeleigh Abbey, Maldon, Essex (Jermyn 1974) and around Ripper's Cross, Ashford, Kent (Philp 1982). Its salient features are adequately summarised in Clapham *et al.* (1987), Rich (1991) and Stace (1991); however, only in the latter work do we find a single fruit illustrated. Anticipating,

therefore, that some readers may be unfamiliar with the earlier growth stages of this unassuming little crucifer, I have chosen to illustrate those in the present issue of *BSBI News* (see front cover).

On June 26th, 1987, Tim Rich and I visited Maldon and we detected three or four examples of *Thlaspi alliaceum* struggling to hold their own on vigorously overgrown earth mounds which were bordering a secluded canal within sight of the historic Abbey. Already these plants were reduced to leafless grey husks with ripe seed pods splitting open. Indeed the whole future of the species in such a habitat seemed decidedly uncertain.

I collected some seed and sowed it on my roof garden at the end of September, 1987. By early January, 1988, numerous cotyledons were sprouting. By early February, these were replaced by clusters of thin, loosely spreading intermediate leaves with slender *petioles* 1-1¼ times as long as their ovate-orbicular blades. By early March, flowering stems were growing rapidly, bearing thicker, ascending, sessile and sagittate-based cauline leaves only. Even by early April, most specimens had senesced into leafless fruiting husks again.

Thus, typically, *Thlaspi alliaceum* can be regarded as a late winter annual. It may also not immediately be conspicuous when mixed with certain other small- and white-flowered self-pollinators of disturbed soil such as *Capsella bursa-pastoris* (Shepherd's-purse), *Erophila verna* (Common Whitlowgrass) and *Stellaria media* (Common Chickweed). Nowadays this association freely arises together at home each February and March, and may reasonably be predicted to occur in similarly dry, open conditions elsewhere. When the first warm days of spring tentatively filter their way through our months of chill gloom, many plants in this foursome shrivel their leaves and mature their fruits with some sense of urgency.

In the autumn of 1992, I sprinkled some surplus *Thlaspi* seed on a series of newly turned earth mounds close to the River Lea. Those mounds belong to the nascent South Tottenham Community and Conservation Garden in Markfield Recreation Ground (L.B. Haringey), an ecological landscape project I planned in 1991 and have created with Tottenham and Wood Green Friends of the Earth ever since. Several stunted plants appeared there in 1993, and numerous small progeny are again in flower now, as I write, in March, 1994. The progress of this and of other introduced species, will be carefully monitored as new Middlesex colonies of known origin. My views on introductions of **unknown** identity and origin are expressed in the next article.

To whom amongst you may also appeal the novelty of adding this interesting continental Penny-cress to someone's garden weed flora? It is almost certain to succeed in any situation similar to that outlined here, and it is, to my mind, satisfying to initiate further populations of scarce aliens which have earned themselves fondly traditional niches in our textbooks. Upon receipt of your requests and s.a.e.'s, I would be happy to post fresh seed after April.

References

- Clapham, A.R., Tutin, T.G. & Moore, D.M. (1987). *Flora of the British Isles*. Cambridge
 Jermyn, S.T. (1974). *Flora of Essex*, F.J. Milner & Sons, Commerce Road, Brentford, Middx.
 Philp, E.G. (1982). *Atlas of the Kent Flora*. Kent County Council Supplies Dept, West Malling, Kent.
 Rich, T.C.G. (1991). *Crucifers of Great Britain and Ireland*. BSBI Handbook No. 6. London
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BRIAN WURZELL, 47 Rostrevor Avenue, Tottenham, LONDON N15 6LA

ARE TRUE GREENS TRUE BLUE?

Victorian morals, Edwardian architecture, Sixties pop music – every epoch adds its own unique creativity and character to our wealth of human history. What comes over as unique today? For

example, do we now live in an age when it appears more fashionable than ever before to manufacture real live British ecosystems? If so, how authentic are the 'green' people who do it and how authentic are their results?

My own attitudes to this subject remain frankly multivalent. At different times and in different places I may consider it a publicity stunt, a mad romance, a tragic deception, an excuse to destroy, a guilt cover up, a patriotic proclamation, a holy crusade, a rousing belly-chuckle – or even the desirable rescue of that which is precious and upstanding within our indigenous biological heritage. All these views are possible. Certain ones can combine. Only sincerity works on its own. For how many readers do these phrases press buttons?

Indeed I soberly believe that we who hold some knowledge of the British flora also hold some responsibility to advise others that botanical confidence tricks should not masquerade as botanical conservation tasks. Clearly, I do **not** condemn introductions of named plants in named gardens for named reasons. At the same time, I do not condone introductions of **unnamed** plant mixtures, under pretence of divine philanthropy, to the environment at large. If seed-packet fixes become automatically acceptable for the purpose of drugging British habitat pains, then none of our ancient plant communities are sacrosanct any more.

This argument is nothing new since I have observed many synthesised floras which are advertised as enhancements of naturalness instead of replacements of it. Two particular sites surveyed in the summer of 1993 struck me as missing the point by wide margins – the point presumably being to extra-anglicise the vegetation already there. Both shall remain nameless. Both provided floristic entertainment and ethical dilemma. Both were injected with seed which had no relevance to the locality and soil types. Both were justified by claims that conservation and education would thus be served. And both are blatantly unsustainable in their present species compositions.

The first site was a central London park. Thousands of working people regularly seek lunch and leisure in its relaxing embrace. Certain gracious expanses of unmown grass are welcome, relieving the municipal formality of short dry lawns. However even these are still basically lawns albeit now under more lenient management regimes. They are still the green carpets gratefully trodden by countless city shoes. Fun though it is to detect novelties, this is still not an appropriate place in which to naturalise *Primula veris* (Cowslip), *Hypericum pulchrum* (Slender St John's-wort), *Epilobium hirsutum* (Great Willowherb), *Origanum vulgare* (Marjoram), *Stachys officinalis* (Betony), *Sanguisorba minor* (Salad Burnet), *Pulicaria dysenterica* (Common Fleabane), *Centaurea scabiosa* (Greater Knapweed), *Teucrium scorodonia* (Wood Sage), *Silene vulgaris* (Bladder Campion), *Trifolium ochroleucon* (Sulphur Clover) and, of all things, *Bunium bulbocastanum* (Great Pignut). Such indiscriminate elements of acid heathland, chalk downland and low marshland have no future here, no ecological function or coherence, no meaning to anyone but another botanist whose sense of humour finds itself equally eccentric. To have fun is fine and healthy, but to **make** fun, especially of species rare in their proper homes, cannot contribute significantly to our respect and concern for the more vulnerable members of our native flora.

The second site was an east London industrial relic, a flat stony nomansland intended for designation as a local nature reserve. Most of the surrounding factories and warehouses still stood stark but had been pretty well abandoned. Housing estates and schools were scheduled for the neighbourhood, and so town planners deemed it prudent to provide some 'wildlife' to go with. 'Wild Cabbage is our commonest plant at the moment', explained the recently appointed warden as he drove us rather comfortably through sluggish grey traffic. 'We encourage it for the white butterflies to feed on'. I placed a silent bet with myself. It's going to be *Hirschfeldia incana* (Hoary Mustard). It was. And white butterflies don't feed on it.

He unlocked the heavy iron gate with pride. Dreamland awoken thee. It really appeared attractive. Suddenly a sense of confusion shrouded me, bewilderment even. Suddenly things seemed not quite real but something like; half familiar yet uncannily altered, as though a mild hallucinogenic state had come to prevail. Part of the mind went into denial. No, these are not literally hundreds of bright *Lotus corniculatus* (Common Bird's-foot-trefoil) tufts, spreading so stout and upright, yet nothing else they could be (the truth lies in var. *sativus*). Again, no, it's not quite right for *Cynosurus cristatus* (Crested Dog's-tail) to mature as millions of single-stem first-year plants, for all the world reduced to

an annual lifestyle, yet that also was obviously what they were. Still drifting in semi-fantasy, I almost didn't want to acknowledge the individual stimulations of discovering *Apera spica-venti* (Loose Silky-bent) and *Crepis setosa* (Bristly Hawk's-beard) and *Phalaris aquatica* (Bulbous Canary-grass) and *Rhinanthus minor* (Yellow-rattle) and *Trifolium aureum* (Large Trefoil). And goodness knows how I was going to sort out the mayweeds . . . and the brassicas . . . and the umbellifers . . . and the cereal grasses . . . and what might still be nestling in the 80% of terrain as yet unexplored. Urban wastelands don't normally behave like this.

However they can be induced to behave like this if so-called wildflower seed mixtures are sprinkled on them first. Here, a particularly large quantity of such seed had been spread far and wide two or three months before our visit. It had produced an extravagantly multi-coloured kaleidoscope of species, an international hotch-potch carrying no ecological identity card whatsoever. At some level, I noticed myself reluctant to report how meaninglessly random this collection was, because the intention behind it had been creative. 'Diversity', at least, is a tactful term of modern times. It doesn't have to be judgmental. It can also be enjoyed . . .

Picture huge foot-scrunching mats of *Vicia sativa* subsp. *sativa* (a cultivated Common Vetch relative) in ripe fruit, the vivid blue *Centaurea cyanus* (Cornflower), the delicately plumed *Hordeum jubatum* (Foxtail Barley), the lurid purple *Papaver somniferum* (Opium Poppy) and *Linaria purpurea* (Purple Toadflax), the mustard yellow *Sisymbrium loeselii* (False London-rocket), *S. orientale* (Eastern Rocket) and *S. altissimum* (Tall Rocket), the lacy white *Ammi majus* (Bullwort), *A. visnaga* (Toothpick-plant) and *Daucus carota* (Wild Carrot). Yes, picture and enjoy. To be sure, the ultramarine billows of *Vicia villosa* (Fodder Vetch) will care for themselves and survive many seasons. *Lapsana communis* subsp. *intermedia* (a alien nipplewort) will continue to invade. *Agrostis castellana* (Highland Bent) will settle snugly into the parched turf unlikely to be recognised any more. *Anthyllis vulneraria* subsp. *polyphylla* (an alien kidney vetch) will struggle bravely and persist for a short while. And let's emulate its courage by sorting out that vast panorama of annual 'mayweeds' after all. In fact, three of them are chamomiles, *Anthemis arvensis* (Corn Chamomile), *A. cotula* (Stinking Chamomile) and *A. austriaca*, the latter armed with formidably sharp scales between its ray florets. The other three are our more conventional *Tripleurospermum inodorum* (Scentless Mayweed), *Matricaria recutita* (Scented Mayweed) and *M. discoidea* (Pineappleweed). And if any one of the six wants to hybridise with any other, well, good luck.

At the further end of the reserve, there stood small groups of young trees, planted in early spring. Close by lay a relatively large butyl-lined pond complete with quota of oxygenating *Crassula helmsii* (New Zealand Pigmyweed) (it is still sold for that purpose). No mud zonation was noted around the pond margin, the site's vigorous cocktail of many-coloured foreigners extending unremittingly to the edge, with several huge *Onopordums* and *Silybums* added on (Scotch and Milk Thistles respectively). The trees themselves comprised Willows, Alders, Apples, Hazels and Rowans. The shrub Willows were mostly *Salix* × *reichardtii* and *S.* × *smithiana* which teachers of tomorrow will doubtless be content to generalise as 'Goat Willows', and reasonably consider as native as any others. The tree Willows were *S. alba* (White Willow), usefully confirmed by their attached nursery labels (printed in Dutch). The Alders were mixed *Alnus glutinosa* (Alder), *A. incana* (Grey Alder) and hybrids, each taxon (from personal observations along the Lea Valley) demonstrably different in its pattern of invertebrate patronage. The Apples, with deeply three-lobed leaves, were, logically, *Malus trilobata* whose nearest native station hails from Syria (and it's probably scarce even there). The Hazels were strikingly upright and grey-corky barked, obviously the Turkish species *Corylus colurna*, whose increasing popularity in streets and parks presents increasing likelihood of spontaneous seedlings arising before too long. And the Rowans, with disconcertingly variable leaflet morphologies and no berries, could have been European, Asian or North American, who knows. Fine specimens they were notwithstanding. One was practically alive.

Enough of this preamble. Duly inspired, I'm off to paint a Rembrandt now. Yes I am. That will qualify me to teach British Art to British school-children. Eh? Why not? I'm using all the same colours.

BRIAN WURZELL, 47 Rostrevor Avenue, Tottenham, LONDON N15 6LA

CHENOPODIUM CAPITATUM IN IRELAND

I was interested to read about the recent find of *Chenopodium capitatum* (Strawberry-blite) in West Sussex (*BSBI News* 65). It has long been cultivated and also occurs as a casual in Europe. In Ireland, *C. capitatum* was first and best known as a persistent weed in a cultivated plot at Farnaght, SE of Enniskillen, in Co. Fermanagh (v.c. H33) for most of the 19th century. It occupied a limited area and never spread any great distance, with occasional plants in adjoining fields; plants of it were last seen at the original site about 1974 (*Jr. Nat.* 12: 271; *Jr. Nat. J.* 23: 427). There are two specimens of this species in the National Herbarium, Dublin (DBN), which were collected from a rubbish tip on Stranmillis Road, Belfast (v.c. H39) in 1909.

The specimen 'of Irish provenance' shown to Mike Mullin referred to in *BSBI News* 65 was one small plant I had found in fruit at Foynes Port in Co. Limerick (v.c. H8) in September 1988 with other aliens which had probably arrived in imported animal feed. *Chenopodium glaucum* (Oak-leaved Goosefoot) and *C. strictum* (Striped Goosefoot) were also found at Foynes Port in the same year (*Jr. Nat. J.* 23: 262-268).

Seeds, removed from the Foynes plant and kept in an egg cup on the kitchen windowsill over the winter, were put in potting compost in the spring of 1989. There was quick and good germination. When the seedlings were a few centimetres tall, they were planted out into the garden where they grew rapidly and produced flowers and fruits by early to mid-summer. The following year, many self-sown plants (up to 26 cm tall) appeared and again produced mature fruits. In 1991, there were only a few small self-sown plants by mid-July. They did not thrive. However, when the same patch of garden was dug over in 1992, plants (up to 35 cm tall) reappeared and there were mature fruits in mid-August. Plants tended to be stripped of their leaves, probably by slugs and snails, by the end of the summer.

I came across a fine illustration of Strawberry-blite (also called Strawberry-spinach), as *Blitum capitatum*, and description with details of its cultivation in Alexander McDonald's (1807) *A complete dictionary of practical gardening*. . . with correct engravings. It was grown mostly for ornament because of its succulent red fruits which were of the same size and appearance as wood strawberries. Seeds were sown annually, though plants often arose freely from self-sown seeds, and the plants which grew to two and a half feet (76 cm) needed to be staked. It was grown in groups in flower borders or with other potted plants 'in conspicuous assemblages about the house'. At the beginning of last century there were cultivated varieties of *C. capitatum* with white and red leaves, and two other species, *Blitum virgatum* and *B. tartaricum*, were also grown for ornament. The fruits were described as being full of purple juice which stains the hands, and they were formerly used for culinary purposes as a colouring ingredient.

C. capitatum was included in W. Robinson's (1934) *The English flower garden* as a hardy annual, but is not in C. Brickell's (1992) *RHS Gardeners' encyclopaedia of plants and flowers*, nor have I noticed it in recent seed catalogues. However, the similar-looking *C. foliosum* (syn. *Blitum virgatum*) from S. Europe is listed in some modern gardening books, in *Plantfinder* (1993) and in at least one 1994 seed catalogue with the common name of 'Strawberry-blite'.

SYLVIA REYNOLDS, 115 Weirview Drive, STILLORGAN, Co. Dublin

CHENOPODIUM CAPITATUM

On pages 43-44 of *BSBI News* 65 it is stated that '... floras of southern England has yielded only two records . . . neither within the last twenty years'.

Simpson's *Flora of Suffolk* appeared in 1982. In 1984, a specimen of *C. capitatum* was given to my very good friend the late M.G. ['Marg.'] Rutterford of Lakenheath, by local botanist Tony Brown for identification. Tony had found it growing on almost pure sand at a nearby air base at which he was working. Marg. grew this on from seed. He was of course a nurseryman by trade until retirement. He photographed it and gave me a transparency in 1986 which of course I still retain.

The foregoing is documented in his book *Breck, Fen & Forest* which I had the privilege of preparing for publication at his request.

LAWRENCE A. STORER, Harwood House, 52 St Helens Street, CHESTERFIELD, Derbyshire S41 7QD

SOLANUM RADICANS AT NOTTINGHAM

Solanum radicans L. f., a South American annual of section *Parasolanum* Child, has persisted over a period of some ten years in sandy soil at the base of a wall on the campus of Nottingham University. Originally introduced and cultivated for phytochemical work, it is very frost sensitive, presumably surviving winter as buried seed, and was last seen in 1983 and 1984, when it formed a prolific colony of about 50 plants.



Procumbent shoot of *Solanum radicans* A. leaf of *S. tripartitum* Dunal. B. leaf of *S. cf. radicans*, all del. J.M.H. Shaw, © 1994

The seedling produces an upright stem which soon becomes procumbent and begins to branch, part of such a procumbent shoot is illustrated from material collected at Nottingham in September 1984 (see page 37). Herbarium specimens of *S. radicans* have been deposited at **NOT** and **herb. JMHS**.

Distinguishing features include, procumbent stems up to 70 cm long, occasionally rooting at the nodes, with pronounced ridges decurrent from the petiole margins. These decurrent ridges with sparse short linear hairs. Leaves alternate, up to 8 cm long × 5 cm wide, deeply trilobed, lobes ovate with keyhole sinuses, glabrous except for the winged petiole margins. Inflorescences axillary, monochasial, peduncle sparsely hairy, flowers 3-8. Calyx lobes triangular, petals lanceolate with a yellowish midrib, and short hairs towards the apex, somewhat reflexed at anthesis. Stamens with hirsute filaments, style with hairs towards the base. Fruit a bilobed berry with many seeds.

One individual encountered differed from the others in consistently producing leaves with five lobes (B, in illustration). It also had more densely hairy decurrent ridges and peduncles, and produced fewer fruit which were not obviously bilobed as in *S. radicans*. Additionally the flowers were larger, calyx lobes narrower, the petals displayed a hint of purple, the inflorescence was frequently dichasial and the procumbent stems did not appear to root at the nodes. This plant possibly represents a hybrid with *S. dulcamara* (Bittersweet) which was growing close by.

The related *Solanum tripartitum* Dunal is known to have been in cultivation but has not yet been found. The difference in leaf shape is illustrated by A on the accompanying illustration.

JULIAN M.H. SHAW, Dept. of Pharmaceutical Sciences, University of Nottingham, NOTTINGHAM NG7 2RD

LEGOUSIA SPECULUM-VENERIS

Venus' Looking-glass is only represented by one species in Britain, *Legousia hybrida* (L.) Delarbre, whereas in France the common one is *L. speculum-veneris* (L.) Chaix, and *L. hybrida* is described by Gaston Bonnier as 'ca et là'.

Or is *L. speculum-veneris* unrepresented in Britain? Its distinguishing features are its size – about treble that of *L. hybrida*, with much more of a 'speculum', and the fact that its sepals are so much longer that they project beyond the petals.

On July 7th 1977, I came across a large patch in a cornfield north of Winchester, on South Down Farm ca. SW/459.372. Alas, soon afterwards the field was sold to the Prudential. But it was recorded much earlier that that, by G.W. Willis, in a cornfield near Wootton St Lawrence, SW/57.53, in N.E.G. Cruttwell's unpublished *Plants of Basingstoke* 1940-45, and in this headland it has persisted. Refound in 1976, by Brian Meyrick, last year it was an amazing belt along the edge, in company with poppies. It is on the land of Sir Michael Colman.

ANNE BREWIS, Benhams House, Benhams Lane, BLACKMOOR, Liss, Hants GU33 6BE

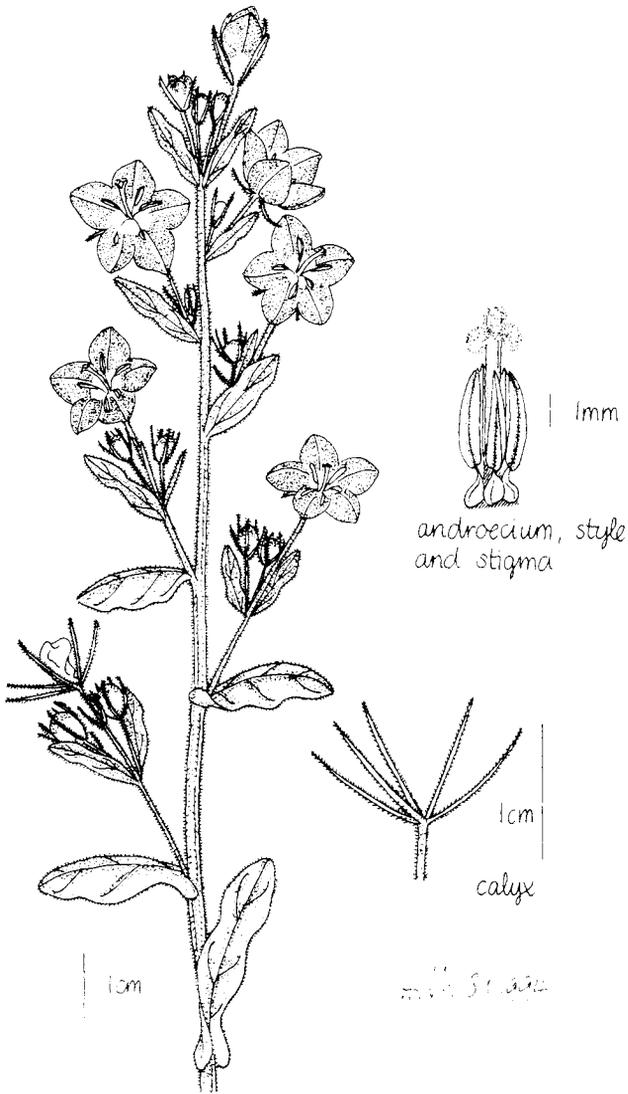
COTULA CORONOPIFOLIA IN YORKSHIRE – A CORRECTION

During the preparation of my note on '*Cotula coronopifolia* in Yorkshire' (*BSBI News* 64: 42-43) a glaring error crept into the text.

The sites along the River Aire are on the vice-county border. Mickeltown Flash is in v.c. 63, S.W. Yorkshire as stated. But Newton Ings, Fairburn Ings and Hickman's Flash are North of the river and therefore in v.c. 64, Mid W. Yorks.

I am deeply indebted to Mrs Phyl Abbot for drawing my attention to this matter.

JOHN MARTIN, 3 West Lea Drive, West Ardsley, WAKEFIELD WE3 1DH



Legousia speculum-veneris
Large Venus Looking Glass

Legousia speculum-veneris del. H Thompson © 1994

ALIEN STUDY GROUP

The first issue of *Aliens*, the newsletter of the Alien Study Group has now been issued. If you would like to join the group, please write to me at the address below.

GWYNN ELLIS, Dept of Botany, National Museum of Wales, Cathays Park, CARDIFF CF1 3NP

NOTICES (BSBI)

LIST OF VASCULAR PLANTS OF THE BRITISH ISLES

by D H Kent

This notice advertises two separate items:-

1. *ERRATA*

An 8-page list of minor errata (as noticed up to October 1993) is available. The list is confined to errors in the *List* as published, and does not include more recent taxonomic, nomenclatural or floristic discoveries.

Available on receipt of a SAE to take an unfolded A5 sheet (minimum 22 × 15 cm) from:

Professor C A Stace, Department of Botany, University of Leicester, Leicester LE1 7RH

2. KENT'S *LIST* ON FLOPPY DISK

The complete *List* emended to include the above errata is available on floppy disk for IBM PC compatible computers. *Members* may obtain a copy *for their personal use* by sending a cheque for £12.50 made payable to the BSBI to:

Mr M. Walpole, Honorary Treasurer BSBI, 68 Outwoods Road, Loughborough, Leicestershire LE11 3LY

Please indicate whether 5¼ HD or 3½ HD disks are required.

There are two different (higher) prices for non-members and for organisations.

GEORGE CLARIDGE DRUCE

The programme for the AGM in Oxford is all about Druce – even the Presidential Address, much of which will be dealing with his life in his native Northamptonshire before he moved to Oxford in 1879. In addition to the talks and walks there will be exhibits and displays of 'Druceana', and members are cordially invited to bring with them any items they have with a connection with Dr Druce, e.g. signed or annotated books, letters, photographs or herbarium specimens.

FRANKLYN PERRING, President

AN EXTRA BSBI MEETING – JULY 1994

Franklyn and Margaret Perring will be 'at home' at Green Acre, Wood Lane, Oundle over the weekend of 2nd and 3rd July and would be delighted to welcome any members to the house and garden from 11.00 - 20.00 on Saturday and from 11.00 - 18.00 on Sunday. There will be refreshments suitable to the time of your visit and barbecue facilities will be available if you want to use them.

As an additional inducement to come to this part of England, we are only 15 miles from 'Middlemarch' and there are many nature reserves nearby renowned for their rich flora – e.g. Barnack Hills and Holes, Bedford Purlieus and Castor Hanglands. The last named is only a short distance from Helpstone, the birth place of John Clare, Northamptonshire's most illustrious poet/naturalist. You can visit his grave in the churchyard and his local pub – surely a mecca for all BSBI members as it is called the Blue Bell – and the sign board depicts our own emblem – the bluebell!

Are there more pubs called the Blue Bell or Bluebell? If you know of any please bring a photograph to the Exhibition Meeting in London on 26th November – or send it to me to put out if you won't be there.

To find us. The grid reference is TL/029 879 – OS 1:50,000 Sheet No.141.

Coming from Thrapston: cross the stone bridge into Oundle and take the first left for Stoke Doyle.

Coming from Corby: pass a garage on the right and take the first right for Stoke Doyle.

Coming from Peterborough: go to the west end of the main street and follow signs for Stoke Doyle.

All routes take the Stoke road over a small stone bridge, past the cemetery on the right: Wood Lane is the next turning on the right labelled 'No Entry for Unauthorised Vehicles'- 'Green Acre' will be signposted from there.

FRANKLYN & MARGARET PERRING

IRISH BOTANICAL NEWS, No. 4

Issue number 4 of *Irish Botanical News* has just been published. It is sent free to all BSBI members resident in Ireland and to non-resident Irish vice-county recorders. Other members of BSBI may obtain a copy by sending £1.50 to me; a subscription service (multiples of £1.50, published annually) is also available.

BRIAN S. RUSHTON, Department of Biological and Biomedical Sciences, University of Ulster, COLERAINE, Northern Ireland BT52 1SA

THE COMMON GROUND OF WILD AND CULTIVATED PLANTS BSBI Conference Report No. 22

I am very pleased to be able to report that this book is now with the printers and will be published and mailed to subscribers in May. I again offer sincere apologies for the long delay and thank all subscribers for their patience. Please note that the title has been changed from *Plants Wild and Garden* to the above, to avoid confusion with Dr S.M. Walters' New Naturalists book *Wild and Garden Plants*.

GWYNN ELLIS, Dept of Botany, National Museum of Wales, Cathays Park, CARDIFF CF1 3NP

NOTICES (NON BSBI)

COURSE ANNOUNCEMENT EVOLUTION AND TAXONOMY : PRINCIPLES AND PRACTICES

A 10-day residential course co-sponsored by NERC and the Systematics Association, to be held in the University of Glasgow, 12 - 22 September 1994.

This course, part of the NERC Taxonomy Initiative, is open to all who are interested in Taxonomy. Its aim is to provide both background theory and hands-on experience of a wide range of modern taxonomic methodology, from molecular techniques to morphometric analysis, with applications to both living and fossil organisms.

The cost of the course will be £500 (includes accommodation), and the number of participants is strictly limited to 25; places will be allocated on a 'first-come, first served basis' and a deposit of £100 will secure a place. NERC will pay the fees of ten NERC-funded Ph.D. students. A limited number of partial scholarships will be available for Non-NERC students.

For further details, contact:

The Coordinator, Evolution and Taxonomy Course, c/o Jeanette Wylie, Dept of Geology & Applied Geology, University of Glasgow, GLASGOW, G12 8QQ (FAX:- (041) 330 4817; Telephone (041) 339 8855 ext. 5436). E-mail communication is preferred, the address is taxon@uk.ac.glasgow.geology

A SPECTACULAR EXHIBITION IN AN HISTORIC SETTING PATRICK O'HARA'S PORCELAIN SCULPTURES AT WAKEHURST PLACE April 28 to June 6

Wakehurst Place – the Royal Botanic Gardens' 600 acre estate in West Sussex which has seen an enormous growth of popularity in recent years – is to be the scene of a spectacular exhibition of life-size botanical sculptures, engravings and sketches by the Irish artist Patrick O'Hara FLS.

Set in the Tudor mansion, the exhibition, entitled *Secret Gardens of the World*, will depict rare and beautiful flowers of the Sussex countryside – including species protected within the Wakehurst Place estate – as well as from many other countries.

The exhibition at Wakehurst will coincide with a particularly attractive period in the gardens, and visitors will be able to enjoy magnificent displays of rhododendrons and other species.

The exhibition will be open from 10 a.m. to 6 p.m. daily, including Bank Holidays, and the artist will be present throughout.

CHRISTINE BRANDT, Royal Botanic Gardens, Kew, RICHMOND, Surrey

INVITATION TO MEETING IN LONDON

BSBI members are cordially invited by the London Natural History Society to their meeting at the Linnean Society, Burlington House, Piccadilly, London at 6.30 p.m. on Wednesday 27th April, 1994,

when Clive Stace will be presenting his thoughts (afterthoughts?) on 'The flora and *The Flora of the British Isles*'.

RODNEY BURTON, Sparepenny Cottage, Sparepenny Lane, EYNSFORD, Kent DA4 0JJ

WALK ON THE WILDLIFE SIDE

This May, from the 20-30, farmers across the UK will be showing the vital work they do for wildlife as part of a National Farm Walk Week.

The event is being organised by the farmers' wildlife charity, The Farming and Wildlife Advisory Group. FWAG is encouraging other local organisations, parish councils and schools, WI's and local pubs to take part and arrange walks with local farmers and see the wildlife thriving on farms as a result of positive management.

FWAG gives practical advice to farmers and landowners on conservation matters through a network of nearly fifty professional farm conservation advisers. The advisers see, at first hand, the caring attitude for the environment that farmers incorporate into the running of their businesses.

Farmers, organisations and individuals are encouraged to write to FWAG to register their walk.

FWAG, National Agricultural Centre, STONELEIGH, Warwickshire CV8 2RX

CAREERS IN ECOLOGY AND ENVIRONMENTAL MANAGEMENT

A booklet with the above title has been produced as part of the Careers in the Environment Initiative organised by London Guildhall University.

If anyone would like copies of the booklet or any other information, please contact:

MONICA HALE, Faculty of Human Sciences, London Guildhall University, Calcutta House, Old Castle Street, LONDON E1 7NT

LONGEVITY OF *HERACLEUM MANTEGAZZIANUM* SEEDS

A significant gap in our knowledge of *Heracleum mantegazzianum* is the longevity of its seeds. The International Centre of Landscape Ecology (ICOLE) is seeking help to:

- a) establish the importance of the seed bank
- b) determine the limit of seed viability

It is hoped that ICOLE will be able to obtain a number of seeds of different ages, in order to undertake a greenhouse trial that will establish the limit for germination. For these particular experiments, we require seeds of 10 years of age and beyond. It is hoped that these experiments will enable the relevant management procedures and length of treatment to be established.

I would therefore, be grateful if any BSBI members could send me as many seeds as they can spare from the range specified above.

MAX WADE, ICOLE, Dept of Geography, Loughborough University, LOUGHBOROUGH, Leics. LE11 3TU

OFFERS

WEST DOWN SEED LIST 1993

Small amounts of seed of the following are available on request. Seeds are FREE, but small envelopes and a stamped addressed envelope would be welcome.

<i>Agastache mexicana</i>	<i>Kickxia elatine</i> (D)	<i>Scutellaria orientalis</i>
<i>Agrostemma githago</i>	<i>Kickxia spuria</i> (D)	<i>Sedum caeruleum</i>
<i>Allium nigrum</i>	<i>Lamium amplexicaule</i> (D)	<i>Silene armeria</i>
(<i>Anchusa arvensis</i> (D)	<i>Laserpitium latifolium</i> (France)	<i>Silene gallica</i> (D)
<i>Asphodeline lutea</i>	<i>Lathyrus nissolia</i> (D)	<i>Silene italica</i> (France)
<i>Astrantia major</i> (Austria)	<i>Legousta hybrida</i> (D)	<i>Silene noctiflora</i> (D)
<i>Brassica oleracea</i> (D)	<i>Leonurus cardiaca</i>	<i>Silene rosea</i>
<i>Bupleurum rotundifolium</i>	<i>Lepidium ruderales</i> (D)	<i>Silene vulgaris</i> (D)
<i>Centaurea cyanus</i>	<i>Linum catharticum</i> (D)	<i>Sinapis alba</i> (D)
<i>Centaurea scabiosa</i> (D)	<i>Lithospermum officinale</i> (D)	<i>Sison amomum</i> (Somerset)
<i>Chrysanthemum segetum</i> (D)	<i>Malva moschata</i> (D)	<i>Smyrnum olusatrum</i> (D)
<i>Cichorium intybus</i> (Berks)	<i>Marrubium vulgare</i> (D)	<i>Stachys germanica</i> (Bulgaria)
<i>Collinsia grandiflora</i>	<i>Medicago orbicularis</i> (Portugal)	<i>Thlaspi arvense</i> (D)
<i>Datura stramonium</i> (D)	<i>Melilotus alba</i> (D)	<i>Torilis japonica</i> (D)
<i>Dierama pulcherrima</i>	<i>Misopates calycinum</i> (D)	<i>Tragopogon porrifolius</i> (D)
<i>Dipsacus sylvestris</i> (D)	<i>Misopates orontium</i> (D)	<i>Tordylium maximum</i> (Bulgaria)
<i>Echinacea purpurea</i>	<i>Nepeta cataria</i> (D)	<i>Trifolium incarnatum</i> (D)
<i>Erigeron acer</i> (D)	<i>Onopordum acanthium</i> (D)	<i>Trifolium stellatum</i> (Portugal)
<i>Euphorbia exigua</i> (D)	<i>Onopordum illyricum</i>	<i>Urtica pilulifera</i> (Greece)
<i>Euphorbia platyphyllos</i> (D)	<i>Orlaya grandiflora</i> (Bulgaria)	<i>Veronica agrestis</i> (D)
<i>Galeopsis angustifolia</i> (France)	<i>Paeonia lutea</i>	<i>Veronica polita</i> (D)
<i>Galtonia candicans</i>	<i>Paeonia mlokowitschii</i>	<i>Vicia bithynica</i> (D)
<i>Glaucium flavum</i> (D)	<i>Papaver argemone</i> (D)	<i>Viola arvensis</i> (D)
<i>Hyoscyamus niger</i> (D)	<i>Papaver hybridum</i> (D)	
<i>Iris foetidissima</i> (D)	<i>Primula veris</i> (D)	
<i>Iris pseudacorus</i> (D)	<i>Salvia pratensis</i>	

D) – originating in Dorset.

H.J.M. BOWEN, West Down, West Street, WINTERBORNE KINGSTON, Blandford, Dorset
DT11 9AT (tel. 0929-471714)

SEED DISTRIBUTION SCHEME

Commencing in January 1994, the South London Botanical Institute (just south of the South Circular road) will be inaugurating a seed distribution scheme free to all members. The seeds of scarce wild and uncommon plants have been collected from members and the Institute's garden.

The Institute has over 3,000 botanical volumes and a large herbarium of British and European species. The subscription is only £5.00 per annum and includes a Gazette three times a year and a programme of lectures, workshops and outings. Our open day will be Sunday June 5th from 2.00-5.00 p.m. Teas will be provided. Do come.

THE SOUTH LONDON BOTANICAL INSTITUTE, 323 Norwood Road, Herne Hill, London
SE24 9AQ

ILLUSTRATIONS ON OFFER

If any members require any illustrations of plants, for a nominal fee to cover post and packing and materials alone, would they please contact me, at the address below, for further details. An example of my work is given below.



Dactylorhiza praetermissa del. C.S. Crook © 1994

CAMERON S. CROOK, 8 Woodstock Close, Lostock Hall, PRESTON, Lancs PR5 5YY

REQUESTS

ADONIS SPECIMENS WANTED

I am studying the pollen and seed morphology of the genus *Adonis*. Unfortunately, only two species grow in Korea and I would like to obtain samples from as wide a range as possible.

I would greatly appreciate flowers of any *Adonis* species for pollen preparations, if possible with seeds, Xerox copies of specimens, and full collection details. Ideally I would like to have as many flowers per species as possible, but one flower, if that is all that is available, will be welcomed.

Access to literature is also limited in my country and offprints of any literature dealing with *Adonis* would be most welcome. I would, of course, refund all expenses incurred.

SUNGWOO PARK, Dept of Biology, Sung Kyun Kwan University, Suwon 440-746, Korea

BOOK WANTED

I am very anxious to obtain a copy of *Flower and Flower Lore* by Rev. Hildred Friend. Condition is immaterial, please state price.

JILL LUCAS, 8 Camborne Drive, Fixby, HUDDERSFIELD, W. Yorkshire HD2 2NF

SEEDS OF *EUPHORBIA DULCIS* WANTED

I would be grateful for seeds of English grown *Euphorbia dulcis*. The request is for a Polish cytologist working with this species from different countries. Postage will be refunded.

J.J. ZAWADZKI, 4 Maplehurst, Park Hill Road, BROMLEY, Kent BR2 0XG

SEEDS OF *PEDICULARIS PALUSTRIS* WANTED

I am interested in the germination of *Pedicularis* spp. and would be very grateful to receive seeds of *Pedicularis palustris*.

MALCOLM McFARLANE, Yemoji, Framfield Road, Buxted, UCKFIELD, Sussex TN22 4LF

WHITE OAKS

In the Isle of Wight we have references to 'White Oaks'. One being of sufficient importance to be shown on an early map of Brading Harbour. Additionally there is a field in the locality named 'White Oaks'. A second location at the head of the Newtown river is today marked by a pair of cottages similarly named.

What these two locations have in common is that they are situated at the head of two former busy commercial waterways and there appears to be little doubt that these 'White Oaks' were navigational aids. Would any member be able to elaborate on this by a knowledge of the form these sea marks would have taken?

B. SHEPARD, 87 Elm Grove, NEWPORT, Isle of Wight, PO30 1RN

BOOK NOTES

Reviews of the following books will be included in the August 1994 issue of *Watsonia* vol. 20(2):

Mediterranean wild flowers. M. Blamey & C. Grey-Wilson. Pp. 560, with 173 pp. of colour plates illustrating 1,500 species. Harper-Collins, London. 1993. Price £25 (ISBN 0-00-219901-7).

The Flora of Ditchley: wild flowers of an Oxfordshire estate. A.J. Dunn. Pp. xi + 68; 1 map, 11 colour plates. Catherine Wills, Sandford St Martin. 1993. Price £16.45 (ISBN 0-9521310-0-5).

- The Wiltshire Flora*. Edited by B. Gillam. Pp. x + 386; 615 distribution maps, 8 colour plates. Pisces Publications, Newbury. 1993. Price £27.95 (ISBN 0-9508245-8-5).
- Roses of Great Britain and Ireland: B.S.B.I. Handbook no. 7*. G.G. Graham & A.L. Primavesi. Pp. 208. Botanical Society of the British Isles, London. 1993. Price £11.50 (ISBN 0-901158-22-4).
- Atlas of the bryophytes of Britain and Ireland*. Edited by M.O. Hill, C.D. Preston & A.J.E. Smith. Vol. 1: Liverworts (Hepaticae and Anthocerotae), pp. 351, incl. 293 maps, 1991. Vol. 2: Mosses (except Diplolepidaceae); pp. 400, incl. 367 maps, 1992. Harley Books, Colchester. Price £20 (ISBN 0-946589-29-1, vol. 1); £25 (ISBN 0-946589-30-5, vol. 2).
- The families and genera of vascular plants*, ed. K. Kubitzki. Vol. 2: flowering plants, dicotyledons, Magnoliid, Hamamelid and Caryophyllid families, ed. K. Kubitzki, J.G. Rohweder & M. Bittrich. Pp. x + 653; 140 figs. Springer-Verlag, Berlin. 1993. Price DM 478 (ISBN 3-540-55509-9).
- Algae Plants and Landscape*. D.J. Mabberley & P.J. Placito. Pp. xvi + 300; 279 col. & 269 b/w illustrations. Oxford University Press, Oxford. 1993. Price £45 (ISBN 0-19-858702-3).
- Scandinavian Ferns*. B. Øllgaard & K. Tind. Pp. 317; 114 full-page colour plates. Rhodos, Copenhagen. 1993. Price D.Kr. 425 h/b (ISBN 87-7245-532-2); D.Kr. 375 p/b (ISBN 87-7245-530-6).
- The genera of the Umbelliferae*. M.G. Pimenov & M.V. Leonov. Pp. [vii] + 156; 1 map, 1 table. Royal Botanic Gardens, Kew & Botanical Garden of Moscow State University. 1993. Price £12 (ISBN 0-947643-58-3).
- Flora of Northumberland*. G.A. Swan. Pp. 351; 8 transparent overlays, 14 pages of colour plates. Natural History Society of Northumbria, Newcastle-upon-Tyne. 1993. Price £36 (ISBN 0-9520782-0-1).

The following publications have been received recently. Those that will **not** be reviewed in *Watsonia* are marked with an asterisk; unsigned notes are by J.E.

Greek wild flowers and plant lore in ancient Greece. H. Baumann; translated & augmented by W.T. & E.R. Stearn. Pp. 252; 482 illustrations, most in colour. The Herbert Press, London. 1993. Price £16.95 (ISBN 1-871569-57-5). [This book represents a curious marriage between the plants in Europe's richest flora and their historical significance in relation to one of its oldest civilisations. The plants which influenced artists, early physicians, local economies and even older mythologies are mostly unchanged today; the author has brought together information from many diverse sources in this lavishly illustrated work. Chapters on the botany of the ancients, the Homeric landscape, cults and myths, medicinal and magic plants and the gifts of Demeter, together with further chapters on orchids and introduced plants, make this a well rounded work which will have wide appeal. I would especially recommend it to those visiting Greek archaeological sites and desiring a broader view of the landscape and its antiquities, as well as for any natural historian seeking an adjunct to the traditional field guides and floras of the area.

- S. G. Knees

Illustrated Flora of Mallorca. E. Beckett. Pp. 223; 96 col. plates. Editorial Moll, Palma de Mallorca. 1993. Price Pta. 5500 (ISBN 84-273-0714-4).

**'Chinese' Wilson: a life of Ernest H. Wilson, 1876-1930*. R.W. Briggs, with a chapter by V.A. Matthews; foreword by R. Lancaster. Pp. xiv + 154, with numerous b/w photographs and 4 maps. H.M.S.O., London. 1993. Price £19.95 (ISBN 0-11-250017-X). [This is the first in a projected series of biographies of 'Great Plant Collectors', a joint project of the Royal Botanic Gardens, Kew and the Royal Botanic Garden, Edinburgh. Although Wilson is perhaps less well known to many botanists than Fortune, Farrer and Forrest, this new illustrated biography by his great-nephew perceptively details Wilson's achievements, especially in China, in introducing so many plants to Western gardens. Drawing on Wilson's original journals and photographs, the author paints an intriguing picture of a man whose motives for undertaking so many arduous field trips may have included a desire to escape from domestic bliss.]

- **Copy editing: the Cambridge Handbook for Editors Authors and Publishers*, 3rd ed. J. Butcher. Pp. xii + 471. Cambridge University Press, Cambridge. 1992. Price £19.95 (ISBN 0-521-40074-0). [This is one of the most comprehensive yet concise guides to copy editing, the process which largely takes place between submission of a manuscript and its transmission to the printer. The third edition of this classic work contains, for the first time, six pages on 'biology', but these notes are of limited use to those working in the field of plant science publishing. Its main value to authors is in helping them to appreciate, and respond to, the needs of publishers and printers. Specially noteworthy is the "checklist of copy-editing" (pp. 376-395), which while dauntingly comprehensive is not beyond the capability of those working with word-processing software. Also notable is the moderate price.]
- **The Bamboos*. F.A. McClure. Pp. xxii + 345; ill. Smithsonian Institution Press, Washington. 1993. Price £13.25 p/b (ISBN 1-56098-323-X). [The reissue of a classic monograph on the bambusoid Poaceae, with much information on morphology, anatomy, cultivation and economic uses as well as chapters on particular species which are of use in horticulture or as sources of fibre and cane. First published in 1966, this is a paperback reissue with a new introduction by Lynn Clark.]
- **Endangered wildlife in Dorset. The County Red Data Book*. Edited by A. Mahon & D. Pearman. Pp. 135; ill. Dorset Environmental Records Centre, Dorchester. 1993. Price £6 (ISBN 0-9511394-3-6). [A summary of the rare and endangered species of wildlife in one of the most biologically diverse counties of southern England, this guide allows one to pinpoint the "hot spots", and gives brief summaries of changes in the status of these environmentally sensitive plants and animals since 1945. As with other similar county summaries, the data on lower plants are sketchy and incomplete by comparison with those given for many invertebrate groups.]
- Wild Plants of the Phoenix Park*. P.A. Reilly, with contributions by D.L. Kelly, D.M. Synnott & J. McCullen. National Botanic Gardens, Glasnevin & The Phoenix Park, Office of Public Works, Dublin. 1993. Price IR£7.50 (ISBN 0-7076-0331-5). Reprinted from the journal "Glasra".
- **Easy ways to the plants of the Bernese Oberland*. P. & J. Talboys. Pp. [x] + 99; 16 pp. of colour plates. Sawd Books, Sittingbourne. 1993. Price £6.99 (ISBN 1-872489-14-1). [A handy pocket guide to 26 botanical excursions in this very touristic part of Switzerland, with full details of transport and notes on the plants most likely to be encountered.]
- Wild and garden plants*. S.M. Walters. Pp. 200; 39 col. & 51 b/w illustrations. New Naturalist series: Harper Collins, London. 1993. Price £27.50 h/b (ISBN 0-0021-9376-0); £12.99 p/b (ISBN 0-0021-9889-4).
- Domestication of plants in the Old World*, 2nd edition. D. Zohary & M. Hopf. Pp. x + 278; ill. Oxford Science Publications, Oxford. 1993. Price £35 (ISBN 0-19-854795-1).

JOHN EDMONDSON, Botany Dept., National Museums & Galleries on Merseyside, Liverpool Museum, William Brown St, LIVERPOOL L3 8EN.

PLANTING NATIVE TREES AND SHRUBS

This useful book is now in print again and can be obtained from BSBI Publications for £8.00 post paid. Originally published in 1979 it was written by Ken and Gillian Beckett at the instigation of a BSBI Working Party. At that time there was not a great interest in the topic but now, with growing opportunities to plant trees and shrubs for amenity and profit on roadside verges, in field corners on farms, in churchyards, on village greens and so on – and with generous grants to do it – awareness of the importance of choosing native trees and shrubs whenever possible is paramount. If you do not have a copy please buy one and use it: if you do own one buy another and give it to anyone you know who can influence the planting of native trees and shrubs.

FRANKLYN PERRING

ROSES OF GREAT BRITAIN AND IRELAND
(B.S.B.I. Handbook No. 7)

Corrigenda and explanatory notes

- Page 18, line 22: *For* Fig. 2b *substitute* Fig. 2c
line 25: *For* Fig. 2c *substitute* Fig. 2b
- Page 21, line 12: The "long narrow pear-shape" of the base of the prickle mentioned here is not shown in Fig. 6b.
- Page 27, last line: *Add* (g) Pyriform.
- Page 29, line 23: *For* (Fig. 13) *substitute* (Fig. 15b)
- Page 48, line 2: *After* *R. canina* × *sherardii* *add* *R. × rothschildii* Druce
line 36: *After* *R. sherardii* × *canina* *add* *R. × rothschildii* Druce
- Page 119, line 22: *For* *R. agrestis* Desv. *substitute* *R. agrestis* Savi

It is stated on p. 47 that the female parent is listed first when a hybrid formula is given in the list of species and hybrids noted in the text, but it should have been made clear that this applies also in the descriptive part of the Handbook. For example, on p. 66 the description of 4 × 11 relates to plants which have species 4 as the female parent, but on p. 88 the description of 11 × 4 relates to plants which have species 11 as the female parent. The term "non-directional records" used in listing the distribution of hybrids by vice-counties refers to records in which it was not determined which parent was the female.

The maps for hybrids contain all accurately determined records irrespective of which species was the female and which the male parent.

PHILIP OSWALD, BSBI Handbooks Editor

Copies of the corrigenda sheet, printed to fit neatly in the book, can be obtained by sending an A5, stamped, self-addressed envelope to Margaret Perring, Green Acre, Wood Lane, Oundle, Peterborough PE8 5TP – or by asking for one when next you order books.

REPORTS OF FIELD MEETINGS – 1993

Reports of Field Meetings are edited by, and should be sent to, Dr B.S. Rushton, Dept. of Biological and Biomedical Sciences, University of Ulster, Coleraine, Co. Londonderry, N. Ireland BT52 1SA.

No map this time I'm afraid – no space and no time! Ed.

Field Meeting Reports

In order to make the editing of these more efficient, would contributors please note the following:

1. When referring to a particular species, you must include both the Latin **AND** the English name as published in Stace, C.A. (1991). *New Flora of the British Isles*. Cambridge. Generally, you should refer to the Latin name of the species with the common name in parentheses.
2. If the report is typed or word-processed, then make sure it is double line spaced to allow corrections and alterations to be made easily to the text

BRIAN S. RUSHTON, Honorary Editor, Field Meeting Reports

ENGLAND

MIDHURST, WEST SUSSEX (v.c. 13). 24th - 25th JULY

The purpose of this joint BSBI/Sussex Botanical Recording Society (SBRS) meeting was to continue the work started on the field meeting in 1992 to assess tetrad recording (*BSBI News* 63: 45-46). Two main problems were addressed. First, how many species are recorded in common between cards recorded along the same route? Second, what is the relationship between the number of habitats recorded and the number of species?

14 botanists met on a dull, sometimes wet weekend, and recorded 'standard' routes for two and a half hours in pairs. In general, the quality of the recorders was higher in 1993 with a mean recording score of 7.9 compared to a mean of 6.6 in 1992. It is no surprise then that the average number of records per card was 204, a considerable increase on the average of 177 in 1992. Several new species were recorded in 1993, including Spear-leaved Willowherb (*Epilobium lanceolatum*), Sheep's-bit (*Jasione montana*) and Spring Vetch (*Vicia lathyroides*). In a continuation of the Orpine (*Sedum telephium*) story (c.f. 1992 report), only one out of four pairs recorded it in its 'new' locality despite everyone walking within 1 m of a clump 30 cm across.

The same route was recorded four times for tetrads L, Q and R, and three times for tetrad K. Whilst the data are still being analysed, it is clear as expected that the percentage of species in common between cards is greater when the same route is followed than when tetrads are recorded.

A surprising result of the 1992 work was that there was only a weak relationship between the number of habitats and the number of species recorded. To test a possible explanation that the list of habitats present on the card was too limited to explain the variation, the recorders annotated which habitats they had recorded from a list of 76 local habitats. There was a much closer relationship between the number of habitats and the number of species, though variation due to botanists was still the major factor. This suggests that the lists of habitats present on cards such as those used for the BSBI Monitoring Scheme are too limited to be of great value in data analysis.

The data from the 1992 meeting have now been fully analysed, and a paper is shortly to be submitted with the results. Thanks once again to those who took part, and also to Judy Rich and Evelyn Jones who provided an excellent cream tea on Saturday afternoon.

T.C.G. RICH & P.A. SMITH

OUSE AND NENE WASHES, CAMBRIDGESHIRE (v.c. 29). 30th JULY – 1st AUGUST

This meeting was held for a number of reasons. First, it was a sentimental journey for some who, over 30 years ago in 1959, had been involved in a Distribution Maps Scheme meeting in Wisbech which included a visit to Peckover House. Secondly, it was an opportunity, under expert guidance, to visit the washes of the Ouse and Nene which have been acquired as nature reserves of national importance for wetland plants as well as for birds by the Cambridgeshire Wildlife trust and RSPB over the last 25 years. Thirdly, there was to be a return to Bassenhally Pit near Whittlesey to search for old records as well as recording generally for the Cambridgeshire Parish Flora Project (ten cards were filled in during the weekend). All these objectives were enjoyed by over 40 members and guests (from the Cambridge Botanical Group who joined us on Saturday afternoon) in weather which varied from the dramatic to the benign.

On Friday evening the Queen's Hotel on the South Brink in Wisbech provided a rendezvous for the start of the meeting. From here Graham Easy led a town trail concentrating on waste land on the east side of the R. Nene. Whilst half the party were quickly forced by a deluge to retreat to the shelter of the bar of the Queen's, the hardy and prepared were shown amongst other species, *Hirschfeldia incana* (Hoary Mustard), *Guizotia abyssinica* (Niger) and two species of cotoneaster, *C. bullatus* (Hollyberry Cotoneaster) and *C. sternianus* (Stern's Cotoneaster).

Saturday dawned bright and the assembled party was divided into three groups led by James Cadbury, Owen Mountford and Chris Preston to explore the RSPB Ouse Washes south of the Welney road. A special search for *Bidens cernua* (Nodding Bur-marigold), a county rare species found here in 1959 but not seen since, was unproductive but *Juncus compressus* (Round-fruited Rush) was still frequent. With Chris's assistance two grass-leaved pondweeds were located, *Potamogeton pusillus* (Lesser Pondweed) and *P. trichoides* (Hairlike Pondweed).

After lunch a trail of cars wound its way through the long straights and sharp bends south-west to Welches Dam, the centre of the Wildlife Trust's holding in the Ouse Washes. One party with Frank Perring and Chris Preston were driven to the east side to visit the Singing Washes. Here, in well-grazed grassland with marshy hollows there were good quantities of Marsh Stitchwort, *Stellaria palustris*, a county rare species, and the diploid fenland form of Common Comfrey, *Symphytum officinale*. Other notable finds included *Achillea ptarmica* (Sneezewort), *Thalictrum flavum* (Common Meadow-rue) and all four native species of duckweed (*Lemma gibba*, *L. minor*, *L. trisulca* and *Spirodela polyrrhiza*). Meanwhile the second party with James Cadbury, Gigi Crompton and Owen Mountford were seeing the stitchwort in a remarkable triangular marsh between the Counter Drain and the Forty Foot along with a small amount of Greater Spearwort, *Ranunculus lingua*. One of the most notable changes over the last 35 years has been the replacement of *Elodea canadensis* (Canadian Waterweed) by *E. nuttallii* (Nuttall's Waterweed) – only the latter was found.

For the second half of the afternoon the parties joined forces to walk through willow carr inside the R. Delph making a fruitless search on the nettles for *Cuscuta europaea* (Greater Dodder) found here in quantity in 1992. However the nettles themselves were interesting – the newly recognised stingless, narrow-leaved *Urtica galeopsifolia* was abundant alongside *U. dioica* (Common Nettle). The other genus on display was *Persicaria* s.l. – and it was enlightening to be able to compare large populations of *P. lapathifolia* (Pale Persicaria) and *P. maculosa* (Redshank) and taste the difference between *P. laxiflora* (Tasteless Water-pepper) and *P. hydropiper* (Water-pepper) with possible hybrids between them in evidence.

Tasting was also the privilege of those wise people (nearly 30) who chose to experience the buffet supper arranged by Penny Hawes, the National Trust tenant, in the cellars of Peckover House. The gourmet meal was preceded by a wander through the charming, informal (botanical) garden at the rear, and was followed by a tour of this 'distinguished Georgian House, the finest in a magnificent row' (to quote from my earlier report in *Proc. BSBI* 4, 1961, p.208!) – but now made even more delightful by being fully and tastefully furnished, by piano music filtering through the air, and by the anecdotal guidance of Mrs Hawes.

On Sunday morning the party moved west to the Nene Washes, a new RSPB reserve near Whittlesey, downstream from Peterborough. Once again we were divided. Frank Perring's group took a modest walk examining fields and ditches SE of Dog-in-a-Doublet Bridge: for them the outstanding feature was the carpets of Frog-bit, *Hydrocharis morsus-ranae*, a rare and declining species in the county now hardly known outside the Nene Washes. The group with Ceri Evans, who had recently completed a survey for RSPB, and Chris Preston in the lead, found several species of pondweed including *Potamogeton pusillus* (Lesser Pondweed) and *Groenlandia densa* (Opposite-leaved Pondweed): another ditch species seen was Greater Bladderwort, *Utricularia vulgaris*. However the find of the morning was undoubtedly made by a third group led by Owen Mountford which located a patch of *Apium inundatum* (Lesser Marshwort), a rarity last seen at Wicken in 1972 and Cottenham in 1980.

Lunchtime found the majority in the sunlit pub yard of the Morton Fork in Whittlesey though some ate their sandwiches on the way to Bassenhally Pit – in Drybread Road! The Pit itself still has wet areas and small stretches of open water. Despite considerable overgrowth by scrub an English Nature suggestion that the pit should be denotified as an SSSI seemed somewhat premature following the discovery of several locally rare species not seen for over a decade including *Carex vesicaria* (Bladder-sedge) first noticed here by Fryer in the 1880s. The central area of lime-rich grassland is still extant, an unusual habitat in the fenland half of the county, and, outside the Washes, is the only site in the county where *Juncus compressus* (Round-fruited Rush) is present in quantity.

Though the meeting finished at 4.30 p.m., many lingered on trying to finish their sandwiches and doubtless chewing over the titbits that the many leaders had served for them during the three days. They and the Society are grateful to all the leaders and particularly to Derek Wells who gave so much time to organising the meeting but was, at the last minute, prevented by family commitments from enjoying the fun on Saturday or Sunday.

F.H. PERRING

CHICHESTER AND LANGSTONE HARBOURS, S. HANTS AND WEST SUSSEX (v.cc. 11 & 13). 10th - 12th SEPTEMBER

47 members and guests visited the largest expanse of mud on the south coast of England. The Society is very grateful to the several people who so kindly and expertly acted as leaders for the various facets of this meeting. The objectives were to provide various organisations with an expert survey of the flora of the Binness and Pilsley Islands, and to enable members of the Society to enlarge their knowledge of littoral plants and habitats – at sites where public access is normally barred.

Activities commenced on the Friday evening, at Portsmouth Outdoor Centre, with a superb talk and discussion on the ecology of Langstone Harbour (led by Fred Haynes – formerly of Portsmouth Polytechnic) and examination of specimens of *Zostera* spp. (Eelgrasses), *Spartina* spp. (Cord-grasses), *Limonium* spp. (Sea-lavenders) and *Salicornia* spp. (Glassworts) (identified by Francis Rose, and introduced by Brian Gale – who made available species lists for the area, and notes on identification of *Salicornia* taxa). The colonization of the mud by the *Spartina anglica* (Common Cord-grass) / *townsendii* (Townsend's Cord-grass) complex in the first half of this century, and its subsequent decline (corresponding with eutrophication from sewage works, and a resurgence of *Zostera* spp., was noted.

On the Saturday one group (led by Howard Matcham) visited Thorney and Pilsley Islands, whilst the other group (led by Graham Roberts, Sussex County Council) sailed to the five Binness Islands in boats kindly supplied by Portsmouth Outdoor Centre. Dr Rose spent the morning with the Pilsley group and at lunch time – exemplifying his divine position in the botanical universe – walked across the waters and joined the other group. In the evening 28 participants enjoyed a walk at Farlington Marshes NR (led by Dr Clive Chatters, Hampshire NT) – seeing *Polypogon monspeliensis* (Annual Beard-grass), *Bupleurum tenuissimum* (Slender Hare's-ear) and *Oenanthe pimpinelloides* (Corky-fruited Water-dropwort). 18 members dined together.

The Sunday brought continuous rain and rising winds, which precluded sailing, and the group concerned split into two parties: one (led by Andy Polkey, RSPB) made an 'over the mud' trek to North Binness and Long Island, whilst the other (led by Alison Went, Portsmouth OC and Anne de Potier, Chichester Harbour Conservancy) travelled by minibus to two reserves on Hayling Island (Gutner Marsh and Sandy Point). The second group (led by Howard Matcham) visited Thorney and Pilsley Islands. Despite the very wet conditions all of the parties – with magnificent dedication – completed 3-4 hours in the field!

The Binness Islands are owned by the RSPB, and the plant communities are those dominated by species of *Salicornia* (Glassworts) (all four macro species), *Spartina* (Cord-grasses), *Puccinellia* (Saltmarsh-grasses), *Atriplex* (Oraches) and *Juncus gerardii* (Saltmarsh Rush), *Enteromorpha* sp. and *Ulva* sp. North Binness has an oak copse. Separate plant lists were completed for each of the five islands. 30 specimens of *Geranium purpureum* (Little-Robin) were found on the shingle (whereas c. 8000 were present in 1992; the heavy storms of last winter probably buried much of the seed). Scarce plants in evidence were *Zostera marina* var. *angustifolia* (Eelgrass), *Z. noltii* (Dwarf Eelgrass), *Inula crithmoides* (Golden-samphire), *Sarcocornia perennis* (Perennial Glasswort) and *Limonium humile* (Lax-flowered Sea-lavender). The fauna included American Clam, Little Egret and the first returning Brent Geese.

Pilsey Island (18 ha) is leased by the RSPB from the Ministry of Defence. It has an excellent strandline community on the sandy shore, an exceptional lichen heath on stable shingle, and a fine saltmarsh (with similar communities to the Binness Islands). Ground cover between the vascular plants was found to be provided by algae on the saltmarsh (notably *Bostrychia scorpioides*) and by lichen and moss (principally several species of *Cladonia* and *Tortella flavovirens*) on the stabilised shingle. The highlights were the finding of two colonies of *Frankenia laevis* (Sea-heath) (not previously known from Pilsey), *Limonium humile* (Lax-flowered Sea-lavender), *L. vulgare* (Common Sea-lavender) and their hybrid (*L. × neumanii*), *Festuca arenaria* (Rush-leaved Fescue), *Carex extensa* (Long-bracted Sedge) and an Osprey.

By Thorney Island church (*Linopodium ascendens* (Common Calamint) was in flower – and at Wickor Point one of only three communities of *Lythrum hyssopifolia* (Grass-poly) currently known on mainland Britain was examined, and the management regime was discussed.

Hayling Island has an extensive rich saltmarsh at Gutner, which grades into oak woodland without any intervening sea-wall. It is the type locality for two *Salicornia* microspecies (*S. nitens* (Shiny Glasswort) and *S. obscura* (Glaucous Glasswort)), but they were not obviously and consistently distinguishable from the other forms of the *S. procumbens* agg. and the *S. europaea* agg. that were present. By this time in the weekend members were confidently detecting hybridisation everywhere – putative *Fucus spiralis* × *F. vesiculosus* being found amongst *Limonium humile* × *L. vulgare* and introgressed *Spartina*! Sandy Point is a unique habitat within Britain: acid heath on stabilised coastal shingle, where all three British *Ulex* species (Gorses) were seen mingling with *Erica* spp. (Heaths), *Juncus acutus* (Sharp Rush), *Lavatera arborea* (Tree-mallow), *Polygonum oxyspermum* (Ray's Knotgrass) and many species of *Cladonia*.

B.A. GALE

IRELAND

WEST CORK (v.c. H3). 5th - 6th JUNE

The party of twelve people met at the two Sycamores in the middle of Castletownshend village in Sommerville and Ross Country. A local wood was checked for *Trichomanes speciosum* (Killarney Fern) and the party were pleased to see that the specimens were healthy and in an unthreatened state. This site, shown to M. Scannell by J.E. O'Donovan, is one of only two in West Cork where fronds have been re-found in checks of old known locations and is therefore an important location for the fern.

We then moved to Lough Hyne Marine Nature Reserve where a pleasant lunch was taken in full sunshine. The roadsides through the woods in the Barnabah area were then checked. R.A. Phillips reported *Asplenium onopteris* (Irish Spleenwort) here in 1889. It was also seen in 1983. Careful searching resulted in a plant which we considered to be the hybrid *Asplenium × ticinense* (*A. adiantum-nigrum* · *A. onopteris*). However, one of the party, Dr Tom Curtis, did find true specimens not far from the site in separate fieldwork the following week. Mr Michael Troy then led us from Lough Hyne to a site near Roury Bridge where one plant was found on a stone embankment. Some felt that this specimen was not quite acute enough and may be the hybrid again.

The party then moved to Ballin Lough near Leap. Here in the years prior to 1856, G.J. Allman of Bandon, later Professor of Botany at Trinity College, Dublin, studied the freshwater polyzoa. He published *A monograph of the freshwater Polyzoa* (Ray Society, London, 1856) which is today still the standard work! The lake was poor in flora and we called it a day.

On Sunday, June 6th we started in Glengarriff whose oceanic oak woodlands are well known to botanists from the work of Tansley and others. Our main target was a thorough search for *Cephalanthera longifolia* (Narrow-leaved Helleborine) in the wet woodland on the east side of the river. We failed to find the species despite covering much ground. Flora noted included *Saxifraga hirsuta*

(Kidney Saxifrage) and *S. spathularis* (St Patrick's-cabbage) but not the hybrid. Also, the woody species included *Viburnum opulus* (Guelder-rose), *Quercus* spp. (Oak), *Betula* spp. (Birch) and *Ilex aquifolium* (Holly) and the ground flora included *Carex pallescens* (Pale Sedge), *C. pilulifera* (Pill Sedge), *C. viridula* subsp. *oedocarpa* (Yellow-sedge) and *Juncus bulbosus* (Bulbous Rush). The river was dominated by *Juncus bulbosus* var. *fluitans*.

An interesting find was made by Ro Fitzgerald in a field off the main Kenmare road – *Bromus racemosus* (Smooth Brome). This is the first record for v.c. H3, and is also the first record for County Cork. The field was a species rich unimproved hay meadow. We then moved deeper into the wood and looked at two small trees of *Arbutus unedo* (Strawberry-tree) before proceeding to Lough Avaul on the Adrigole road. The list for here included *Lobelia dortmanna* (Water Lobelia), *Carex viridula* subsp. *oedocarpa* (Yellow-sedge), *C. pilulifera* (Pill Sedge), *Schoenus nigricans* (Black Bog-rush), and the stoneworts *Chara virgata* and *Nitella translucens*. The stoneworts are under-recorded for County Cork; the *Nitella* is a new record for the area. The party dispersed after the Lough Avaul search.

MAURA J.P. SCANNELL & D. O'DONNELL

CAHA MOUNTAINS, WEST CORK (v.c. H3). 1st - 2nd AUGUST

The party of four (Jacinta Reynolds, Clare Herdman, John Earley and Declan O'Donnell) and the leader (Miss Maura Scannell replacing Dr Tom Curtis) met at 10 a.m. at Adrigole Bridge. As cloud and mist covered the mountains, it was decided to keep to the lower ground around Castletown-berehaven to search for the orchid *Spiranthes romanzoffiana* (Irish Lady's-tresses) – a protected species. In 1810 James Drummond reported the first European sighting of this orchid from the area. Several wet rushy fields sloping to the sea on the west side of the town were searched but *S. romanzoffiana* was not located. The Gatekeeper butterfly and the migrant butterflies Clouded Yellow and Painted Lady were observed here. We travelled further west to the peaty slopes south of Dunboy Castle opposite the western extremity of Bere Island. While *S. romanzoffiana* was not found, interesting plants recorded here included *Cicendia filiformis* (Yellow Centaury) (one plant), *Scutellaria minor* (Lesser Skullcap), *Hypericum elodes* (Marsh St John's-wort), *Viola palustris* (Marsh Violet), *Saxifraga spathularis* (St Patrick's-cabbage) and *Eleogiton fluitans* (Floating Club-rush). *Euphorbia hyberna* (Irish Spurge) was frequent on the drier ground with small quantities of *Jasione montana* (Sheep's-bit) also seen. *Rhododendron ponticum* (Rhododendron) is well represented and unless checked could cover the area. Much of the lower slopes of these hillsides have been planted with sitka spruce, so it is possible that the station discovered by Drummond is now covered.

The party then travelled a distance of 20 km over the Slieve Miskish Mountains to a location NE of Eyerics on the shore of Kenmare Bay. In 1987 Mr Nicholas Cummins of Bude, Cornwall reported to the herbarium the siting of *Simethis planifolia* (Kerry Lily) previously known only from the Derrynane Area to the NW across Kenmare Bay. His detailed notes were followed seaward of the Ring of Beara road, west of the western tip of Derryvegal Lough. On three hillocks, outcrops of old red sandstone with a thin peat cover, *S. planifolia* was first seen and, therefore, this record new to v.c. H3 was confirmed. The plant appeared to be native here. The immediate flora consisted of *Calluna vulgaris* (Heather) and *Erica cinerea* (Bell Heather) with *Danthonia decumbens* (Heath-grass) as the dominant grass. *Osmunda regalis* (Royal Fern), *Saxifraga spathularis* (St Patrick's-cabbage) and a small quantity of *Carex punctata* (Dotted Sedge) by the stream waterfall were noted. *Juncus tenuis* (Slender Rush) and *Chamaemelum nobile* (Chamomile) are common on the boreen leading to the site. *Fuchsia* sp. and *Montbretias* abound in this area.

It was hoped to botanise about Glenbeg Lough SE of Ardgroom but time did not permit. A brief stop was made near Cappul Bridge, the inner estuary of Ardgroom Harbour to look for a further station of *Carex punctata* (Dotted Sedge). Instead we found some 50 spikes of the protected species *Stachys officinalis* (Betony), reported from this area in the *Atlas of the British flora*. As a final bonus

here we were treated to a fine display of Compass Jellyfish passing under the bridge in the incoming tide.

On Sunday, 2nd August, the party met again at Adrigole Bridge. The party was joined by Lyn and Ian Wright and Jeff Oliver. The weather had deteriorated further, mist had given way to rain and the cloud system was low. Again, it was decided that to venture far up the mountains was unwise in these conditions, so we visited Park Lough – a small lake at the end of the track about 120 m up on the western slope of Hungry Hill. *Lobelia dortmanna* (Water Lobelia) was abundant in the lake together with small amounts of *Menyanthes trifoliata* (Bog-bean). *Phragmites australis* (Common Reed) fringed the lake and there were a few clumps of *Schoenus nigricans* (Black Bog-rush). In the stream draining the lake *Juncus bulbosus* var. *fluitans* (Bulbous Rush) was recognised. Other plants recorded included *Nymphaea alba* (White Water-lily), *Osmunda regalis* (Royal Fern), *Hypericum elodes* (Marsh St John's-wort) and *Rhynchospora alba* (White Beak-sedge) (abundant) and *Viola palustris* (Marsh Violet).

Rain was now persistent and the participants were very wet but before leaving we decided to climb up a stream to a large rock outcrop with a SW facing cliff some 5 m high. Growing from a split in the cliff face was a thick trunked (circa 20 cm in diameter) *Arbutus unedo* (Strawberry-tree). The plant was approximately 2 m high with plenty of leaves but showing the signs of its exposed position by numerous bare branches. It was not in flower. Two further specimens were found on the next outcrop about 30 m higher up the slope in a similar habitat. The rain ended the search but as these records represent an extension in its range, a further look for the species in this area would be worthwhile. *Juncus tenuis* (Slender Rush) and *Chamaemelum nobile* (Chamomile) occurred on the track alongside the lake.

As the weather showed no sign of improvement, it was suggested that we move to the Glengarriff oakwoods. At the main picnic area, the ground flora was examined with *Melampyrum pratense* (Common Cow-wheat) being common. *Polypodium* sp. (Polypody) was growing in quantity on the upper limbs of the oaks. We visited a rock outcrop nearby coated in the filmy fern *Hymenophyllum umbrigenae* (Tunbridge Filmy-fern) in fruit. The oak trunks carried many folioid lichens including *Sticta dufourii* and other eucoceanic species. The results of the Rhododendron clearance programme currently being carried out by staff of the National Parks and Wildlife Service were evident with much natural regeneration of oak and holly to be seen in the cleared areas. We travelled further along the road to see two trees *Arbutus unedo* (Strawberry-tree) and *Amomyrtus luma* (Chilean Myrtle). Some members now departed and four went with the leader to the *Hypericum canadense* (Irish St John's-wort) site on the east side of the village. This site on the eastern slopes of Rosnashunoge seems safe from development; however, the site further to the south from which *H. canadense* was first recorded is now gone, a bungalow now occupies the site.

MAURA J.P. SCANNELL & D. O'DONNELI.

SCOTLAND

GIRVAN, AYRSHIRE, (v c 75) 5th - 6th JUNE

This meeting had an attendance of nine, BSBI members being joined by local members of the Scottish Wildlife Trust. We were much indebted to the SWT for the provision of their minibuses which greatly assisted the mobility of the party. The weather throughout the two days was warm and sunny.

On Saturday we explored the Grey Hill Grasslands Reserve of the SWT which covers a considerable area of hill ground inland from the coast between Girvan and Lendalfoot, much of it given over to hill sheep grazing. Its botanical interest is due to the underlying serpentinite rock which outcrops in several places and influences the grassland, particularly where wet flushing occurs. The local abundance of *Schoenus nigricans* (Black Bog-rush) is a feature of the vegetation. In the flushes we found *Selaginella* sp., *Parnassia palustris* (Grass-of-Parnassus), *Eleocharis quinqueflora* (Few-

flowered Spike-rush), *Carex hostiana* (Tawny Sedge) and *C. viridula* subsp. *brachyrrhyncha* (Yellow Sedge). Where the serpentinite outcropped the most interesting species was *Mimuartia verna* (Spring Sandwort) which was frequent over the whole area. Several healthy bushes of semi-prostrate juniper (*Juniperus communis*) grew in a gully accompanied by Rock-rose (*Helianthemum nummularium*), *Antennaria dioica* (Mountain Everlasting) and *Helictotrichon pratense* (Meadow Oat-grass). We failed to rediscover the site of a small colony of *Thlaspi caerulescens* (Alpine Penny-cress) which has been known in the area since 1974.

Lunch was taken overlooking Loch Lochton, a small body of open water surrounded by fen and willow carr. Here, both White and Yellow Water-lilies (*Nymphaea alba* and *Nuphar lutea*) were a feature, with *Carex diandra* (Lesser Tussock-sedge), *C. paniculata* (Greater Tussock-sedge) and their hybrid *C. × beckmannii*. Cranberry (*Vaccinium oxycoccos*) straggled over *Sphagnum* hummocks in the swampy margin.

Our transport awaited us by the coast road at Pinbain where the grassy cliffs were bright with flowering Rock-rose (*Helianthemum nummularium*), Bloody Crane's-bill (*Geranium sanguineum*), Wood Vetch (*Vicia sylvatica*) and Kidney Vetch (*Anthyllis vulneraria*). In one spot there was a fine colony of Carlina Thistle (*Carlina vulgaris*), a scarce species in Ayrshire. Most of the party also visited a fine population of *Mertensia maritima* (Oysterplant) on the shore nearby.

On the second day we met in the car park at Dunure Castle, the intention being to explore the coast to the south towards Croy, where transport would await. Cliffs composed of volcanic rocks are the main feature of this stretch of coast. Some time was spent first in the vicinity of the castle where *Sagina subulata* (Heath Pearlwort), *Conium maculatum* (Hemlock), *Trifolium arvense* (Hare's-foot Clover), *T. striatum* (Knotted Clover) and *Umbilicus rupestris* (Navelwort) were noted. On the shore nearby grew *Carex otrubae* (False Fox-sedge) and *Catabrosa aquatica* var. *uniflora* (Whorl-grass). The flora of the grassy cliff tops included quantities of *Antennaria dioica* (Mountain Everlasting), *Allium vineale* (Wild Onion), *Scilla verna* (Spring Squill), Rock-rose (*Helianthemum nummularium*) and Kidney Vetch (*Anthyllis vulneraria*), while the cliff flora featured *Asplenium marinum* (Sea Spleenwort), *Spergularia rupicola* (Rock Sea-spurrey), *Eupatorium cannabinum* (Hemp-agrimony), *Ligusticum scoticum* (Scots Lovage) and *Crithmum maritimum* (Rock Samphire) in its best Ayrshire site. A handsome hawkweed, *Hieracium dicella* was plentiful. Towards Croy, *Polystichum setiferum* (Soft Shield-fern) was seen on a shaded stream bank and *Equisetum telmateia* (Great Horsetail) on wet slopes above the shore.

A. STIRLING

WALES

MERTHYR MAWR, GLAMORGAN (v.c. 41). 17th JULY

17 members and friends met at Candleston car park (GR SS/871 772) at the eastern end of the Merthyr Mawr dune system. We were fortunate in having not only the company of Miss Elizabeth Ford of the Glamorgan Heritage Coast Ranger Service but also Mr and Mrs J.P. Curtis whose detailed knowledge of the site proved invaluable.

The party was introduced to the dune system whilst assembled on top of, one of the few mobile dunes left. Just adjacent to this a very large mature stand of *Hippophae rhamnoides* (Sea-buckthorn) was viewed with *Acer pseudoplatanus* (Sycamore) and *Sambucus nigra* (Elder) present as 'secondary' woody species. Soon after a typical area of rabbit grazed dune grassland supporting *Thymus polytrichus* (Wild Thyme), *Galium verum* (Lady's Bedstraw), *Pilosella officinarum* (Mouse-ear-hawkweed) and *Lotus corniculatus* (Common Bird's-foot-trefoil) was viewed together with some patches of *Rosa pimpinellifolia* (Burnet Rose). Also seen were more mobile dune slopes supporting *Reseda lutea* (Wild Mignonette), *Echium vulgare* (Viper's-bugloss), *Erodium cicutarium* (Common Stork's-bill) and *Oenothera glazioviana* (Large-flowered Evening-primrose). Whilst heading towards

the Afon Ogwr a small dune slack was visited with *Epipactis palustris* (Marsh Helleborine), *Mentha aquatica* (Water Mint), *Gentianella amarella* (Autumn Gentian), *Equisetum variegatum* (Variegated Horsetail), *Dactylorhiza praetermissa* (Southern Marsh-orchid) and *Blackstonia perfoliata* (Yellowwort). An unsuccessful search was also made for *Liparis loeselii* (Fen Orchid), a species never previously recorded at Merthyr Mawr. Just before entering the saltmarsh an area of dune grassland supporting the two locally uncommon species *Cruciata laevipes* (Crosswort) and *Asperula cynanchica* (Squinancywort) was found.

On the Afon Ogwr saltmarsh notable special species seen by the party included *Centaureum pulchellum* (Lesser Centaury) and *Polygonum oxyspermum* subsp. *raii* (Ray's Knotgrass). One of the highlights of the day included *Frankenia laevis* (Sea-heath) discovered here as new to South Wales in 1981 and now spreading quite rapidly on to the drier parts of the marsh in association with *Limonium binervosum* (Rock Sea-lavender), *Armeria maritima* (Thrift). At the western end of the saltmarsh both *Parapholis incurva* (Curved Hard-grass) and *P. strigosa* (Hard-grass) were seen together with *Glaux maritima* (Sea-milkwort) and *Spergularia media* (Greater Sea-spurrey).

We re-entered the dunes soon after and visited the largest slacks at the centre of the system. Notable species seen here included *Epipactis helleborine* (Broad-leaved Helleborine) and *Monotropa hypopitys* (Yellow Bird's-nest), and a brief search was made for the rare liverwort *Petalophyllum ralfsii*. Its absence may have been due to mid-summer drought. Of great interest to all was the extensive stand of *Aristolochia clematitis* (Birthwort) visited in one of the dry western slacks. Members of the party spent some time photographing and examining plants before moving north to the unusual suite of slacks which are influenced by carboniferous limestone springs. It is thought to be in this area that *Rumex rupestris* (Shore Dock) was last seen by E.J. Lousley in 1954, but no plants were found. Instead the party was able to examine the unusual inundation community of *Rubus caesius* (Dewberry), *Agrostis stolonifera* (Creeping Bent), *Potentilla anserina* (Silverweed), *Rorippa sylvestris* (Creeping Yellow-cress) and the moss *Fontinalis antipyretica* before moving on to areas of partially vegetated shingle resulting from past extraction works.

The day ended with a brisk return walk across the dunes after a day of ideal breezy and sunny weather.

My thanks go to Mr Murray McClaggan for permission to hold the field meeting at Merthyr Mawr.

P. S. JONES

HUNGARY

HUNGARY. 5th-19th JUNE 1993

Twelve members joined the BSBI tour of botanical sites in Hungary, the first since 1985. On arrival in Budapest we were met by our Hungarian guide Ferenc Nemeth, who conducted us to our hotel situated in the Buda Hills south of the city. A brief inspection of grassland around the hotel before supper revealed *Sisymbrium strictissimum* (Perennial Rocket), *Astragalus onobrychis* and *Salvia nemorosa* (Balkan Clary). All these species were to become familiar during the tour. Sunday morning started with a sight seeing tour followed after lunch by a walk across the dolomitic limestone grassland of the Buda Hills. Species noted included *Dianthus ponederae* subsp. *giganteiformis*, *Clematis recta*, *Dorycnium pentaphyllum* subsp. *germanicum*, *Iris pumila*, *Thesium limophyllum* and *Verbascum speciosum*. *Puccinellia distans* (Reflexed Saltmarsh-grass) occurred in a habitat far removed from a coastal saltmarsh.

On the Monday morning we left Budapest to travel west towards Lake Balaton. En route we visited two further sites on dolomitic limestone in the Vertes Mountains. Here limestone knolls support a relict flora including Hungary's only population of *Primula auricula* subsp. *hungarica*. Other species included *Aconitum vulparia* (Wolf's-bane) and *Dictamnus albus*. Nearby was the *Quercus*

petraea (Sessile Oak) and *Q. cerris* (Turkey Oak) dominated Csakvar Forest. Extensive areas of grassland were also present with *Centaurea triumletti*, *Galium glaucum*, *Gypsophila paniculata*, *Dianthus plumarius* subsp. *regis-stephanae* and *Stipa pulcherrima*. Relict wetland at Lake Sosko proved a sedge rich habitat which included *Carex filiformis* (Downy-fruited Sedge). Orchids, including *Epipactis palustris* (Marsh Helleborine), *Orchis coriophora*, *O. laxiflora* subsp. *palustris* (Loose-flowered Orchid) and *O. militaris* (Military Orchid), were also present although due to the exceptionally hot weather most had finished flowering.

A wide range of other habitats around Lake Balaton were visited on Tuesday and Wednesday. These ranged from the wetlands of the Kali Basin to the flora of the volcanic basalt plugs which form a line of steep sloped hills along the northern shore of the lake. The rich fenland flora of the Kali Basin includes the only remaining population of *Primula farinosa* (Bird's-eye Primrose) in Hungary. At the time of our visit in 1985 the species was thought to be extinct in Hungary. The future of this area has now been made more secure by the implementation of a number of conservation measures aimed at maintaining water levels. A good population of *Petrorhagia prolifera* (Proliferous Pink) was found in one of the basalt areas while elsewhere *Dianthus lumnitzeri*, *Inula hirta*, and *Seseli elatum* subsp. *osseum* were present. On Thursday we headed east again towards the Kiskunsag National Park. The Park comprises some 30,000 ha of sand dune, steppe and wetland habitat situated between the Danube and Tisza rivers. En route we passed through an area of rolling loess hills. Here new examples of Hungary's relict loess flora have recently been discovered. The site visited contained *Crambe tataria*, *Allium atropurpureum*, *A. scorodoprasum* (Sand Leek), *Isatis tinctoria* subsp. *tinctoria* (Woad), *Taraxacum serotinum* and an extensive stand of colourful *Linum hirsutum*.

Our first visit in the National Park was to an area of soda or 'natron' lakes. Species noted included *Limonium gmelinii*, *Hordeum hystrix*, *Lepidium cartilagineum* subsp. *crassifolium* and *Suaeda maritima* subsp. *pannonica*. The flora of the sand dune steppes ranges from open sand to enclosed juniper forest. Highlights included *Holosteum umbellatum* (Jagged Chickweed), *Linaria genistifolia*, *Gypsophila fastigiata*, *Onosma arenaria* subsp. *arenaria*, *Tragopogon floccosus*, *Stipa capillata* and *S. borystenica*. One of the areas of dune visited outside of the National Park was formerly a Russian military training area. We were among the first party of botanists to record there since it was handed back to the Hungarians. Several further species of interest such as *Achillea ochroleuca* and *Senecio paludosus* (Fen Ragwort) were noted on road verges in the Park. A break from botanizing was provided by a traditional herdsman's lunch at the Cut Throat Inn. This was followed by a successful excursion by horse and cart to see some of the great bustards which breed in the National Park.

On Saturday two wetland areas were visited before we headed north towards the town of Eger and the Bükk National Park. The first, inside the Kiskunsag National Park, comprised a former oxbow of the river Tisza. *Alopecurus aequalis* (Orange Foxtail), *Pholius pannonicus*, *Aristolochia clematidis* (Birthwort), *Bidens frondosa* (Beggarticks) and *Celtis occidentalis* subsp. *dentatus* were noted here along with a number of sedges including *Carex vulpina* (True Fox-sedge). Further north along the river *Salvinia natans* and *Trapa natans* were seen. The Bükk National Park covers some 39,000 ha of the Bükk Mountains and includes a range of grassland and woodland habitats on limestone. The Park contains some of the richest botanical sites in Hungary. One of these, the 'Great Meadow', which we visited on the following day also provided the highlight of the tour as indeed it did in 1985. *Iris sibirica* (Siberian Iris), *I. variegata*, *I. graminea*, *Dracocephalum ruscianum*, *Ajuga genevensis*, *Pulsatilla vulgaris* subsp. *grandiflora* (Pasque-flower), *Maianthemum bifolium* (May Lily), *Moneses uniflora* (One-flowered Wintergreen), *Carum carvi* (Caraway), *Bupleurum longifolium*, *Trautsteinera globosa*, *Lychnis viscaria* (Sticky Catchfly) and *Aconitum moldavicum* were among the species recorded. Sedges included *Carex hallerana*, *C. pilosa*, *C. michelii* and *C. brizoides*. Other species of interest recorded in the National Park included *Cypripedium calceolus* (Lady's-slipper), *Cephalanthera rubra* (Red Helleborine), *Epipactis atrorubens* (Dark-red Helleborine), *E. microphylla*, *Salvia glutinosa* (Sticky Clary), *Lactuca perennis*, *Scutellaria altissima* (Somerset Skullcap), *Daphne cneorum* and *Inula ensifolia*. *Genista pilosa* (Hairy Greenweed) was also noted growing alongside the more familiar *G. tinctoria* (Dyer's Greenweed).

Tuesday involved a further move to the north to the Aggtelek National Park. This comprises a further mountainous area straddling the border with Slovakia. Further areas of species rich limestone

grassland and scrub were visited. These included the only site worldwide for the endemic *Onosma tornensis*; over a hundred individuals were counted on a scorchingly hot limestone hillside. Associated flora included *Melica ciliata*, *Astragalus vesicarius* subsp. *albidus* and *Prunus mahaleb* (St Lucie Cherry). An adjacent road verge provided *Melampyrum pratense* (Common Cow-wheat) and the white flowered *Papaver dubium* subsp. *lecoqii* (Long-headed Poppy). Elsewhere in the Park we recorded *Adonis vernalis*, *Linum flavum* and *Dipsacus laciniatus*. Other activities at Aggtelek involved a 3 km walk through the extensive cave system, and a visit to the arboretum which retains the first *Robinia* which was, unfortunately, introduced to Hungary early in the last century. On our return to Budapest we visited the national plant collection at the Vácrotot Botanic Gardens while the final full day was free for further sightseeing.

At a celebration 'last supper' we thanked our guide and organiser of the tour in Hungary, Ferenc Nemeth. Thanks must also go to our other guides in particular Tibor Seregelyes and to both the National Bureau for the Environment and Nature Conservation (OKTH) and the Hungarian Academy of Science's Institute of Botany and Ecology, for providing local guides and allowing access to their protected sites. Finally I must thank Trevor Evans, John Montgomery and Richard Pryce for their help in preparing this account.

PHILIP HORTON

ANNUAL EXHIBITION MEETING – 1993

**Plant Science Laboratories The University of Reading Whiteknights
Saturday, November 27th**

These reports have been edited for publication by Dr Sarah Webster

AN IRISH BRAMBLE IN ALDERNEY

Rubus iricus Rogers described in 1896, is a strikingly beautiful bramble of the West of Ireland, where it is locally common on roadsides and in bushy places, especially near the sea, extending from Kerry right up to Tyrone and Donegal. Its large, showy, deep pink flowers render it unmistakable.

Until the summer of 1993 it was assumed to be an Irish endemic (a solitary Cornish record having been exposed a few years ago as an error). Most unexpectedly, however, it has turned out to be present in Alderney – and in considerable quantity there, occurring conspicuously in the low-growing scrub that fringes the island's north-west coast. Here it is accompanied by another hardly less unexpected species *R. viridescens* (Rogers) T.A.W. Davis, known hitherto only from Cornwall, Devon, Pembroke and Kerry. No sign of either of the species has been found in any of the other Channel Islands.

An Alderney specimen of *R. iricus* was exhibited, together with a map showing its Irish distribution

D.E. ALLEN

GLOBAL WARMING IN DORSET?

Three botanical observations suggest that conditions in Dorset may be becoming more like those of SW Europe:

1. Of thirty-five species recently recorded in v.c. 9 (Dorset), 63% are from south, west or south-west Europe and none from north Europe.
2. *Erica ciliaris*, *Parentucellia viscosa* and *Pinus pinaster* are south-west European species which have markedly extended their ranges in Dorset since the 1950s.
3. Of twenty-eight possibly extinct species, none of which have been seen in Dorset since 1975, 25% are from north Europe and 36% from south or west Europe.

H.J.M. BOWEN & D.A. PEARMAN

MEDICINAL & HERBAL PLANTS IN LLEYN

The medicinal and culinary herbal species of West Lleyrn show a restriction to village or farm and never grow far from human settlement. Some are rare (*Marrubium vulgare*, *Verbena officinalis*), others e.g. *Ballota nigra*, *Malva sylvestris*, *Conium maculatum*, more frequent, but never common roadside weeds as in England. *Artemisia absinthium*, *Datura stramonium*, *Smyrniolum olusatrum*, *Inula helenium* and *Hyoscyamus niger* are others, all of which grow on Bardsey Island and/or the close-by mainland in and near Aberdaron. A remarkable concentration in an area rich in monastic mediaeval history suggesting ancient introduction; but doubtless repeatedly up to modern times. The sole Lleyrn locations for *Sambucus ebulus* too, are along the north-coast pilgrim's route to Bardsey.

Seed of many of these species are known from Roman and older archaeological sites; in Denmark *Hyoscyamus* has been reported as growing on exposed soil dated 1300 AD. *Hyoscyamus* still grows on remote 'monastic' Welsh islands – a handy drug for hermits with tooth-ache.

A.P. CONOLLY

WHAT FROM WHERE, A BRIEF LOOK AT THE NATURAL HISTORY MUSEUM'S BRITISH COLLECTIONS

The NHM's vascular plant herbaria comprise about four million specimens, of which some 600,000 are from the British Isles. Material within each species is arranged in vice-county order.

Details of some herbaria of regional interest were displayed on a map of the British Isles using herbarium sheets and photographs as illustrations.

Holdings of specialist collections, *Asplenium*, *Carex*, *Dryopteris*, *Hieracium*, *Potamogeton*, *Rosa*, and *Rubus* were described, illustrated by a 1934 photograph of two *Potamogeton* hunters identified by members present as Dandy collecting with probably H.W. Pugsley looking on.

Members were reminded about the opening times of the herbarium as in *BSBI News* 61: 41 and urged to come forward to use, identify and help curate the collections.

C.M. DOWLEN

RUBUS GATHERINGS FROM THE NORTH OF ENGLAND

Thanks to J. Edmondson and A. Gunn at LIV, it was possible to exhibit local distribution maps produced from over 4000 *Rubus* records.

General agreement was reached that *R. pallidus* occurs in Cheshire, *R. distractiformis* occurs in S.W. Yorks and that the following occur in S. Lancs :- *R. albionis*, *R. cumbrensis* (new Southern limit Winter Hill), *R. elegantispinosus*, *R. leightonii* (new Northern limit, near Wigan), *R. echinatus*, and *R. pallidus*.

Extracts of a *Rubus* synonyms key compiled by E. Kearns were also exhibited, this has been used at BOLTON to update nomenclature for the 171 species assumed to be represented there.

Special thanks to P. Francis at BOLTON for mounting over 297 sheets of rubi and to G. Halliday for demonstrating the features of *R. cumbrensis* at Troutbeck last summer.

D.P. EARL

HUNGARIAN GRASSES AND SEDGES

Forty herbarium sheets of Hungarian grasses and sedges seen on the BSBI trip in June 1993 were exhibited together with a small number of other plants.

T.G. EVANS

VEGETATION STUDIES AT THE MATTMARK DAM, SAASER VALLEY, SWITZERLAND

This study at the side of the Mattmark hydroelectric power reservoir, formed part of a first year undergraduate field course. Quantitative studies showed that the site was of a high species diversity, and characterised as alpine heath. The site also contained many of the characteristic, protected plants of the alps including, *Aquilegia alpina*, *Leontopodium alpina*, *Gentiana kochiana*, *Lilium martagon* etc. The poster highlighted the importance of such a site which is relatively undisturbed, and not subject to much trampling, by humans or cattle. This contrasts sharply to many sites in the vicinity, which have been badly damaged by bulldozers during the construction of ski slopes. Once damaged, many sites fail to recover as they are subject to artificial snow, fertilised and sown with agricultural grasses. The alpine flora is very vulnerable, and relatively undisturbed sites such as this need to be conserved.

A.M. HALL & P. BEALES

COTONEASTER NATURALISED IN WALES AND SOME SPECIMENS AT NMW

Fifteen *Cotoneaster* taxa are reported as naturalised in Wales based on published and corrected plant records and more recent records, as yet unpublished, based on specimens at NMW. They are *C. affinis*, *C. bullatus*, *C. conspicuus*, *C. dielsianus*, *C. frigidus*, *C. hjelmqvistii*, *C. horizontalis*, *C. insculptus*, *C. integrifolius*, *C. rehderi*, *C. salicifolius*, *C. simonsii*, *C. s. suecicus* 'Skogholm', *C. sternianus*, *C. s. watereri*. The record of one other species, *C. villosulus*, was confirmed during the meeting. Two 1993 records of *C. mucronatus* and *C. franchetii* will need confirmation. All confirmed taxa for Wales were illustrated by photocopies of exsiccata at NMW together with 24 others from the collections. This included examples of species with whitish hairs on the underside of the leaves, black-fruited *Cotoneaster* and some *sp. nov.* determined by B. Hylmö and J. Fryer. The

exhibit included an interim report on the *Cotoneaster* of the parks and gardens of industrial South Wales.

A handout of leaf silhouettes of naturalised *Cotoneaster* in Wales was provided.

G. HUTCHINSON

THE CONSERVATION OF *LIPARIS LOESELII* (FEN ORCHID) IN SOUTH WALES

The British dune slack form of *Liparis loeselii* (var. *ovata*) has declined considerably in recent years. Phytosociological and demographic studies suggest that above all else this seems to be related to the loss of its most important suite of supporting ecosystem types, namely successional young dune slacks. In South Wales, as elsewhere, the loss of these community types has principally resulted from undergrazing and dune system stabilisation. The lack of formation of new dune slacks by natural processes may now seriously threaten the long-term survival of the dune slack form in the British Isles. Accordingly a range of carefully monitored management techniques to encourage the recovery of *Liparis loeselii* populations are currently under consideration. These include close mowing to expose bare soil, turf stripping to restore slacks to an earlier successional stage and (in the long-term) destabilisation of carefully selected areas to encourage the formation of new dune slacks by natural aeolian processes.

P.S. JONES, C. HURFORD & A. JONES

CHECKLIST OF THE VASCULAR PLANTS OF N MOROCCO

A project to study the vascular plants of Northern Morocco is being undertaken by four teams in Seville, Rabat, Reading and Barcelona, financed by the EC. It will result in a checklist with chorological information. The three-year project consists of the preparation of a synthetic reference system of the diversity of vascular plants of N Morocco, and will be published as a synonymic checklist with keys for the identification of genera and species. Field studies are being undertaken on 30 expeditions which will cover 20 natural regions of N Morocco. Biological, ecological and chorological data are being recorded during the expeditions and plant material is being collected for herbarium and laboratory studies.

The exhibitors undertook two expeditions in July, spending one week in the region around Keta-ma and another based on Taza and the Jebel Tazzeke. A Global Positioning System was used for rapid, accurate recording of localities. Photographs were displayed showing many under-recorded, later-flowering taxa.

S.L. JURY & L.S. SPRINGATE

NATIVE ON SEACLIFFS IN WALES? *SORBUS DOMESTICA* JOINS THE BRITISH FLORA

Sorbus domestica (the true Service-tree), previously known in Britain only as a single, doubtfully native, tree which once grew in the Wyre Forest in Worcestershire, has been discovered growing in

two apparently native populations on south-facing limestone seacliffs in southern Glamorgan. Ring-counts on dead branches indicate that the oldest trees are several hundred years old.

S. domestica may have been overlooked here in the past because of its close superficial vegetative similarity to *S. aucuparia*, because its occurrence was unsuspected, and because reliable identification characters are not given in most British floras. Its discovery in Glamorgan suggests that similar non-fruiting populations may also have been overlooked at other sites in Britain.

Q.O.N. KAY & M. HAMPTON.

HYDROTHERAPY FOR HERBARIUM MATERIAL

A plant pressed and dried becomes brittle. Any attempt to open out a folded-over leaf results in cracking and breaking along the fold. The exhibit demonstrated that by immersing a dried specimen in water for about half an hour, sufficient moisture is absorbed to restore a leaf's pliability so that it can be opened out and re-pressed.

Once pliability has been restored the specimen is placed on a clear plastic sheet and the stem sello-taped to it. The leaves can then be opened out and, if necessary, held in place with stamp hinges. Sheets of absorbent kitchen towel can then be placed over the specimen and the pressure of an average telephone directory applied.

After 48 hours the specimen will have dried, the stamp hinges can then be peeled off and it is ready to be remounted. A specimen collected as long ago as 1937 was successfully treated in this way in 1993.

P. MACPHERSON

THE *CARDAMINE AMARA* GROUP IN AUSTRIA

The results of the karyological study of the *Cardamine amara* group show that tetraploid plants of this group are widespread throughout most of Austria. Lower Austria, Styria and Tyrol are the only known areas where diploid plants (widespread in other parts of Europe) come into contact with tetraploid plants. Preliminary morphological analysis of Austrian populations, compared with diploid populations of *C. amara* subsp. *amara* and *C. amara* subsp. *opicii* from the Carpathian and Sudeten mountains and tetraploid populations from southern Bohemia, shows that the diploid populations from Austria belong to *C. amara* subsp. *amara*, while the tetraploid populations from Austria and southern Bohemia appear to be morphologically distinct and possibly represent a different, as yet undescribed, taxon. No diploid plants of *C. amara* subsp. *opicii* were found in Austria in the course of the present study.

K. MARHOLD

NEW FINDS IN 1993 IN THE BAILIWICK OF GUERNSEY

For some time now, remarkable records have been made, year after year, from the islands of the Guernsey Bailiwick. Vouchers were on show of the following:

Silene armeria, new to the Bailiwick; *Fallopia* × *bohemica*, first CI record; *Geranium purpureum*, new to Herm; *Cotoneaster simonsii*, new to Sark; *Aethusa cynapium*, Alderney – previously known only in 1932; *Cyclamen hederifolium*, hitherto overlooked in Alderney; *Angelica pachyderma*, well established in Guernsey, new to the British Isles – source New Zealand, where it is long naturalised from its native NE coast of Iberia; *Lamiastrum galeobdolon* subsp. *argentatum*, new to Alderney; *Linaria maroccana*, new to Guernsey; *Galium* × *pomeranicum*, previous records 1883 and 1907. *Helianthus tuberosus*, first flowering noted from the CI; *Aster subulatus*, new to British Isles; *Lemna trisulca*, known previously only c. 1790; *L. minuta*, detected in Alderney, new to CI; *Asparagus officinalis* subsp. *prostratus*, new to Sark, *Lagurus ovatus*, first confirmed record for Herm.

B. OZANNE

A STRANGE TOOTHPICK FROM MOROCCO

An umbel bought from a stall near Agadir was displayed. It was sold as a toothpick. The specimen was identified by John Cannon as *Ammi visnaga*, a species which is native to the Mediterranean, Portugal, Western Asia and North Africa, which occasionally occurs as a casual in Britain. The economic importance of this plant was foretold by David McClintock in his *Supplement to the Pocket Guide to Wild Flowers* (1957) where he gives, as its English name, Toothpick Plant and adds that it is best identified by the swollen-based rays of the fruiting umbels being stiff, erect and congested. Stephen Jury/Reading University Herbarium kindly supplied a pressed specimen of *Ammi visnaga* and a photograph of a basket of toothpicks for sale.

F.H. PERRING

IN PRAISE OF TOADSTOOLS

A fine book of this name written, illustrated and published by Suzanne Lucas was displayed. With an Introduction by Roy Watling it is the first of two planned volumes. Copies of Vol. I are available from Suzanne Lucas, Ladymead, Manor Road, Mere, Warminster, Wilts BA12 6HQ.

F.H. PERRING

LOCAL BOTANICAL GROUPS

A map was displayed showing the location of local botanical groups involved in the preparation of local floras and a list of contacts for each was given. Information about any other similar groups was requested. Members not in touch with local groups in their area were invited to approach the appropriate contact.

F.H. PERRING

POTAMOGETON × SCHREBERI : RECENTLY DISCOVERED IN THE BRITISH ISLES

A well-established population of *Potamogeton* × *schreberi* (*P. natans* × *P. nodosus*) was discovered in 1992 in the River Stour near Marnhull, v.c. 9, Dorset. It grew upstream of the known sites for *P. nodosus* in the Dorset Stour. Specimens of *P. × schreberi* from Dorset were exhibited, together with the putative parents and material of the hybrid from Germany and Switzerland. The similar hybrids *P. × fluitans* (*P. lucens* × *P. natans*) and *P. × sparganifolius* (*P. gramineus* × *P. natans*) were also exhibited with their parents. A detailed account is being prepared for submission to *Watsonia*.

C.D. PRESTON

JOSEPH BANKS (1743 – 1820) : THE LINCOLNSHIRE CONNECTIONS

Banks lived at the family home, Revesby Abbey on the edge of the fens near Horncastle, from the age of two to nine. Over those years and during school holidays he roamed the local unenclosed countryside and undrained East Fen, learning to fish and swim. After school, university and overseas explorations, Revesby remained his principal country seat to which he returned every autumn. In Georgian Lincolnshire he was a towering figure and was the instigator or driving force behind the Horncastle Canal and the drainage of East, West and Wildmore Fens. He had a town house in Horncastle and chaired meetings in the Assembly Rooms of the Bull Hotel there. He took a scientific interest in the submerged forest on the coast and an antiquarian interest in features of Lincoln Cathedral where the Banks View is named after him. One aspect of his hospitality were the fishing parties on the River Witham.

D.N. ROBINSON

THE GENUS PEUCEDANUM (UMBELLIFERAE) AN ASSORTMENT OF DISCS

A review of this large and widespread genus as found in Europe, with additional data about its wider distribution. Specimens of most of the 29 European species were on show, belonging to the exhibitor or RNG.

Peucedanum is widely believed to be an unnatural grouping of plants, which are united solely by their disc-like fruits. The *Flora Europaea* order appears to be based on a gradation from narrow to broad leaf-lobes but, even here, there are inconsistencies.

The exhibit was intended to put flesh on the bare bones of the *Flora Europaea* paragraphs.

M.J. SOUTHAM

RANUNCULUS × LEVENENSIS IN V.C. 73, PAINTINGS OF COTONEASTER & SHODDY PLANTS

A Creeping Spearwort was found growing in a strange habitat – a clay indentation in what may have been a shallow quarry in the middle of Forestry Commission forest. The plants were covering a 10

foot square and there were no signs at all of *Ranunculus flammula* in the vicinity. Other v.c. 73 records included *Dryopteris aemula* and a second record for *Polygonum rurivagum*. Twenty years ago *Polystichum* × *bicknellii* was recorded and it was refound at the same location this year.

Drawings of capitulae of *Taraxacum* for the prospective Dandelion Handbook were shown as well as schematic drawings of *Hieracia*, Paintings of *Cotoneaster*, and also shoddy plants seen on the Recorder's meeting at York in September.

O.M. STEWART

BOTANICAL PAINTINGS : THE FLORA OF THE AREA AROUND CHRISTCHURCH, ENGLANDS SOUTHERN HEATHLANDS, AND SOME ORCHIDS OF DORSET

The cover for the *Flora of the area around Christchurch, Dorset* was commissioned by Felicity Woodhead, and I was very pleased to be asked. As a mature student in the second year of H.N.D. Natural History Illustration, it is a real bonus to have work in print before the end of the course!

Englands Southern Heathlands was a college project, and as I have always been interested in conservation, I have highlighted the threat to the rarer species. This piece took some 180 hours from start to finish.

Illustrations of Greater Butterfly Orchid (*Platanthera chlorantha*), Early Spider Orchid (*Ophrys sphegodes*) and Lizard Orchid (*Himantoglossum hircinum*) are the first of nine to be incorporated into a bound illustrated essay, to be assessed at the end of the college course. The medium used is watercolour and gouache white, and on average each painting takes 30–40 hours.

J. TYLER

CLOVERS, CRASSULA & CLIFFS

A summary of a botanical and habitat survey of 8 km of the Bournemouth Cliffs was exhibited. A total of 331 species was recorded, including four Red Data Book species – *Anisantha madritensis*, *Cynodon dactylon*, *Poa infirma* and *Valerianella eriocarpa*. A further 13 species are Nationally Scarce and 24 are Dorset Scarce and Noteable Species.

Many of the interesting species belong to the guild of plants that cope with the summer drought by flowering early and producing seeds, or like *Poa bulbosa*, form a 'bulb'. There are 9 annual clovers, *Vicia lathyroides*, *Silene gallica*, *Lotus subbiflorus* and *Crassula tillaea*. The latter is of particular importance because it is thriving, whereas elsewhere it appears to be declining.

A tentative, vegetative key to clovers and related species in Dorset was presented for comment with a view to improvement.

R.M. WALLS

FLORA OF THE CHRISTCHURCH AREA

This flora is the culmination of 12 years of fieldwork by the author and provides an up-to-date account of the current composition and distribution of flowering plants in the Christchurch and Bourne-mouth area. Detailed information on over 900 species and their habitats is given, together with over 650 distribution maps.

The last Flora concentrating on this area was written in 1900 and since then the growth of urban south-east Dorset has resulted in rapid change and loss of habitats. This *Flora* demonstrates that although many species have declined and many others are under threat, the area still retains much of the floristic variety of a century ago.

This new survey will provide an invaluable basis for future study and for assisting decisions which may help safeguard the immensely varied flora of this part of Dorset.

F WOODHEAD

The following also exhibited.

M. Braithwaite	More Evidence of the Spread of Maritime Plants on Scottish Roads
Mrs M. Briggs	Hon. Gen. Sec's Miscellany
B.S.B.I.	Recent publications by members
N. Cowie	Autecology & applied management of rare plants for recovery
Mrs J. Fryer	Cotoneasters in Stace
R.J. Gornall	BSBI Database
R.J. Gornall	Cytological catalogue
J. Bailey	Japanese knotweed Hybrid Survey; results of Leicester and Loughborough Universities joint research
S.L.M. Karley	Help!
D. MacIntyre	Data of Wild Seeds Sown in Britain 1980-1993
A. Morton	DMAP for Windows with examples from the Montgomeryshire Flora
J.S. Parker	<i>Scilla autumnalis</i> in North-Western Europe
F.H. Perring	Photographs taken on BSBI Field Meetings
F.H. & M. Perring	Books from Oundle
T.C.G. Rich	Plantlife
Mrs M. Todd	<i>Flora of Flintshire</i> (Recently published County Flora) by Dr G. Wynne
T.M. Upson & S.L. Jury	Systematic work on the genus <i>Lavandula</i> L.
D. Viney	Pages from an <i>Illustrated Flora of N. Cyprus</i>
Mrs I. Weston	Commemorative Postcard to mark 250th Anniversary of Sir Joseph Banks
Mrs I. Weston	BSBI AGM
R.G. Woods	<i>Flora of Radnorshire</i>

ADVERTISEMENTS

1994 BOTANY TOURS AT HOME AND OVERSEAS

(Led by BSBI Members)

Supplement to the list published in *BSBI News* 65

The following botanical tours and courses have been organised by Dr Roland Randall, Fellow of Girton College, Cambridge.

14 - 21 May	Isles of Scilly
12 - 21 June	Central Pyrenees, Spain
17 - 24 September	Umbria, Italy
21 Nov. - 5 Dec.	Barbados, W. Indies

Full details of these and other courses run by ACE/Cambridge University are available from:

ROLAND RANDALL, Girton College, CAMBRIDGE CB3 0JG (tel. 0223-338949)

Helen and Tony Tichen, both keen botanists invite you to join them later this year on the following escorted trips.

11 - 21 August	Spanish Pyrenees, including Andorra
11 - 25 October	Autumn in Crete
25 Nov - 9 Dec	Tenerife, with visit to La Gomera

Plans for 1995 already include The Burren, Madagascar and Israel, for further information contact:

TONY TITCHEN, 29 Nore Road, Portishead, BRISTOL, Avon DS20 9HN

BSBI JOURNALS FOR SALE

I have decided to dispose of my runs of *Watsonia* Vols 8-18 (1970-1991) and *BSBI Abstracts* Nos. 1-22 (1971-93). Enquiries/offers to me at the address below.

JOHN SOUTHEY, 4 Yeomans Avenue, HARPENDEN, Herts AL5 3EQ (tel 0582 460680)

W. H. COLEMAN'S *FLORA OF EAST GRINSTEAD* (1836)

In 1836, William Higgins Coleman spent six months at Saint Hill, East Grinstead, and documented the flora found within a four mile radius. The work is remarkable for the quality of the recording and the detailed localities given by Coleman. It is the earliest detailed checklist for the area and covers parts of East Sussex, West Sussex and Surrey.

Coleman was a remarkable botanist, and is one of the most under-celebrated field workers of his era. He was the first to divide counties up into districts, and set out systematic methods of survey to ensure even coverage. Amongst the best known of his works is *Flora Hertfordiensis* with R. H. Webb, but he is more notable for the number of high quality unpublished manuscripts including lists from Essex, Cambridgeshire, Leicestershire and Somerset.

The flora will be published by the Sussex Botanical Recording Society in spring 1994, as an A5, soft-back 32 page booklet. It includes an introduction, a biography of Coleman, Coleman's flora, a gazetteer, generic index and a copy of the 1813-1819 Ordnance Survey map.

Booklets are available for £2.50 + 50p P&P each (cheques payable to Sussex Botanical Recording Society) from:

Mrs L. Matcham, Hon. Sec. SBRS, 21 Temple Bar, Strettington, CHICHESTER, W. Sussex PO18 2LB

CHANNEL ISLANDS PLANT LORE

Attractively illustrated with old wood cuts, this 70 page booklet written by our member Brian Bonnard gives a fascinating account of the herbal remedies, folk lore and legends, superstitions and beliefs of the Channel Islands.

It is available from Brian Bonnard, The Twins, Le Petit Val, Alderney, Channel Islands and costs £5.40 including P&P.

GWYNN ELLIS, Editor

STOP PRESS

COMPUTERS AND THE BSBI

The BSBI is currently assessing the computing needs of its members, especially vice-county recorders. The newly reconstituted Computer Users Group (see below) has come up with some recommendations about the hardware needed to set up a floral database and will soon meet to recommend a software package. In the meantime it would be very useful if those members (especially vice-county recorders) who already own computers, or who are seriously thinking of getting one in the next year or so, could let me know so that the Society has some idea of the numbers involved should some bulk licensing of software be feasible.

GWYNN ELLIS, Acting Chairman, Computer Users Group

BSBI COMPUTER USERS GROUP

Four members (R.G. Ellis, J. Dring, R.D. Pryce & P. Rooney), appointed by Records Committee, met in January to recommend, in the first instance, hardware specifications for running a v.c. floral database. At its next meeting in April it is hoped to evaluate suitable software packages with a view to recommending one which the BSBI could endorse as the most suitable for use by v.c. recorders.

The machine specifications for minimum requirements and the ideal setup are outlined below. A copy of the full specifications is available on receipt of an S.A.E. We hope to publish our findings on the recommended software package in the September issue of *BSBI News*.

Anyone wishing to join the new Computer Users group should contact the Hon Sec. R.D. Pryce, Trevethin, School Road, Pwll, LLANELLI, Dyfed SA15 4AL

	Minimum Spec	Ideal Spec.
Processor	386SX	486DX (or Pentium)
Processor speed	20MHz	33 (or 66)MHz
RAM size	1Mb (2 if using Recorder, 4 for Windows)	8Mb
Hard Disc	60Mb	200Mb
Floppy Disc	3 5inch, 144Mb	3.5inch, 144Mb
Monitor	VGA Colour	SVGA Colour
Printer	Bubble Jet	Ink Jet or Laser

GWYNN ELLIS, Acting Chairman, Computer Users Group



EUPHRASIAN NATURAL HISTORY SOCIETY

71, Albert Road,
Hammersmith,
London, W6 7PL
1st April 1994

Dear Coleridge,

It gives us great pleasure to present to you this noble and timely document, the first Prospectus of the Euphrasian Natural History Society. We are confident that you will find its contents worthy of your attention, a spur to your endeavours in the field, a source of inspiration in your worthy pursuit both of Western and Eastern.

It is our warmest belief that our new Society will offer, in the words of our illustrious President, "a bright beacon of hope to those who have grown disillusioned by the mechanistic rigidity of the so-called modern 'environmental' movement." It is our hope that as the Society is endowed with fresh laurels in the name both of Coleridge and Spenser will be increased.

Knowing and respecting the scope of your Natural Historical endeavours, and the zeal of your commitment to sound scientific and just economic ideals, the Fellows of the Society feel certain that you will wish to give them an advisory glance to salute the Society upon this auspicious day. Long May the Society Prosper!

Letters of congratulation and salutation will be most gratefully received at the Secretary's residence. The Society has a particular interest in two recent issues of your *Workshop*!

Yours in Euphrasia,

The Fellows of the Euphrasian Natural History Society

This letter and a copy of the 1893 prospectus dropped through our letterbox. Does anyone know anything about this Society? Or is it another Lirpa loof?

The Editor Gwynn Ellis can be contacted by phone on 0222-397951 ext. 218 (NMW) or 0222-496042 (home).

Articles can now be Faxed to the Editor on 0222-239829 or 0222-373219.

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BSBI News (ISSN 0309-930X) is published by the Botanical Society of the British Isles.

Enquiries concerning the Society's activities and membership should be addressed to:
The Hon. General Secretary, c/o Dept. of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD.

Camera ready copy produced by Gwynn Ellis at the National Museum of Wales and printed by J. & P. Davison, 3 James Place, Treforest, Pontypridd, Mid Glamorgan CF37 2BT (tel. 0443-400585)

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