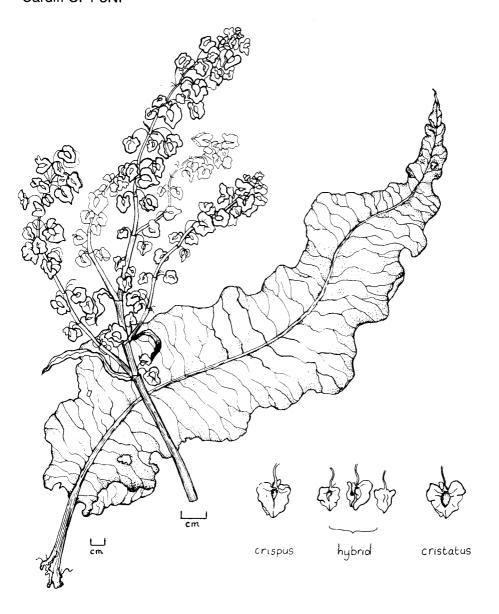
B.S.B.I. NEWS

Sept. 1991

Edited by R. Gwynn Ellis

No. 58

Dept. of Botany, National Museum of Wales Cardiff CF1 3NP



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CONTRIBUTIONS INTENDED FOR

BSBI NEWS 59

should reach the Editor before

5th NOVEMBER 1991

BSBI ADMINISTRATIVE CHANGES

The stimulus for change was the production in December 1990, of a Forward Planning Document by four influential members of the Society. They had felt that the 'aims of the BSBI had become too diffuse and that there was a certain lack of urgency in pursuing them and indecision in the means that should be employed.' It was felt that it was the Botanical aspect which most lacked impetus. The group considered that Council met too infrequently, that the Co-ordinating Committee was rather ineffective and that the President's role was in reality only that of a figure-head as it took most of the two years in office to become familiar with the details of the organisation.

The authors of the Forward Planning Document were at pains to point out that their suggestions implied no criticism of past or present office bearers or Committee members - indeed all have served

in these capacities.

Certain proposals were suggested and these were considered in February 1991 at a meeting of the Co-ordinating Committee whose recommendations were put before Council in March. The following changes have been agreed:

1) That the Co-ordinating Committee be replaced by an Executive Committee which should meet four times a year. It should consist of President, General Secretary, Assistant General Secretary, Treasurer and the Chairmen or Deputies of the Four Permanent Working Committees (PWCs), namely, Conservation, Meetings, Publications and Records. The aims would be a closer co-ordination of activities, 'sensible' long-term planning, oversight of the work of the Permanent Committees and the main source of new ideas. The Secretaries of the PWCs would no longer be members of Council and further consideration would be given to the composition of Council.

2) That each future President be elected a year in advance of taking office.

3) That a 'Think-tank' be set up, the members of which would be nominated jointly by the President and the President Designate. Its aim would be uninhibited discussion and the generation of ideas to put before the Executive. I propose that this group be known as the President's Energising Panel (PEP).

The Executive Committee has had its first meeting and among other items considered it noted that with the disbanding of the Co-ordinating Committee and the reduction in membership of Council, there was a loss of the services of valued members. It wished to express thanks to those who had made a contribution to Committee or Council and appreciation of their continuing role in their other capacities.

PEP

Executive

Permanent Working Committees

Council

AGM

PETER MACPHERSON, President

IMPORTANT NOTICES

HON. GENERAL SECRETARIES TELEPHONE NUMBERS

Please note that the Hon. General Secretary's telephone number has changed; it is now **0798-873234.** The Assistant Hon. General Secretary's phone number is **071-435-8903**. See also the note about times of calls on page 7.

CONTRIBUTIONS TO NEWS

Now that an IBM compatible computer is being used to produce *BSBI News* (see Editorial, below) the Editor is able to accept contributions on 5½" or, preferably, 3½" floppy discs. The file(s) can be produced with all control codes for *italic*, **bold** or <u>underlined</u> text entered in the normal way for your word-processor (please identify this precisely, e.g. WordStar 4.2) and also include a pure ASCII file as well as a precaution. If in any doubt, just phone me up.

It will be an enormous help if all contributors who do have access to an IBM compatible computer could send their copy on disc, but a print-out will still be essential, and, of course, handwritten or typed copy will continue to be welcomed.

NEW FLORA OF THE BRITISH ISLES

Clive Stace has informed me that the publishers Hodder & Stoughton have sold their 'Life Sciences' list of publications, which includes his *New Flora of the British Isles*, to Cambridge University Press. This has delayed the publication of his *Flora* which is now estimated to be sometime during October.

One piece of good news is that Clive has been assured that all orders already made on the yellow forms, distributed with the last *News* mailing, will be honoured at the quoted price!

EDITOR

DIARY

N.B. These dates are supplementary to those in the 1991 Calendar.

1991

SEPTEMBER 27-29: Willow Symposium, Edinburgh (see page 44).

NOVEMBER 5: Deadline for contributions for *BSBI News* **59**. **1992**

APRIL 1-15: BSBI Field Meeting, Crete (see page 45).

MAY 9 AGM, Royal Botanic Gardens, Kew. (Programme and booking forms to be

sent to all members in New Year mailing).

EDITORIAL

A 'new look' to BSBI News

The National Museum of Wales having been seduced by the charms of IBM compatible computers has consigned my faithful BBC Microcomputers to other duties. To enable me to carry on producing (i.e. typing) BSBI News as well as editing it, the BSBI has purchased a Notebook Computer which has been loaned to me. The use of this computer, a state-of-the-art word-processor and laser printer has resulted in what I hope is an improved look to BSBI News, but there are still a few teething problems to be overcome. For instance, I am having difficulties with the automatic hyphenation, please bear with me.

An apology

Due to an unfortunate oversight, details of the Edinburgh Willow Symposium were omitted from the last *News*. Details are now given on page 44. My apologies to the organiser for any inconvenience this omission may have caused.

My worst nightmare

Brian Wurzell has courageously [foolishly] confessed that:

My worst nightmare is to be leading fresh and eager youngsters on a wildflower walk only to find that one of them points to a plant whose scientific name is unpronounceable, whose English

name sounds rude and whose embarrassed dismissal for either reason can only be taken as proof of my ignorance.'

He has also confessed that 'This does happen!'

EDITOR

THE OPENING OF THE QUEEN ELIZABETH THE QUEEN MOTHER'S NATURE RESERVE NEAR ALBURY NOWERS, TRING

It was a happy afternoon at Aldbury Nowers on June 8th 1991 when Her Majesty Queen Elizabeth the Queen Mother opened the new Nature Reserve. Because of security measures guests were restricted to 100 ticket holders representing the organisations involved; 22 BSBI members participated, some of whom had arrived in the morning for a plant recording field meeting locally.

Those presented to Her Majesty on her arrival included the President - in his kilt - the Chairman of the Conservation Committee and the Hon. General Secretary. Her Majesty's Personal Standard was raised and she then unveiled the Nature Reserve Sign with these words:

"May I thank you, Mr Harris, for your kind words of welcome. I am most touched that my 90th birthday should have been marked by the establishment of this Nature Reserve in one of the finest areas of chalk grassland in Hertfordshire.

This exciting aim has been made possible through the efforts of many volunteers who have given their time and energy to the fulfilment of the venture, and it is my heartfelt hope that in years to come the lovely Pasque Flower and other grassland blooms will once again flourish in this countryside, and that the Nature Reserve, which I am so pleased to declare open, will be a source of pleasure and enjoyment to all who come here."

After meeting groups of volunteers from BSBI, the Herts and Middlesex Wildlife Trust and British Telecom on the grassland site, Her Majesty then took tea in a woodland glen under the beeches on the Reserve.

Since publication of the plans for the Reserve, in *BSBI News* 57; 3, the name of the Reserve was altered to Duchie's Piece, in memory of the late owner of the land who had loved the area. The local arrangements were organised with calm efficiency by Rosemary Reynolds, Publicity Officer of H.&M.W.T., and the Earl of Cranbrook was present representing English Nature. Colin Harris, Chairman of H.&M.W.T. has plans for BSBI's continuing involvement with the Reserve, and we will publish future reports on the management, and progress in establishing species-richer grassland on this Queen Elizabeth the Queen Mother's Nature Reserve, Duchie's Piece.

MARY BRIGGS, Hon. General Secretary

JOHN G. DONY

With deep regret we report the death of John Dony - a member since 1937 who for many years has been a most respected senior member and office holder in the Society. An obituary will be published in *Watsonia* 19: 1.

Sending our sincere sympathy to Chris (also an Honorary member of BSBI, and member since 1948) we also thank her for her generous gift to the Society of John's complete bound set of the *Botanical Exchange Club Reports* - we plan to house these in the British Herbarium in the Botany Dept., N.H.M., where BSBI members will be able to use them.

MARY BRIGGS, Hon. General Secretary



Her Majesty Queen Elizabeth the Queen Mother unveiling the Nature Reserve sign.

Photo Mary Briggs © 1991



Presentation to H.M. Queen Elizabeth the Queen Mother of Mary Briggs, Franklyn Perring and Peter Macpherson. Photo David J. Hambler $\, \odot \,$ 1991

MEMORIAL MEETING 29th MAY 1991

A memorial meeting in memory of John Dony took place on 29th May 1991 at Luton 6th Form College. The venue was appropriate as it was at this school, when Luton Grammar School, that John spent most of his career as teacher, which culminated in the position of Head of History and Economics. The Chairman was David Stephen, of the School's Old Boys Association, who, with staff of Luton Museum, had organised the meeting. John had been connected with many organisations during his life and representatives of a few of these each presented an address to the 200 or so assembled relatives, friends, former pupils and colleagues.

David Allen described John's years as friend and mentor of many members of the BSBI, and of his time as holder of most of the major offices of the Society. Continuing the botanical theme, Bernard Verdcourt spoke of his help to several of the staff at Kew and of his connection with the Bedfordshire Natural History Society. John was a leading figure in this local society from its inception in 1946. History, his other main strand of study, in particular research into the straw hat industry, was remembered by Anne Buck. His thesis, for which he was awarded his PhD, is still a standard work. Miss Buck's time at Luton Museum also coincided with John's setting up of the herbarium there. John's importance to the museum service and the county in general was emphasised by Peter Smith. His services to education in Luton and his time as teacher at Luton Grammar School were recalled by Melvyn Butcher.

All the speakers were able to conjure up vignettes of John's life and activities by which many of those present will remember him with affection. They also reminded us that, by his incredible activity, personality and achievements, we had all been privileged to know a most remarkable man.

CHRIS BOON, 7 Duck End Lane, Maudlen, BEDFORD MK45 2DL

HON. GENERAL SECRETARY'S NOTES

Assistant Secretary

Ruth Stungo, Assistant Secretary has volunteered her phone number for member's enquiries - see page 3. This will be especially helpful at times when the Hon. Gen. Sec. is away from home, although again 071-435-8903 is Ruth's home number so a certain reply is not guaranteed; but members now have a double chance for a secretarial answering service.

In BSBI News 57: 35, Brian Wurzell notes that 'phone calls are welcome' (on alien queries) but adds 'please try to avoid meal-times'. But what are these? As an after 6pm telephone user, I have for many years researched the times of members' evening meals hoping to avoid these, but concluded that at every minute between 6.00 and 10.00 pm some BSBI members will be sitting down to teahigh tea-dinner or supper? The time for last calls varies too, and it is helpful to know if members are owls (e.g. Gwynn Ellis, David Allen, Francis Rose and Adrian Grenfell) or larks (e.g. Ailsa Lee, Breda Burt and Arthur Chater). My own evening meal times are flexible, but I do key out as a larkson not too many late calls please.

Editorial News

Brian Rushton is now Receiving Editor for *Watsonia* (and for Reports of Field Meetings) - see Administration, page 2. This follows Richard Gornall's retirement as an Hon. Editor, after ten years in this exacting post, and we send thanks to him for undertaking this work for the Society and for his quiet efficiency.

Norman Robson also retired this year from the Publications Committee, on which he has served for 23 years. For most of these years Norman was a *Watsonia* Editor and after reading so many proofs his pencil is still often poised as he reads, ready for the botanical, grammatical or nomenclatural error - or the missing comma! He still helps with proofs of our notices and programmes and we are particularly grateful to all those members who give their time working for the publications of the Society.

Field Guides Review

Any member who does not already see *British Wildlife*, will have missed in April 1991, Volume 2 No. 4: 214-218, a very interesting and useful paper by John Akeroyd on currently available *Illustrated Field Guides to the British Flora: A Review*.

The Editor of this highly recommended Magazine, Andrew Branson, is also a BSBI member. Further information from: Wildlife Publishing, 1 Vine Cottages, Greywell, Basingstoke, Hants. RG25 1DA

MARY BRIGGS, Hon. General Secretary

RECORDERS AND RECORDING

BSBI v.c. Recorders - Amendments to Year Book 1991

With regret we report the death of Norah Dawson, who has been Recorder for Armagh for nearly 20 years. H37 is temporarily vacant.

We welcome the new Recorder for:

v.c. 003, S. Devon: Mr Chris Riley, Slapton Ley Field Centre, Slapton, Kingsbridge, Devon TQ7 2QP

BSBI Panel of Referees and Specialists - Amendments to Year Book 1991:

We welcome as joint Referee, with David Parker:

SAXIFRAGACÉAE

Saxifraga: Dr Richard J. Gornall, Dept. of Botany, University of Leicester, LEICESTER LE1 7RH

Please include sterile shoots with specimens for identification sent to either Referee.

Change of address:

Dr Mark F. Watson, Oxalis Referee is now at Royal Botanic Garden, Edinburgh EH3 5LR

MARY BRIGGS, Hon. General Secretary

OVERWORKED VICE-COUNTY RECORDERS

As an overworked vice-county recorder (v.c. 15 & v.c. 16) I wish to object strongly to the comment of 'a life of peace and ease' in the article on the scarce plants project in the April number of BSBI News. This whole project appears ill-conceived as far as the BSBI is concerned and with the NCC (does it still exist?) trying to gain a lot of information on the cheap.

As soon as this list of scarce plants was published it was obvious that it would not be possible to cover these as required in my own county of Kent. In fact I wrote and pointed out to the organisers that if they liked to employ me full-time over the next two years (not that I wish to be so employed) then it might be possible to put on paper what is known about these species in the county, or to service other people who wish to research these species. Their answer seems to be the flippant comments at the top of page 18 in the last News.

To cheer things up, a friend and fellow member of the BSBI has worked out on the basis of a tetrad being a single site (although in practise there are often several sites within a tetrad) that I should go out and look at each site and write it up myself as it should be possible to cover all these Kent sites within sixty-eight years!

Each year, as a v.c. recorder, I get a large number of requests from members who wish to see certain species on visits to the county or from researchers who wish information on the species they are studying - these I always try to answer to the best of my ability. To be burdened with this extra work is the straw that breaks the camel's back, and more projects like this could leave the BSBI short of v.c. recorders.

So, before too many people who have adopted species write to me, be warned, with that precious little spare time that I have, I could be out in the field, searching for that 'life of peace and ease'!

ERIC PHILP, 6 Vicarage Close, AYLESFORD, Kent ME20 7BB

WHERE HAVE ALL THE COMMON NAMES GONE?

Having learned the first part of my taxonomy from H. Gilbert Carter, to whom the common name of every plant was then 'lesser cobbledy stalks', I have for 40 years relied on Latin names. The BSBI recognised the taxonomic confusion arising from use of vernacular names with their binomial-hyphenated system (Dony et al., 1986). That lead has been followed by recent Floras so they no longer include vernacular synonyms. See Clapham et al. (1987), Polunin (1988) and Blamey & Grey-Wilson (1989).

Can anyone refer me to, or announce compilation of, lists of the common names? For example, Marren (1990), refers to *Mercurialis perennis* as 'The Boggart' and other literary references I find are hard to confirm from recent Floras.

References

Blamey, M. & Grey-Wilson, C. (1989). *Illustrated Flora of Britain and Northern Europe*. Hodder & Stoughton. ISBN 0-340-40170-2.

Clapham, A.R., Tutin, A.G. & Moore, D.M. (1989). Flora of the British Isles. 3rd ed. CUP. ISBN 0-521-38974-7.

Dony, J.G., Jury, S.L. & Perring, F. (1986). English names of wild flowers. 2nd ed. BSBI. ISBN 0-901158-15-1.

Marren, P. (1990). Woodland Heritage (Britain's Ancient Woodlands). David & Charles. ISBN 0-715-3-9436-3.

Polunin, O. (1988). Wildflowers of Britain and Northern Europe. Collins. ISBN 0-00-219709-X.

The different styles for quoting ISBNs are taken from the publications. Is there no consistent pattern for setting out the ten digits?

CHRISTOPHER J. PERRATON, 178a Woodrow Road, MELKSHAM, Wilts. SN12 7RG

OENANTHE SILAIFOLIA - A SCARCE BRITISH UMBELLIFER

My attention was recalled to this rare and local British umbellifer by the Scarce Plant Project, in which I have taken on *Oenanthe silaifolia* Bieb. and *O. fluviatilis* (Bab.) Coleman. If the project needs any recommendation, it can certainly be said that it stimulates participants to learn more about the nature and distribution of their adopted species.

The Atlas of the British Flora, and the specimens in RNG, indicate a scattered distribution limited to a few alluvial riversides. Absence from other, apparently suitable, locations can be explained by a requirement for winter flooding by base-rich water but, even within this limitation, only certain stretches appear to have supported the *Oenanthe* during the last century.

Armed with this knowledge I visited the River Arun on 10.6.91, at a point near Houghton, and saw a single plant among the *Iris* and *Typha* fringing the main channel. The floodbank had a few small individuals - the only ones seen in any raised situation - but the water-meadows beyond were dotted with an estimated 2,000 handsome plants, more than I had expected to see between Arundel and Billingshurst. By 18.6.91, a silage crop had been taken, and with it most of the *Oenanthe*, but this is presumably an annual occurrence, less damaging than level-raising or 'improvement' of the pasture. About 200 plants remained uncut along the boundary drain.

This first encounter with *O. silaifolia* in quantity provided two further contrasts with *Oenanthe pimpinelloides* L., confirmed by all subsequent observations:

(1) O. silaifolia requires low-lying, damp habitats and does not occur on dry banks or roadsides. It declines rapidly when pastures are raised or 'improved'.

(2) It does not occur in dense stands, plants are usually separated by several feet. This difference is surely not accidental but is so far unexplained.

Correct determination of the two species has traditionally been found difficult. Anyone who sees them both regularly does it with relative ease but finding consistently reliable characters, apart from the tubers, is a problem and the features emphasised are often just a matter of degree. I would rely on:

- (1) Leaflet-shape (± uniform throughout in O. silaifolia)
- (2) Bracts (usually absent in O. silaifolia)
- (3) Bracteoles (distinctly connate in O. silaifolia)
- (4) Stem and rays (hollow throughout in O. silaifolia; best checked by compression of a ray rather than severance of a stem!)

Progress upstream by the Arun occupied all available time for three weeks, after which flowering was over and the survey of meadows through binoculars no longer effective. A cool June undoubtedly delayed and extended this brief working period. The chances of a single observer dealing with even the modest number of post- and pre-1930 squares attributed to *O. silaifolia*, within the project timespan, seem slight, so I hope that members who have seen the plant in recent times will contact me.

There was one more 2,000+ field close to the Arun, in the vicinity of Pulborough, and a number of others yielded from 50 to 500 plants. Vestigial singles and scattered groups helped raise the total to about 5,000. Better than expected but rather vulnerable, especially as 80% were in two fields. Long may those fields remain unimproved!

MERVYN J. SOUTHAM, 72 Fareham Road, GOSPORT, Hants PO13 0AG

SPREAD OF LEMNA MINUSCULA IN WILTS. - 2

Following the letter of Barbara Last (BSBI News 56, Dec. 1990), there has been, in the autumn of 1990, an astonishing spread of Lemna minuscula L. (Least Duckweed) from Devizes, eastward along the Kennet and Avon Canal for 11 miles to the east of Pewsey Wharf.

Recent reports of *L. minuscula* in Wilts. include 2 ponds, the River Wylye, and fast-flowing parts of the River Avon at Salisbury in June 1990. Since Barbara Last reported *L. minuscula* in Devizes, it has, from being the rarest, now become, within 2 months, the most abundant aquatic on the canal in Central Wilts. This conquest was achieved in late August, September and October 1990. Even after the frosts, there still persist huge pale-yellow-green 'lawns' of *L. minuscula* at (and between) most of the 11 canal bridges between Devizes and Pewsey, and as far as the eye can see from some of these sites (March 1991).

I concur with Barbara Last that *L. minuscula* seems to have 'squeezed out' *Azolla filiculoides* (Water Fern) and *Lemna minor* (Common Duckweed), both the small and larger frond varieties as described in the *Plant Crib*. Only *Lemna polyrhiza* (Greater Duckweed) has put up any effective fight, persisting in a few tiny pockets.

A similar sweepingly aggressive colonization in the battle of submerged aquatics, along the same stretch of canal, was seen in summer 1986. Then, *Elodea nuttallii* (Nuttall's Waterweed), overwhelmed and almost eliminated *E. canadensis* (Canadian Waterweed), the former even putting out light green shoots in sunlight penetrating under the ice in Feb. 1986, to give it a head start.

There has been an attempt to explain why *E. nuttallii* rapidly displaces *E. canadensis*, based mainly on the relative rates of shoot and root growth (Simpson, 1990). The semi-elliptic tiny fronds of *Lemna minuscula* pack surface space more effectively than the rounder fronds of *L. minor*; but this does not explain why *L. polyrhiza* survives the onslaught of *L. minuscula* better than *L. minor*. **Reference**

Simpson, D.A. (1990). Displacement of *Elodea canadensis* Michx by *Elodea nuttallii* (Planch.) H. St John in the British Isles. *Watsonia* 18: 173-177.

JACK E. OLIVER, High View, Rhyls Lane, LOCKERIDGE, nr Marlborough, Wilts. SN8 4ED

TARAXACUM RECORDS

Now that I have virtually completed the task of putting the herbarium records of *Taraxacum* on to computer, I have sent a printout of v.c. records for *Taraxacum* to each v.c. recorder. May I, through the pages of *BSBI News*, thank all those who have very kindly sent me emendments and corrections to what were in many cases long (and I fear often faulty) lists. They have of course been of inestimable help in achieving the greatest possible accuracy in the database; it is only the daunting cost of

postage in writing to all v.c. recorders that dissuades me from writing a letter of thanks to each, but I will of course do so whenever there are specific queries that recorders wish to raise about the records.

ANDREW DUDMAN, Holebeck House, CLEATOR MOOR, Cumbria CA25 5HD

IDENTIFYING LOCALITIES FOR OLD TARAXACUM RECORDS

Having finished entering onto computer the accumulated *Taraxacum* records, largely culled by Dr John Richards from British herbaria, I have been trying to identify localities for as many as possible of those that were without grid references. To this end, I sent all the defective Scottish records to Allan Stirling to see how many of them he could place for me, in which he was more successful than I dared hope. Of one of them he wrote:

Investigation of the C.C. Babington record (in CGE) for *T. faeroense* in Skye (1841) proved very interesting. I looked up his Journal to see what he was doing on the date in question (8.7.1841) only to find that he was elsewhere at the time. However, I knew that he was in Skye that year in the following month, and in fact on 7th August during a walk from Sligachan to Dunvegan he notes having found "a curious form of *Taraxacum dens-leonis*, allied to *palustre*, but not that plant". He evidently collected it for the herbarium, and now, after 150 years it has been properly identified. Obviously in transposition at some time 7.8.1841 has become 8.7.1841.

I have yet to investigate the full extent of Allan's knowledge of the place and time of forays of 19th century botanists, but was extremely grateful for this piece of detective work, and thought it worth recording. I should add that I then presumed that a reasonable grid reference would be NG24, i.e. the 10km square which holds Dunvegan; but I had underestimated Babington's prowess as a walker: Allan pointed out to me that the walk from Sligachan to Dunvegan is a distance of 26 miles, and takes in no less than four 10km squares, and one which Babington and his companions covered ('in heavy rain') in eight hours - this included stops to collect *Eriocaulon aquaticum*, *Carex pauciflora*, and his curious new form of dandelion! We agreed to settle for NG33/34.

ANDREW DUDMAN, Holebeck House, CLEATOR MOOR, Cumbria CA25 5HD

WHITE FORMS OF PINK FLOWERS - 1

With reference to Brian Bonnard's note in *BSBI News* **56**, I have formed the opinion that white forms of *Calluna* and *Erica* (both common species) may be favoured by western and north-western sea winds. I used to reckon to find at least one specimen each season in walks over Fair Head (extreme NE corner of Ireland) and got the impression that they were commoner on Rathlin Island than elsewhere. I rarely if ever found them on the inland hills, or the east-coast headlands. It is only a qualitative recollection - I never thought of keeping statistical records. But one site was memorable - on the west coast of Donegal - a tiny clachan called Port, a few miles north of Glencolumbkille. The hillside was covered with the three common species of Heather - *Calluna* and the two Ericas - and it seemed as if white flowered plants of all 3 were as numerous as the normal pink/purple ones - if not more so.

HELEN D. MEGAW. 22 Dunamallaght Road, BALLYCASTLE, Co. Antrim BT54 6PB

WHITE FORMS OF PINK FLOWERS - 2

I was interested in Brian Bonnard's note on white forms of pink/mauve flowers in BSBI News 56.

About 12 years ago, when I was recording road verges in this area, I came across a single plant of *Centaurea scabiosa* with all white flowers. The site was only 300 yards from my house so I was able to visit the plant frequently. I made a mental note to check the site in following years but no more white flowered plants ever appeared. There were patches of normal purple flowered *Centaurea scabiosa* and *C. nigra* along about 400 yards of a country road but they never increased in size.

For the last three years not a single plant, of either species, has reappeared; the traffic has more than doubled, in fact trebled, with the road verges gradually being flattened by the passing traffic. These road verges were most interesting, with quite a variety of plant species. One, between 5 & 6ft wide, very dry and bounded by a low-cut, mostly hawthorn, hedge and facing west had over 30 species over a short stretch. It has been sad to see it destroyed by increased levels of traffic.

What I have found interesting, over a period of thirty years, is to note how the flora of this area has changed, new plants have arrived and others have disappeared and not always by man's hand.

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

WHITE FORMS OF PINK FLOWERS - 3

With reference to the article by Brian Bonnard in BSBI News 56, I too have noticed white forms of normally pink flowered species on a Nature Reserve near my home here in the West Midlands.

For the last fifteen years I have observed a *pure white* form of *Geranium robertianum* growing in the Reserve. Plants grow in amongst the common pink forms, appearing in the same and different places every year. In recent years I have noticed these white forms have spread out of the Reserve and on to the grassy edges of footpaths.

I have studied these white and pink forms quite closely and find them identical except for flower colour - in the former there is no trace of pink in the petals at all. I have also raised white forms from seed collected from white-flowered plants. I have noticed a tendency for other species in the Reserve to veer towards paler or whitish pinks than usual. One species in which this is quite marked is *Galeopsis tetrahit*.

The only other place where I have ever seen the white form of *Geranium robertianum* is in the Derbyshire Dales, where they grow in damp woods, as here.

BARBARA DAVIES, 7 Beausale Drive, KNOWLE, Solihull, West Midlands B93 ONS

WHITE-FLOWERED FORMS OF SOME N. LANCASHIRE PLANTS

White-flowered forms of the following, which normally have flower colours in either the pink-to-red or blue-to-violet range, are occasionally recorded by the authors. These are:

Viola reichenbachiana, Spergularia marina, Malva moschata, Geranium robertianum, Vicia sepium, Epilobium hirsutum, Calluna vulgaris, Erica tetralix, Solanum dulcamara, Cymbalaria muralis, Campanula rotundifolia, Cirsium arvense, Hyacinthoides non-scripta, Orchis mascula, Dactylorhiza fuchsii.

In the authors' experience, the white forms of *Viola odorata* and *Polygala vulgaris* are more common in this part of the country than their coloured counterparts. It should also be mentioned that the white form of *Epilobium hirsutum* often has a slight rosy tint.

White forms of yellow-flowered plants appear to be uncommon in the area, so far only the occasional white-flowered specimen of *Helianthemum nummularium* has been observed. This seems a trifle surprising when it is known that the horticultural trade, for instance, offers *Caltha palustris alba*, *Ranunculus ficaria albus*, *Primula vulgaris alba*, etc. for sale, thus indicating the possibilities for future discoveries.

LEN & PAT LIVERMORE, 8 Durham Avenue, SCOTFORTH, Lancaster, Lancs. LA1 4ED

MORE ABOUT WHITE FLOWERS

I was interested to read Ian Brown's note on white flowers. I never remember seeing *Geranium molle* with white flowers, but I have known white-flowered *Geranium robertianum* since my childhood. My father grew it in our garden near Frome (v.c. 6) and took it to Cheltenham (v.c. 33) when we moved in 1921. I had it in our garden at Petersham (v.c. 17) in 1934 and brought it to Nayland (v.c. 26) in 1969, where it is still flourishing. It is not a true albino as it has normal anthocyanin in its stems and leaves, and could not be distinguished from the normal form until the flowers opened. It always bred true from seed and I never knew it produce offspring with coloured flowers.

In spite of my having studied marsh-orchid sites all over England and Wales, I have only once come across *Dactylorhiza praetermissa* with white flowers, and never *D. purpurella*. It was in a wet meadow at Eastbridge (v.c. 25), a small colony of 5 or 6 plants with pure white flowers. Sadly, the adjacent ditch was cleaned out later that year and the spoil dumped on the area where the albino orchid grew, and it has not been seen there since.

I would be interested to know if any members have seen a white-flowered *Ranunculus acris*. I came across one such plant in a hay meadow yellow with thousands of this buttercup. The upper sides of the petals were pure white, but the lower, outer side was pale lemon yellow. It was at Foreward Green near Stowmarket (v.c. 25). The white flowered *Ranunculus ficaria* is well known in gardens, but I have never come across it in the wild.

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ALBINO FLOWERS

Brian Bonnard and Philip Harmes write on white flowers in *BSBI News* **56**: 9 and *BSBI News* **57**: 14, and very frequently plant identification queries sent to BSBI by non-members are on white-flowered forms. These can be very striking, often beautiful - although we would not want all to be white? Because the enquirers cannot find their white flowers pictured in the books, and as the plants are often few or growing singly, it is hoped, or often assumed, that the find is a great rarity. David McClintock in his *Supplement to the Pocket Guide to Wild Flowers* lists some 400 species which have been recorded from the wild or from gardens with white flowers, but David tells me that since the *Supplement* was published in 1957, his list totals more than twice that number.

MARY BRIGGS, Hon. General Secretary

ERRORS IN DISTRIBUTION MAPS

I was very interested in Miss Scannell's note in BSBI News 56: 18 (Dec. 1990), 'Mapping the Primrose'. About 1975 or so, I happened to notice that the 1962 edition of the 'Atlas' gave very curious omissions in squares which I knew well - affecting not only Primula vulgaris but also Anemone nemorosa and Ranunculus ficaria. In 1979 I wrote to BRC and was told that the Irish grid did not match the English one exactly. But the discrepancy was more than that. I could only assume that the people who sent in records for these parts did so in summer and autumn, when the leaves of the anemone and celandine had died down. I was also put in touch with the Recorder for Co. Antrim and I then started to make my own records and cooperate with him, as soon as the new Irish O.S. maps marked with the Irish grid were available. The squares affected were (in modern notation) those in the rectangle with corners C94, D24, C92 and D22. These cannot all be due to computer error, and in fact the revised map reproduced on page 18 of the last issue is still incorrect in showing Primula vulgaris absent from one of these squares where it was certainly present in 1979. One interesting fact I found in my checking, was that Anemone nemorosa is absent from the extreme NE corner of Ireland - the whole of D24, and all the mainland part of D14 east of about 10.2, and the northern parts of D13 and D23 east of the same lines, despite careful search. This contrasts markedly with its great abundance in D04 and D03, and C94 and C93.

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MORE PUZZLE PLANTS

As all determined field botanists know, there are few pleasures in life equal to the final "running down" of a puzzle plant - the longer, more arduous and more tortuous the search for clues, the greater the sense of achievement! (This satisfaction is often out of all proportion to any importance of personally knowing the name of the plant). A recent quest was started as "a leaf from Canada" - and offered, apologetically, as this to a hapless botanist from that continent on slender chance of instant recognition! Only leaves were seen, but we had other clues from unusual growth habit and Achlys, Podophyllum and Peltiferum species were looked at - and rejected. Shrewd Eric Clement suggested Compositae, but only when our Canadian naturalist phoned from British Columbia enquiring about "that darned leaf" and mentioned Coltsfoot, did a speedy look in The Wild Flowers of the Pacific Northwest by Lewis J. Clark, give us Petasites peltatus, Canadian Coltsfoot. The identity was confirmed with specimens in the General Herbarium at The Natural History Museum and this is the first plant that I have had identified by transatlantic telephone.

Vera Gordon, writing to say that for her the detective work on the mystery leaf and solving the problem is an extension of the holiday, and "makes those far away sunny days seem like yesterday", comments that Eric Clement (who predicted a Composite) "is a wizard on plants". She adds did we know that Eric shares his birthday with Linnaeus and Druce...?

A quest from another aspect, when in Western Australia one of the mulla-mulla* was established as *Ptilotus gaudichandi*, all were surprised, and amused, at this specific name new to us. Only some weeks later when a French Pharmacist researching naval medicine, wrote to BSBI for information on Charles Beaupré-Gaudichaud, did we discover (in replying to his letter) that he was the apothecary on, and author of the botanical report of, Freycinet's voyage around the world 1817-20 on Uranie and Physicienne. Shipwrecked on the Falkland Islands, some specimens from Western Australia were saved and these Gaudichaud took back to France, via Ascension Island and S. America, and deposited them in the Paris Museum Herbarium. We then looked at that mulla-mulla with new eyes.

It is not necessary to travel far to find exotic puzzle plants. Botanical colleagues from the B.M., Caroline Whitefoord and Nancy Garwood were dining in a Singapore Restaurant in West London and they ordered fish cooked in coconut sauce flavoured with Tamarind. The "Tamarind" skin and very thin slices were obviously not the familiar pod of *Tamarindus indica* (known to us as Tamarind), so the specimen was removed, wrapped in a napkin and taken back to the Department of Botany for identification. It was immediately recognised by Dr Dennis Adams as a young Mangosteen fruit *Garcinia mangostana* - and another puzzle solved!

*'mulla-mulla' is the Aboriginal name (so Australian name, 'English' name) of *Ptilotus* (Amaranthaceae) of which there are about 100 species in Western Australia. In the more arid regions, spectacular drifts of mulla-mulla become a feature of the landscape after spring and autumn rains.

MARY BRIGGS, Hon General Secretary

SEDUM VILLOSUM - A BETTER ALTERNATIVE ENGLISH NAME?

The name hairy stonecrop is usually given to *Sedum villosum* as a direct translation from the Latin. There is however an alternative, and I believe more appropriate, name for this delightful little plant, namely the 'Bog Stonecrop'. I confess to being biased as I was brought up to call it this and I am sure I am not alone. Stella Ross-Craig in her *Drawings of British Plants*, Isa Martin in her *Field-Club Flora of the Lothians* and Albert Wilson in his *Flora of Westmorland* and *The Altitudinal Range of British Plants*, all refer to the bog stonecrop.

I have never been impressed with its hairiness. Its cousin *Sedum hirsutum* which I discovered in *Flora Europaea*, would seem the obvious choice as hairy stonecrop. Unfortunately it is not a British plant. To the field botanist finding a stonecrop in a wet or damp habitat of montane flush or spring, especially in the Northern Pennines or Southern Uplands of Scotland can only mean that he or she has found *Sedum villosum*. Do any other European Sedums grow in wet places?

Some of the older floras don't provide an English name at all but John Ray named it the small marsh sengreen or stonecrop in 1670 and John Lightfoot in *Flora Scotica* (1777) refers to it as the

marsh stonecrop. Perhaps these great pioneers in the exploration of the British flora should be given the last word with the English name although I suppose, ecologically speaking, *Sedum villosum* grows neither in a marsh nor in a bog.

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LARGE PLANTS OF LAPSANA COMMUNIS subsp. COMMUNIS

In my paper dealing with variation in *Lapsana communis* L. (Sell, 1981), I mentioned as a particularly large plant of *L. communis* subsp. *communis*, one which was 150cm high and had 380 capitula.

During the summer of 1990, there were quite a lot of plants in the Fen Road area of Bassing-bourn, Cambridgeshire, v.c. 29, with over 300 capitula. One particular plant, however, was most striking. It was nearly two metres high and growing in a bed of tall *Urtica dioica* on the roadside. It bore 765 capitula.

Salisbury (1961) gives 12-18 achenes in a capitulum, an average size plant producing nearly a 1000. I found that in the large Bassingbourn plant, and in those with which it grew, the number of achenes per capitulum varied from 10-20. The number did not seem to depend on the size of the plant. It meant that the very large plant could produce somewhere between 7,650 and 15,300 achenes.

I have preserved the large Bassingbourn plant (including its rather small root), with the exception of a small length of bare stem towards the base, in CGE.

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SURVEYS IN NORTH LANCASHIRE

In BSBI News 53: 17 (Dec. 1989), notice was given of an account of a survey of 23 miles of the Lancaster Canal, carried out in 1988, entitled The Flowering Plants, Ferns and Rusts of the Lancaster Canal in the Lancaster District.

Since then, three further local surveys have been accomplished.

(1) 1989 Plants and Rust Fungi of the Dismantled Railway Lines in the Lancaster District. This covers three former railway tracks radiating from Lancaster which fell under the 1960s 'Beeching Axe' and, later, became public footpaths/cycleways. Some 487 plant species were recorded, also 41 species of rust affecting 59 different plant hosts. The records are presented in tabloid form, each railway being divided into Sections (24 sections altogether).

(2) 1989 Coastal Plants and Rust Fungi of the North Lancashire Coast. This deals with the coast from near Cockerham to the county boundary with Cumbria. Some 652 plant species were recorded, also 35 species of rust occurring on 46 different plant hosts. The records are presented in

tabloid form, covering 72 Sections of coast.

(3) 1990 Lancaster's Plantlife. An account of the plants growing within the Lancaster City Boundary. Over 820 plant species, subspecies, and varieties were recorded, a high percentage of which are native plants, the remainder either garden escapes or plantings. The records are divided into eight groups, presented in tabloid form, based on the city's Census Ward boundaries.

There are no copies of the above publications available for purchase. For reference purposes,

copies have been deposited at the following:

Royal Botanic Gardens, Kew

The Natural History Museum, London

English Nature (NČC) North West Region, Bowness-on-Windermere

Liverpool Museum databank

Libraries University of Lancaster
University of Leicester
University of Newcastle
Lancaster City Library

Lancashire County Council Library

Copies were also sent to Lancaster's Town Clerk in the hope that the information they contain will influence conservation measures when changes of land-use and planning applications are under consideration.

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CROP PLANTS AS WEEDS

Flora writers are not very consistent about recording crop plants as weeds. Oil-seed Rape, *Brassica napus* subsp. *oleifera*, is an example of a crop which has become common in recent years and escapes onto roadsides and in waste places, and because it is so obvious and because *Brassica napus* will appear on lists and is a traditional flora plant, it will get ticked.

On the other hand, Wheat, Triticum aestivum, Barley, Hordeum vulgare and Rye, Secale cereale, are not usually listed or recorded. They are, however, at least in East Anglia, appearing as a regular feature of grassy roadsides. I think they originate from seed blown from, or leaking out of, large wagons drawn along our roadsides throughout the harvest. Councils, trying to save money, now cut our roadsides very late or not at all, allowing their seed to ripen. Whether they appear again from this seed, or get a renewal from the wagons, I do not know, but they appear regularly in the same place.

They also occur regularly in root crops, not as odd plants, but all over the field, and sometimes when it is more than a year since that species was a crop in the field. This did not happen in the past. I think in the past the corn spilt on the stubble either germinated, was gathered by women for their fowls, or was eaten by large flocks of birds before the stubble was ploughed late in the year. Now there is no gathering, and the stubble is quickly ploughed before the birds can eat it.

The commonest weed of stubbleland in South Cambridgeshire is the Potato, Solanum tuberosum, which seems to survive at least five years after it was a crop on that field. Herbicides will kill the top, but not the potatoes themselves, which often get cut up when ploughing takes place, thus forming yet more new plants. They originate because a large proportion of the small potatoes of a crop are left in the field and ploughed in. Again a practise which did not happen in the past, when they were hand-picked.

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RED DATA BOOK PUBS - III

There is a pub in Glyntawe, Brecon, near Genista pilosa and Carex montana, called 'The Gwyn Arms'! Is the Editor of BSBI News a regular?

ANONYMOUS!!! [Thankyou Tim!!!]

[Contrary to popular belief, your Editor is the very soul of sobriety - and if you'll believe that]

BOTANISTS AND PUBS - continued

The connection between botanical field-work and public houses is well-established, but there is some historical evidence from herbarium collections to corroborate this statement.

In the Liverpool Botanic Garden herbarium there is a specimen of *Dalibarda repens* (Rosaceae), the delightfully named Robin-run-away, which was collected by Dr Francis Boott "on the hill opposite Fitton's tavern at Lanbourton bridge N.H. [New Hampshire] U.S.A. June 29, 1817". Boott (1792-1863) was an American-born botanist from Boston, Mass. who settled in London and was the

author of a well-known monograph of the genus *Carex*. Do any herbarium curators know of earlier documented examples?

There are also instances of botanists who were born in public houses. William Roscoe (1753-1831) of Liverpool, author of *Monandrian Plants of the order Scitamineae* is one such case; his parents were market gardeners who also operated a tavern close to the town centre.

JOHN EDMONDSON, Botany Dept., Liverpool Museum, William Brown St., LIVERPOOL L3 8EN

FUMITORIES AND OTHER WEEDS IN ONION FIELDS

In a previous article in *BSBI News* (Sell, 1985) I reported on a field of onions at Bassingbourn, Cambridgeshire, v.c. 29 (GR 52/323449), which was densely covered with *Fumaria officinalis* subsp. *wirtgenii* var. *wirtgenii* and var. *minor*, and to a lesser extent with *F. densiflora* and *F. vaillantii*. In the intervening years since then, the crops have always been cereals, and I saw no plants of *Fumaria*. In 1990, however, the crop was potatoes, in which there were more open areas and less spraying with herbicides, so that fumitories could again be expected. I found that amongst the rows of potatoes they were only scattered, but along the margins frequent and in the untouched corners dense. The majority of the plants were *F. officinalis* subsp. *wirtgenii* var. *wirtgenii* and var. *minor*, with a few plants of *F. densiflora*. I saw no *F. vaillantii*.

Of further interest was another field of onions about half a kilometre away (52/325448) belonging to the same farmers. Over this field fumitories were scattered, but never dense. The plants were all large, rampant and much branched. All were referable to F. officinalis subsp. officinalis var. officinalis. Later in the summer I found a single plant of F. vaillanii var. vaillanii. This field, like the earlier one, usually bears cereal crops, with occasional potatoes. As well as the fumitories, it contained numerous plants of Papaver argemone and P. dubium subsp. lecoqii. species I had not seen in the area for many years. Epilobium tetragonum subsp. tetragonum was also common all over the field, an unusual weed in my experience. Even more surprising was E. hirsutum which was scattered over the field. The plants were only about 30cm high, but they produced plenty of good seed. Urtica urens was abundant, and in the hot dry summer produced three distinct generations of plants, the first two ripening and dropping their seed, the third generation being ploughed in while

field, and potatoes, *Solanum tuberosum*, were frequent from the two years previous.

I examined both the above fields continually throughout the summer, until they were ploughed in the autumn, recording 46 species of weeds in the potato field and 45 species in the onion field, although the quantity of weeds in the onion crop was far greater than in the potato crop.

still young plants. Wheat, Triticum aestivum, from the previous year's crop was scattered over the

In the past, agricultural methods allowed weeds to flourish in almost any crop. Modern techniques seem to allow weeds to flourish only in crops which are less heavily sprayed with herbicides. The interesting point is how they manage to survive, apparently in great numbers, in the intervening years.

The taxa in the genus Fumaria mentioned above, are keyed out in Sell, 1988.

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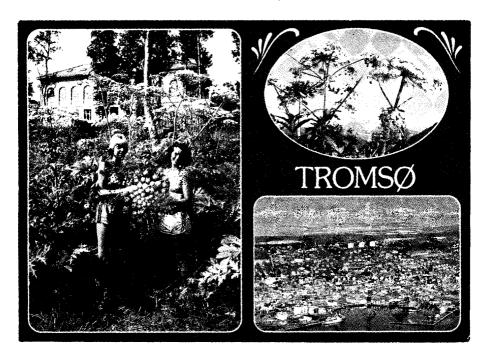
GIANT HOGWEED IN NORWAY

I was interested to read the note about giant hogweed (*Heracleum mantegazzianum*) in the April 1991 issue of *BSBI News*, especially the reference to planting in Norway.

At Tromsø and its environs in the far north of Norway (south west of Hammerfest at 69° N), the plant seems to be spreading rapidly. However, local people seem unconcerned and call it the "Tromsø palm", and you can even buy a postcard of it! [Reproduced below. Ed.]

In appearance, the leaves appear to be a darker green, more shiny, and less spiky, although I have not studied the plant in detail. It reaches the same size, though, as in Britain. Can any reader tell me if this is, in fact, the same species as *H. mantegazzianum* - I have seen two names given to it locally - *H. sibiricum* and *H. laciniatum*?

JAMES FENTON, Inch Cam, Roseisle, by ELGIN, Moray IV30 2YF



These two beauties have obviously never heard of photo-allergic reactions - Ed.

OROBANCHE MARITIMA: AN OVERLOOKED FEATURE?

"Parasitica ad radices Dauci Carotae et D. gummiferi, rarissime Plantaginis Coronopus et Ononis repentis." (Pugsley, 1940).

Pugsley's diagnosis for *Orobanche maritima* does not contain any exclusion clause regarding its hosts. Indeed such an exclusion (see Rumsey, 1991) could not be upheld logically, as a list of 'non-hosts' would be theoretically 'limitless'. My use of the name for specimens on *Eryngium maritimum*, or on any other host, reflects my opinion that certain specimens, including those illustrated in *BSBI News* (Hambler, 1990) agree with Pugsley's description. Indeed, it may be possible to extend Pugsley's list still further: 'var *maritima*' (sic) on the same host species listed by Pugsley for *O. maritima*, together with *Calystegia soldanella* and an intriguing 'etc.' is quoted, with no author, under *O. minor* Sm. by Clapham, Tutin & Moore (1987).

I asked (Hambler, 1990) whether anyone had previously noticed or described long-pedicellate flowers in British *Orobanche*. I have, as yet, had no affirmations, although Rumsey (1991) repeats my inference, that 'very elongated pedicels >30 mm are uncommon'. This is why the occurrence of the feature at a higher frequency in some populations, or species, of British *Orobanche* than in others is of interest, as is the possible maritime connection. Evidence is needed - any field-records of pedicels, and their lengths, in the form requested in my previous Note, will be welcomed.

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LISTERA CORDATA ON THE DOORSTEP

Some sixteen years ago we came to live in a house newly built in about half an acre of virgin peat, rock and heather, some three miles north of Ullapool. In our first year I noticed several plants of *Listera cordata* growing among heather on a low hill about half a mile from the house, and I have seen it there every year since. I have also found it in several other locations in the area, one of which was only about 200 yards from the house. So when the *Listera* Survey was announced (*BSBI News* 57: 43; April 1991), I volunteered my records, unaware that this would bring me a chastening learning experience.

Chris Sydes' penetrating questionnaire got me down on my hands and knees at my sites carefully pushing the heather aside, to reveal a far greater number of plants than I had noticed in my previous casual observations. Reflecting on this after I had completed the questionnaire, I walked out into our garden among the natural heather, most of which we have left undisturbed, and got down on hands and knees again. Within less than half an hour I discovered four separate groups of *Listera*, one only six yards from our front door!

Two other orchids, *Dactylorhiza maculata* and *Gymnadenia conopsea*, also appear regularly in uncultivated parts of our garden.

COLIN SCOULLER, Tigh na Faoileige, Rhue, ULLAPOOL, Ross-shire IV26 2TJ

LATIN AND ENGLISH NAMES PLEASE

Like other members of the BSBI no doubt, I read with interest the periodicals received, or at least those parts which appear to be relevant to my current interests or studies, but could I please suggest a modification in the approach to nomenclature that will be of enormous help to **some** of us without being expensive in time or effort.

In some articles I notice that the vernacular name is given alongside the Latin name of the species when first mentioned. In other equally interesting articles this is not the case.

In the field, locally, I often accompany fellow botanists on outings where I am asked what the English name is for a particular species - largely for the benefit of others in the party. Alternatively when carrying out a monitoring scheme, using Record Cards, I am asked to supply the Latin name so that the particular species can be scored through. Matters are made worse of course because of the Latin shorthand names on the record card and the fact that Latin names are no longer the stable things that they used to be.

There must be many botanists from both 'schools' who would benefit from seeing the Latin name and vernacular name alongside each other as often as possible. It would help them to 'marry' the two names together instead of regarding them as totally different entities - as divorcees if you like. All I am asking is that at the <u>start</u> of a paper or article the two names occur together. Once should be enough.

How relieved I am that Shelley's ode was to a skylark and not to *Alauda arvensis* and that I await the spring song of the blackbird and not *Turdus merula*! The ornithologists are just lucky.

GORDON KNIGHT, 12 Ffordd y Felin, Trefin, HAVERFORDWEST, Dyfed SA62 5AX

SCARCE PLANTS PROJECT

SCARCE PLANTS UPDATE

Thanks to all of you who responded to our request in the last BSBI News for members to adopt a species. Over 60 are now adopted, either for the whole country or just locally. This leaves plenty of species on the list which are suitable candidates for adoption; Carex divisa, Fallopia dumetorum, Moenchia erecta, Teesdalia nudicaulis and Thesium humifusum are top priority. If you have come across any scarce plants this summer that have caught your interest, please consider adopting them for the 1992 season, even if only in your vice-county. Species which are relatively common in your area, are likely to be the ones for which we have few localised records.

If you have any odd records of scarce plants for this year, don't forget to send them to your v.c. recorder to pass onto BRC. Many recorders may still welcome some help in checking localities; some are preparing field work schedules for next year which you could also get involved in.

Although you are receiving this newsletter rather late in the season, there is still the opportunity to get out and about and collect records for the later flowering species. How about looking out for

some of the following species:

Althaea officinalis, Calamintha nepeta, Centaurium capitatum, Ceratophyllum submersum, Cicendia filiformis, Euphorbia paralias, E. platyphyllos, Galeopsis angustifolia, Gentianella germanica, Hypochaeris glabra, Limosella aquatica, Mentha pulegium, Parentucellia viscosa, Polygonum oxyspermum, P. rurivagum, Scilla autumnalis, Sibthorpia europaea, Silene gallica, Sorbus spp. (autumn berries), Suaeda vera, Ulex minor, Wolffia arrhiza, Zostera spp.

Several of the trees/shrubs and most ferns should also be possible for a while longer. With a late

season this year, many other species could also be lingering on.

It is not too early to start looking ahead to next year. If you would like to get involved in the project in any way, get in touch with us now, so that you can be prepared for the spring. We now have a better idea of where the gaps are going to be and can suggest what may be of most use to the project.

It has taken nearly a year for things to settle down but most people now seem to have a better idea of what is involved. To repeat again for those who may be new to BSBI, we require any records of scarce plants, particularly if they are post 1970. It is not necessary to re-record, although that would be preferred, so please search your notebooks this winter and use next year to check a record if you have any doubts.

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FOCUS ON SCARCE PLANTS

In this issue we are looking at three species. Two of these, *Ceratophyllum submersum* and *Rhynchospora fusca*, are presented in the way that we currently envisage the eventual publication. Some notes on *Campanula patula* also appear.

Ceratophyllum submersum Soft Hornwort

An aquatic plant of shallow, sheltered, eutrophic lowland waters. It is one of the few British vascular plants which lack roots; it grows as a floating mass or lightly anchored to the substrate by buried stems. In coastal sites its most characteristic habitats are shallow ponds and ditches (including grazing marsh ditches), where it grows with other plants which tolerate slightly brackish conditions (e.g. *Myriophyllum spicatum*, *Potamogeton pectinatus*, *Ranunculus baudotii*, *Zannichellia palustris*) as well as species of wider habitat range. At inland localities it grows in similar habitats to the much commoner *C. demersum*, including small field ponds, lakes and gravel pits. In both coastal and inland sites it can be so abundant that it virtually excludes all competitors.

Plants flower freely but mature fruit is less frequent (*C. demersum* is known to require high temperatures for maturation of fruit). Vegetative reproduction is probably frequent as plants are brittle and are able to regenerate from fragments. Plants survive the winter as sunken stems, but are unable to tolerate prolonged freezing.

The simple vegetative distinction between *C. submersum* and *C. demersum* was not understood until 1926, and older records of *C. submersum* are unreliable. It is therefore difficult to assess changes in the distribution of the species. *C. submersum* is being recorded with increasing frequency in inland sites, but it is not clear whether this reflects a real increase or whether it was previously overlooked. As a species of eutrophic water it is likely to benefit from the increasing nutrient levels in many water bodies. Widely distributed in Europe.

Rhynchospora fusca Brown Beak-sedge

On wet heaths, often on bare peat, and margins of acid bogs.

Ceratophyllum submersum

Associated species nil, or at best some of the following; *Rhynchospora alba*, *Eleocharis multicaulis*, *Juncus bulbosus*, *Narthecium ossifragum*, *Eriophorum angustifolium*, together with *Sphagnum* spp. Actively spreads by rhizomes. Sets fertile seeds and stands the winter. UK distribution decreasing from 12 vc to current 6 vc. More widespread in Ireland but current position unknown. Most populations small but occasionally abundant in bare habitats.

North-West and Central Europe, commoner in the N and W. World distribution, Atlantic, Europe and N E America. Lack of grazing or disturbance pose greater threat to UK population than drainage or improvement.

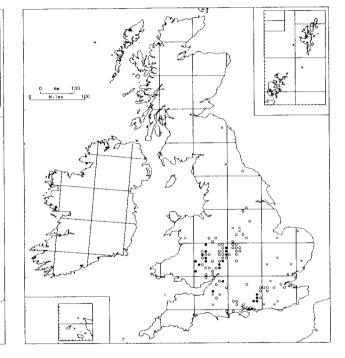
Campanula patula (Spreading Bellflower) is a late-summer flowering perennial of woods and hedgebanks. Its centre of distribution is the Welsh Marches spreading to the West Midlands, with quite a few records in Central Southern England.

The Atlas showed 24 post 1930 dots with a further 59 dots before 1930. Records held now at BRC show only 35 sites in 32 10-km squares post 1950, and 20 sites in 19 10-km squares post 1970. Whilst it is true that there are no recent localized floras of Hereford, Brecon, Radnor, Worcestershire and also Hampshire, it appears there has been a marked decline in this species. Of course this is the purpose of the Scarce Plants Project - to highlight decline and to encourage those who know locations to check and submit records to prove otherwise.

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

0920472





- 1970 onwards (GB-20, Ir-0, Ch.Is-0) before 1970 { GB-66, Ir-0, Ch.Is-0)
- k introduction (GB-24, Ir-O, Ch.Is-O)

Biological Records Centre, Monks Wood. 09-Aug-91 10:18 AM

Biological Records Centre, Monks Wood. 09-Aug-91 10:18 AM

NOTES

AND ARTICLES

DELVING INTO DITTANDER

There are, to my knowledge, two substantial colonies of *Lepidium latifolium* (dittander) around Chichester Harbour (v.c. 13), one towards the end of the creek at Fishbourne, the other a bare half-kilometre south along the harbour wall at Apuldram Sluice where the River Lavant debouches unceremoniously. In the latter station it has been known since at least 1886.

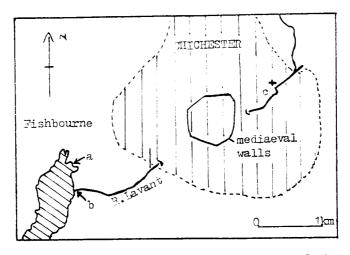
In July 1990 I noticed L. latifolium growing on the eastern outskirts of Chichester. A patch of some 3m² flourished on ground which had recently been disturbed by work to the bank of the Lavant, almost opposite the cottage which stands upon the site of Chichester's oldest hospital. Consulting Arnold's Flora of Sussex of 1887, I found the following record for L. latifolium: 'By the Lavant, nr. St. James' Hospital, Bot. Suss.' Further historical research yielded a reference to a specimen collected by H. Collins (a friend of the great Sussex botanist William Borrer) in 1847, the herbarium label of which read; 'On a bank to the left of the road by a bridge half a mile beyond Chichester on the road to Arundel.' The identical spot! Back, however, to Arnold's citation of 'Bot. Suss.'. The work in question is T.H. Cooper's Botany of Sussex of 1834/35 which was published in its own right but is more accessible as an appendix to Horsfield's History and Antiquities of Sussex; and Cooper's entry for L. latifolium reads: 'By the Lavant below the garden of St. Mary's Hospital from which very probably it originally escaped.' I should explain that the Hospital was dedicated to both St James and Mary Magdalen, although the district now takes its name from only the former - earlier this century the Rev. F. Malleson rejected Coopers record because, I believe, he mistakenly identified St Mary's Hospital with the almost equally ancient St Mary's almshouses in the centre of Chichester which do not lie beside the River Lavant.

Whether or not the putative continuity was provided by a succession of living plants or buried seed (a topical issue which I shall leave well alone!), it was exciting to reflect that the colony which I had seen could well have descended from that which was observed by Cooper and the other botanists in the first part of the last century. But was Cooper correct in his guess that these plants had 'escaped' from the Hospital garden? In The Englishman's Flora, Grigson notes that dittander was cultivated as a culinary herb, the leaves and roots being used to make a peppery sauce until the related horseradish and imported peppercorns superseded it. There were also medicinal applications: Gerard and Culpepper provide the usual gruesome list of agues and fluxes. Then another idea began to form. The Hospital of St James and Mary Magdalen was founded in the 12th Century safely outside the mediaeval city walls in order to care for lepers. It was the pharmacologist Peter Cooper, through the kind agency of Mary Briggs, who supplied the link by bringing to my attention passages in the Elder Pliny's Natural History and Dioscorides' Greek Herbal in which Lepidium is prescribed for the treatment of leprous sores. The works of both the Roman encyclopaedist and the Greek physician enjoyed almost biblical authority in the Middle Ages - in short, it is difficult to imagine the Hospital authorities not utilising home-grown dittander. And thus I am led to wonder: could the dittander here now be the lineal descendant of stock raised in the Hospital grounds seven hundred vears ago?

One more conjectural link remained to be made. Notwithstanding the inclination to regard saltmarshes and creeks as the 'natural habitat' of *Lepidium latifolium*, could the Apuldram and Fishbourne colonies have been derived from the Chichester one, via the River Lavant? I put the question to Tim Rich. A considerable letter arrived almost by return of post, outlining for me a modest programme of experiments which would probably amount to not much more than the work of a lifetime. From my unempirical armchair, however, the theory which appealed most involved rhizome fragments carried downstream, to be deposited near the mouth of the river; from there a further migration by similar means, material being washed up the creek towards Fishbourne on the tide.

There must be a doctoral thesis in this! Yet although experimental work could add weight to the circumstantial evidence, ultimately there can be no conclusive cooking of any of these more or less partly baked theories about the origin of the *Lepidium latifolium*. The case does, however, call into question the status of the species in the Chichester area, and it serves as a healthy reminder of the vital importance of the historical dimension to our understanding of the flora which we see about us today.

NICK STURT, Peacehaven, The Crescent, WEST WITTERING, West Sussex PO20 8EE



Map showing Chichester, the River Lavant and Fishbourne Creek

- a. Lepidium latifolium site nr Fishbourne
- b. Apuldram Sluice
- c. Hospital of St James and Mary Magdalene

Note that today the R. Lavant is culverted under central Chichester



Lepidium latifolium in the foreground; background, beyond the dry R. Lavant, cottage on the site of the Hospital of St James and Mary Magdalen, photo © N. Sturt, July 1990.

THE BRINELL LENS - A USEFUL TOOL

In identifying grasses - and no doubt other plants too - it is very often necessary to measure accurately the length of parts of the inflorescence. In the past I have found this a difficult operation, requiring the simultaneous manipulation of a hand-lens and a metric ruler. Moreover I have never come across a ruler with divisions finer than half millimetres.

All is now changed! In perusing a Dutch article on grasses I saw a reference to the BRINELL lens, and subsequent enquiries led me to Leica UK Ltd, who supply "LEITZ Brinell Magnifiers". These are superbly made hand-lenses with a built-in metric scale in the form of an engraved metal plate, with which one can very easily and precisely measure lengths from 0.1mm to 20mm: the divisions are in units of 0.1mm. A translucent base allows ample light to fall on the object being measured. The lens can be used indoors or in the field. Two magnifications are available, 6x (model no. 810516) and 8x (model no. 810518), but the 8x lens has a measuring range of only 10mm., whereas with the 6x the range is 20mm, so on balance the 6x lens seemed the better model to choose.

These lenses are not cheap (as perhaps one would expect of a precision product from West Germany). I paid about £75 for mine, but it has proved of enormous help to me in examining the quantities of foreign grasses which a few fellow-enthusiasts supply me with from time to time.

The address of Leica UK Ltd is Davy Avenue, Knowlhill, Milton Keynes MK5 8LB, tel. 0908 666663. [Recent information suggests that the following firm may be worth contacting first: TESA Metrology Ltd, 1-3 Singer Way, Kempston, Bedford, tel. 0234-840048].

RON M. PAYNE, Applegate, Thieves Bridge Road, Watlington, King's Lynn, NORFOLK PE33 0HL

INDEX KEWENSIS CENTENARY

Grenville Lucas writing in the magazine *Kew*, published by the Royal Botanic Gardens, Kew for its friends, describes the *Index Kewensis* programme, which will be 100 years old in 1993.

The botanical literature of the world containing the descriptions of all the new species with reviews and evaluations, is carefully scanned by Herbarium staff at Kew. New species have to be described and published, and to be valid the new name must be accompanied by a Latin description Latin is the universal language of the botanist. On average there are 6,400 new names each year and these are listed in the *Kew Index*.

To celebrate the centenary of *Index Kewensis*, Oxford University Press is to produce, with the latest computer technology, a compact disk which will contain the 956,499 species names so far gathered by Kew staff in the past century. The 5" disk will be equivalent to 21 volumes of 7,546 pages, and will be a fitting centenary commemoration of the millions of hours of discovery, research, scholarship and perseverance, and the hundreds of thousands of species which the database holds.

Written with the permission of G. Ll. Lucas, from his article in Kew, Winter 1991.

MARY BRIGGS, Hon. General Secretary

CONKERS - MORE THAN JUST A GAME?

John Akeroyd asks if the British took the game of conkers to Albania (see *BSBI News* **56**: 20-21). I think that Roy Vickery will be pleased to add Albania to his research into when and where the game has been played. Roy tells me that he has been unable to find evidence of the game of conkers played outside the British Isles (nuts from the North American species are not of suitable texture). In *Plant-lore Notes & News* **11**: 49, Roy reports 'the great deal of space' given to Conkers in *The Times* in the autumn of 1989, and in **16**: 73, a reproduction of a poster advertising the Ashton World Conker Championship at Oundle, 1990, at which a U.S. Serviceman and a Russian Tass journalist were photographed; the winner was a Scots travel agent.

My late husband Alan was conker champion of Luddendenfoot near Halifax, Yorkshire in his youth, and the large conker tree in the paddock of White Cottage was therefore specially prized (and

clinched the Sale when the cottage was purchased as our home). Many hours of school homework were done in the upper branches, and my daughter found a George IV penny below the tree while hanging upside down swinging on a lower branch.

MARY BRIGGS, Hon. General Secretary

COILING OF TENDRILS - A REPLY, 1

The coiling of tendrils in the manner illustrated in *BSBI News* 57: 44 does not, as far as I know, confer any mechanical advantage, but is an inevitable consequence of the sequence in which attachment of the tendril to the support and its coiling occurs. If the tendril forms its spiral coils <u>after</u> the end has become attached, a little thought (and perhaps an experiment with a bit of thin wire fixed at both ends) will show that it is impossible for the spiral coil to form in one sense throughout. It can only twist from the centre, producing a left-hand spiral at one end and a right-hand spiral at the other.

This can be elegantly demonstrated by the following experiment. Cut a long strip about 2mm wide from end to end of a dandelion hollow scape. Hold the ends of this strip between thumbs and fingers of both hands (hold it slack, not pulled tight), and immerse it in a large bowl of water. In a minute or so it will begin to twist, and you can watch it twist from the centre to form a double spiral exactly as illustrated in BSBI News. Repeat the experiment with another strip held by one end only and it will form a single right-hand coil from end to end.

TONY PRIMAVESI, Ratcliffe College, Syston, LEICESTER LE7 8SG

COILING OF TENDRILS - A REPLY, 2

In response to Jennifer Ide's query (BSBI News 57: 44) the following hypothesis would explain the change in direction of the spiral in a tendril.

The tendril begins by attaching itself to a suitable structure:



It then forms a loop between its origin and attachment:



This loop then rotates:



This will produce the observed reversal in the spiral.

This will give two advantages. Firstly, it will result in a shortening of the overall length of the tendril, thus pulling the stem closer to the point of attachment, or vice versa. Secondly, the rotating loop may encounter a second suitable structure and form a second point of attachment.

It now requires someone with time and patience to observe a growing tendril over days or weeks; or has Jennifer Ide already done this and can prove me wrong?

ROGER VEALL, 1 Plant's Close, East Wellow, ROMSEY, Hants SO51 6AW

FOUR-LEAVED CLOVERS

The recent correspondence in *BSBI News* about four-leaved clovers has reminded me that I once knew where to find plants of *Trifolium repens* with four leaflets. It was about 1930, when I was a student at Girton College Cambridge, and we used to take picnic teas out on the lawn. I found specimens on the same site on several occasions - I assumed they were from a particular clone, spreading through more normal plants and the short grass - but it never occurred to me to propagate them; nor would I then have had time or facilities. Years later, when I went back, I could find no trace of them though the site was still there. But in 1930 there would have been no hormone weedkillers.

HELEN D. MEGAW, 22 Dunamallaght Road, BALLYCASTLE, Co. Antrim BT54 6PB

THE SCENT OF ORCHIS MORIO - 1

In response to Peter Hora's query regarding the scent in *Orchis morio* (BSBI News 57), I would offer the following observation. I have found O. morio to have a pronounced vanilla fragrance, but that this is not always apparent and it probably depends on the time of day at which the bloom is sniffed.

Amongst my cultivated orchid collection it is quite noticeable that certain orchids, most notably *Gomesa crispa* and *Dendrohium kingianum*, are very fragrant at particular times of the day and the scent is entirely absent at others. I have always believed this to be an aspect of the pollination mechanism whereby the plant was conserving energy by withholding its attractants when pollinators were not on the wing.

As a point of interest a Wiltshire vernacular name for *Platanthera chlorantha* is 'night violet' as the scent is reputed to be far stronger during the hours of darkness, which would correlate with its pollinator being a night-flying moth as suggested by the floral structure.

Post scriptum. Since writing the above I have read *The Orchids - Natural History and Classification*, by R.L. Dressler, wherein he postulates that many species have flowers which are fragrant only for a part of the day or night as a temporal reproductive isolating mechanism.

GRAHAM GOODFELLOW, Radnor Cottage, CORSTON, Wilts SN16 0HD

THE SCENT OF ORCHIS MORIO - 2

It would appear from Peter Hora's letter in the last issue of *BSBI News* that some individuals can detect scent in *Orchis morio* and some cannot. Perhaps the genetic variation lies in the <u>humans</u> rather than in the orchids??? (The ability of some humans to taste PTC whilst others cannot springs to mind in this context.)

JOHN BURGESS, Head of Biology, Durham School, DURHAM CITY DH1 4SZ

MYRTLE AT WEDDINGS

Queen Victoria is said to have introduced the continental fashion of carrying myrtle at weddings when she married in 1840. Royal brides still carry bouquets which contain a sprig of myrtle plucked from a bush growing at Windsor. This plant, together with bushes growing in the gardens of Osborne House, is said to have grown from the myrtle carried by Victoria on her wedding day. In her autobiography, For the Record, the second Marchioness of Reading records how the honeymoon which followed her wedding in September 1914 was spent at an aunt's cottage in Surrey - 'A splendid meal was waiting for us on arrival: I remember particularly that the table was decorated with sprigs of blossoming myrtle, a happy touch ...' In Wales it was believed that peace and harmony would prevail in a house which had myrtle bushes planted on either side of its main door.

ROY VICKERY, 12 Eastwood Street, LONDON SW16 6PX

QUEEN VICTORIA'S WEDDING BOUQUET - 1

The query about myrtle in Queen Victoria's wedding bouquet (BSBI News 56: 30) interested me. About four years ago an elderly lady came to the shrub nursery for which I am propagator asking us to give a good home to a potted myrtle plant (Myrtus communis) as she was moving away from the area into a flat. She said that it was reputed to have been grown from a cutting from Queen Victoria's wedding bouquet and thought we might like to propagate from it. This I have not done as it is too cold in this area for myrtle to be commercially viable as an outdoor shrub, but the plant is still growing in our cold greenhouse - 3 feet high and at present bearing berries. I, too, would be intrigued to know whether the tale of its origin might conceivably have been true.

PAT VERRALL, Woodpeckers, Hoe Lane, Abinger Hammer, DORKING, Surrey

QUEEN VICTORIA'S WEDDING BOUQUET - 2

I cannot give direct answers to the questions asked about Queen Victoria's wedding bouquet in BSBI News 56: 30, but I can mention some facts which may have a bearing on them.

There is - or was until a very few years ago - a myrtle bush growing in a garden here in Ballycastle, Co. Antrim, in the extreme north-east corner of Ireland. Its owner, an old lady of 80 or so, who unfortunately died soon afterwards, told me that she had grown it from a sprig in her wedding bouquet. She spoke as if it was a natural and traditional thing to have myrtle as part of one's bouquet. Why should this practice be thought odd? The tradition could have lasted over several generations if it followed Queen Victoria's example; and why should a sprig not have been brought to Northern Ireland as well as to any other part of the U.K.?

HELEN D. MEGAW, 22 Dunamallaght Road, BALLYCASTLE, Co. Antrim BT54 6PB

QUEEN VICTORIA'S WEDDING BOUQUET - 3

Myths can grow as well as plants in gardens, but there does seem to be some fact behind Nora McMillan's story (BSBI News 56: 30).

Writing in her book, More than meets the Eye (Stanley Paul, 1986), Sue Phillip states:

"that not only was myrtle traditionally an essential ingredient of a wedding bouquet, but after the wedding was over the chief bridesmaid would plant a shoot from the bride's bouquet next to the door of the couple's new home. When the young plant flowered, another wedding was foretold - this time, the bridesmaid: if her cutting died, she could only expect to be an old maid. Over a century after Queen Victoria's wedding, myrtle grown from her bouquet was used in Princess Anne's, suggesting she came from a long line of happily married bridesmaids, with green fingers."

Fiona MacGregor writing in a special wedding supplement to the *Dartford Informer* in Feb. 1990, also mentions Queen Victoria's wedding bouquet, but adds the extra information that besides being a symbol of love, it was particularly favoured by royal brides.

I am indebted to Mrs M. Noble of Bexley for drawing my attention to the above extracts, and also for providing me with my own plant of *Myrtus communis*. This too is reputed to have originated from Queen Victoria's bouquet, but Mrs Noble's best efforts have failed to trace through her relations any fact to substantiate this claim. Incidentally I know of 2 other myrtle plants in my road, one of which is outside the front door - but again, I have no further information.

As Myrtus communis was introduced in 1597 and Queen Victoria was married on 20th June 1837, the plant was by then well established in cultivation, both outdoors, and, more particularly, under glass. There would have been no difficulty, with the skills and resources available to gardeners in those days, to ensure a supply of myrtle blossom at virtually any time of the year. However as myrtle roots best in late Spring and Summer there was a lot to be said for potential bridesmaids with matrimonial inclinations choosing which wedding they would officiate at with an eye on the calendar!

DAVID NICOLLE, 15 Parkhurst Road, BEXLEY, Kent DA5 1AX

GREEN EVENTS

This spring I was introduced to a new and potentially interesting notice-board leaflet produced in North London. Issued once a month, it combines calender with directory by listing neighbourhood businesses, charities and individuals who offer services or activities conventionally deemed 'green'.

This term should be interpreted sensu latissimo. Green Events will publicise all natural history and conservation announcements, including educational projects, data enquiries and threatened habitat campaigns. It will also extend to the advertisement of matters social, political, domestic, holistic, dietetic, medicinal and even spiritual. It may usefully supplement ecological magazines of national or regional distribution by concentrating on the local community. And it may score over the parochial press in that one is no longer obliged to wade knee-deep through pages of criminal violence, car sales and football results before finding the real news.

I reserve further judgement until I am able to contact a reasonable number of people through the information it has provided so far. At the moment it impresses me as a good idea worthy of mention in BSBI News. I wish it success and hope that it may help to communicate to a wider public some of the important environmental issues which we, as a botanical society, may otherwise only share amongst ourselves. Readers are welcome to request sample leaflets and to seek advice about setting up similar schemes in other parts of the British Isles. Please phone 081-365-2958 or write to: Peter McCaig. Green Events, 14 Curzon Road, LONDON N10 2RA. Thank you for remembering the s.a.e.

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

JIZZ

In his Presidential Address, 1990, Professor Webb states (*Watsonia* 18: 247) that many botanists today 'say that a good genus should have what it is now fashionable to call a characteristic "jizz".' Last year, when reviewing for *The London Naturalist* (of which I am the editor) a new Macmillan title, *Birds by Character. The Fieldguide to Jizz Identification*, I decided to see if I could establish when the term 'jizz' was coined. It was already a familiar expression to me through the ornithological literature. My searches led me to T.A. Coward, *Bird Haunts and Nature Memories*, Warne, London, 1922, in which the author states that it is probably of Celtic Irish origin and handed down from father to son for many generations. Coward's use and interpretation of the term seem unaltered over the years.

Postscript. Since writing the above I spotted in the August 1984 issue of *British Birds* a letter asking about the origin of 'jizz'. Coward (1922) was cited, but in a later edition, Coward added 'Since the publication of the first edition, a friend pointed out that in Webster's Dictionary both "gis" and "jis" are given as obsolete variants of "guise", and this seems to be the origin of the expressive word.' Let's hope that botanists don't become 'twitchers'!

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[I trust that any earlier use will be reported on by members! Ed.]

ON SOME CURIOUS DACTYLORCHIDS

Pseudopeloria

Bateman (1985) defined pseudopeloria in British orchids as a phenomenon in which 'the labellum is poorly differentiated and is similar to, but not identical with, the *outer* [my italics] perianth segments' ('sepaloid'). He explained why the term 'semi-peloric' is inappropriate.

On 11 July 1991 I found a putative hybrid of *Dactylorhiza incarnata* (L.) Soó subsp. *pulchella* (Druce) Soó x D. traunsteineri (Sauter) Soó in the Dalby Forest near Thornton Dale, v.c. 62, N.E. Yorks. The site is well known to me. This plant forms part of what I believe to be a hybrid swarm between these two taxa, with the possible very limited incursion of D. fuchsii (Druce) Soó. My work

is continuing on this colony. The presence of the putative hybrid *D. incarnata* × *D. traunsteineri* at this site was confirmed when I first visited it (D.J. Tennant, *pers. comm.*): the third English record.

The particular interest of the plant found on 11 July 1991, which demonstrated features of each putative parent, was that all the labella resembled the lateral *inner* perianth segments ('petaloid'). The plant had eight flowers which were all the same save for the spur being minute in some flowers and barely detectable in the remainder. Thus the labella were poorly differentiated and similar to, but not identical with, the inner perianth segments, because of the vestigial spurs. I possess mounted inner and outer perianth segments from this plant.

Thus, we have a second category of pseudopeloria. That described by Bateman (1985) in which the poorly differentiated labella are similar to, but not identical with, the outer perianth segments, is thus now designated type (a), and that described in this article in which the poorly differentiated labella are similar to, but not identical with, the inner perianth segments: type (b).

I am not aware of any previous records of type (b) pseudopeloria. Nor am I aware of any previous records of pseudopeloria in a hybrid. I would be most interested to learn of any such records.

Bateman (1985) suggested that pseudopeloria arises in the genus *Dactylorhiza* by the sudden deactivation of the gene(s) determining labellum-shape. Perhaps hybridization precipitated this sudden deactivation in this case. It is interesting to note that the putative parents involved are diploid (*D. incarnata*) and tetraploid (*D. traunsteineri*), the hybrid being triploid. Hybridization, resulting in a loss of some genes from the tetraploid putative parent may be a contributing factor.

Bateman (1985) is updated in summary below for ease of reference:

PELORIA

Type (a) - Lateral inner perianth segments replaced by additional labella.*

Type (b) - Labellum replaced by a third undifferentiated inner perianth segment.*

Type (c) - All perianth segments identical.**

PSEUDOPELORIA

Type (a) - Labellum poorly differentiated and similar to, but not identical with, the outer perianth segments.*

Type (b) - Labellum poorly differentiated and similar to, but not identical with, the inner perianth segments.

* Bateman (1985); **Horsman (1990)

Albinism

It has always been my understanding that albinism is an all or nothing phenomenon. I was, therefore, surprised to find what I can only describe as a 'semi-albino' plant of *D. majalis* (Reichenb.) P.F. Hunt & Summerhayes subsp. *cambrensis* (R.H. Roberts) R.H. Roberts near a dune slack at Ynys-las, v.c. 46, Cards. on 19 June 1991. This robust plant was very striking. In a vertical plane the inflorescence was approximately half albino. However, many of the flowers were significantly but not wholly white. The anthocyanin in the upper stem and floral bracts was restricted to the normal side of the plant. On showing the plant to Arthur Chater he remarked that the leaf spots were unaffected (they are not always present in subsp. *cambrensis*).

Can anyone offer an explanation, please? Perhaps a member who is a gardener.

Lack of anthocyanin

Finally, I come to a dactylorchid which is sometimes taken for an albino. I refer to anthocyanin-less *D. incarnata*. In a count of approximately 12,500 *D. incarnata* subsp. *coccinea* (Pugsley) Soó in the main dune-slacks at Ynys-las, I came across one plant with white buds, on 19 June 1991. On flowering, I examined the plant very carefully, having in mind the recent records for *D. incarnata* subsp. *ochroleuca* (Boll) P.F. Hunt & Summerhayes from Kenfig Burrows, v.c. 41, Glam., and Cors Erddreiniog, v.c. 52, Anglesey. Bateman & Denholm (1985 p. 352) state that subsp. *ochroleuca* '... is characterised by a tall, broad stem, large leaves and bracts... The labella are large (usually *c*.7 x 9mm in Britain), pale yellow (though darkening towards the spur entrance), and *deeply three-lobed* [my italics]... often with notched lateral lobes... they resemble labella of *D. fuchsii* in shape when mounted.' Heslop-Harrison (1956) says of subsp. *ochroleuca*: 'A greenish hue is, however, occasionally present [in the flowers], particularly in the labellum near the spur mouth...' Such a greenish hue was present in the labellum near the spur mouth in the Ynys-las plant. However, none of the characteristics given by Bateman & Denholm (1985) were present. Further, the pollinia and

their thecae were yellow. The plant was clearly an anthocyanin-less *D. incarnata* subsp. *coccinea* (not an albino).

The particular point of interest is that anthocyanin-less subsp. *coccinea* can have a labellum with a greenish hue, especially near the spur mouth, which, but for the key characteristics detailed by Bateman & Denholm (1985), could lead to confusion with subsp. *ochroleuca*.

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FRANK HORSMAN, 7 Fox Wood Walk, LEEDS, W. Yorks. LS8 3BP

OUR VERY PRECIOUS LAND

I have been for some years uneasy about the emphasis on either very rare plants or habitats of great quality which automatically excluded areas at the edges of towns and villages which the local people might value far more *because* these 'fringes' were both available and possibly the only wild spot for walking, for people without cars.

Now a new idea has appeared in the nick of time for some places - the C.A.T. Forum. CAT was set up in 1989 for the Countryside Around Towns, to link the various agencies who might be involved, from the Countryside Commission for Scotland to Regional and District Councils for urban fringe management.

There is a great need, here at any rate, to work at solving conflict between different land uses, have better access - the idea that there is no law of trespass in Scotland is meaningless, and a lack of Rights of Way and signposts mean people in large areas of lowland Scotland, particularly the Central Belt don't feel free to walk about. CAT also promotes conservation and environmental education, while maintaining good relations with farmers and landowners.

In Helensburgh we are neither 'deep county' nor a run-down urban area, though we do have pockets of degraded land. Until very recently, there were plenty of moaners (there still are), nothing was tackled like lack of places to walk and slowly areas on the edges were eaten up. When the Local Structure Plan was published, three owners of parcels of land put in plans to build massively and a local combat group was formed. For the first time we had a practical, hard-working large and vigorous body, ready to turn its guns quickly in any direction. It is obviously not going to flare up and die down or, as so many groups here, gently peter out when the founders step down, this time local people and planners are acting in concert and taking the whole community with them, a thing we have never experienced here!

At last in semi-urban lowland Scotland there is an awareness of the fragility of our fringes, and that, if more places are made available, the extra special spots will have less feet going over them and also that if people don't develop sensitivities with their own landscape they are not going to feel much for special sites too far off for visits, and by extension the whole countryside or the planet earth. Phrases like 'wildlife community ponds', 'informal recreation' and 'environmental education' are now heard here, and with reference to our green fringes, not in some urban reclamation area outside Glasgow or Edinburgh. I really fancy a Community Pond, and know just the spot for it, in a semi-secret very run down area of basic rock, a rare commodity in Helensburgh, and it already has v.c. 99's only known Chara species in it!

ALISON RUTHERFORD, 19 South King St, HELENSBURGH, Dunbartonshire G84 7PU

[I would appreciate other members views on this idea. Ed.]

PRODUCTION OF BOTANICAL BOOKS USING CAMERA-READY COPY

After producing two books using camera-ready copy, I thought that a few hints may help to smooth production of some other publications. Some comments are specific to the BSBI Handbooks, but others are more general. [If the word-processing package cannot support different type styles and sizes then don't touch it with a barge-pole. In my experience it is the printer that is the limiting factor not the software. If you are paying, insist on the use of a laser printer or go somewhere else! Ed.]

Commercial Firms

- Get a quote per finished page. For Crucifers we were quoted an input price per page, and a separate formatting price per hour, and I suspect we have lost out on the latter due to inexperience of the operator.
- 2. It is best to get someone with experience of producing books rather than just typing letters (they tend to be more aware of consistency and are used to handling large files, etc.). Ask to see what has been done in the past. Find out how much experience they have had using the word processing package, and ask them to demonstrate what they can do on the spot (ask them to reproduce a difficult example). The package used for Crucifers was too clever by half for the operator. It is not necessary to have someone close to hand reliability is more important. Much of the Crucifers text was sent by post.
- 3. Make sure that they can do a full range of **bold**, *italics* and normal text, preferably in at least three sizes. Underlining to indicate <u>italics</u> (e.g. *Plant Crib* (and the old style *BSBI News*. Ed.]) is ugly and less readable. Any decent word-processing package with printer should be able to do this (daisy-wheels can do it if the head is changed every time...).
- 4. Ask about 'backing up' procedures. A large chunk of Crucifers was lost when the hard disc was filled up resulting in considerable repetition of proof reading and delay (cost was born by the firm). I was extremely surprised to find that this firm did not back-up as routine and only found out the hard way (as they did). Always keep previous copies with marked changes/corrections this saves hours in the event of an accident.
- 5. Present the book to the firm in sections (at least initially) and get each section into camera-ready format before going on to the next one; problems can be sorted out sooner rather than later.
- 6. Make sure that Latin names can be added to the dictionary for automatic spell-checking, and provide a correct list of unusual words to the typist (it was not possible to add to the spelling dictionary for *Crucifers* apparently). Spell-checkers sometimes think that they know best (!); none-the-less they are valuable, but do not replace careful proof reading.
- 7. Get at least one **copy** of the final text on disc and keep it yourself.

Drawings

- Drawings are best done at one-and-a-third (or thereabouts) final size as most photocopiers will
 reduce easily by this amount once, but not more. Some drawings for Crucifers have become too
 black and lines too thick due to two reductions being required.
 Drawings should be photo-reduced rather than photocopied if possible, though you may not be
 able to do this yourself.
 - A standard pen nib size would help with consistency if using more than one artist.
- 2. I attempted to get all species within a genus drawn to the same scale to help with comparison this I now consider to be a mistake; they should all be drawn to fill the page. Apologies to Pat!
- A standard layout of drawings helps enormously for identification, labelling and visual consistency.
- 4. Drawings are best mounted onto sheets with names, page numbers, etc. already on them so that they are all square. It is difficult to add legends to the drawings squarely.
- 5. Scotch "Spraymount" adhesive is ideal for sticking down drawings, provided care is taken to keep the face clean. This is best done by holding the drawings with tweezers and spraying **held up in the air** (over newspaper, etc.) rather than against a flat surface.
- 6. A **range** of fruits, leaves, etc. (see *Cochlearia* in the *Crucifer Handbook*) should be drawn rather than the more standard singles.

Maps

- 1. The small size of maps may mean that the symbols are hard to read. Increasing the size of symbols to larger than a 10km square would help with legibility on reduction. Arrows (cf. Atlas) could be used to highlight a few dots, but when many require highlighting this reminds one of cowboys and indians.
 - BSBI Publications Committee suggest that if maps are to be plotted with four symbols in the future, the maps are printed one per page (and of course upright).
- 2. Sideways arrangement of maps (cf. Crucifers as suggested by Arthur Chater, but in proper order and not that adopted by TCGR!) helps to keep them larger and more legible.
- 3. Laser printed maps do not reduce as well as those printed on a proper plotter. The printed output from Alan Morton's DMAP program is the best that I have seen by miles.

Cover

- 1. Start with the **lettering** and fill in the gaps with drawings!
- 2. Scales can be very difficult to draw or print accurately (e.g. check the scale in Hubbard's *Grasses*, 2nd ed...) but are very useful for the readers.
- 3. The ISBN must be on the back cover, as well as inside.

TIM RICH, c/o Unit of Vegetation Science, University of Lancaster, LANCASTER LA1 4YQ

LEGACY OF THE CRUSADERS

That a direct result of Norman Knights returning from the crusades is a wild flower growing in a Lancashire field seemed at first to be just a good story, but further investigation made the story a reality.

The only delicacies enjoyed by the peasant rural community which occupied most of Britain during the middle ages, were usually those found in the wild that could be gathered free. One of these was Saffron, which was greatly prized as a colouring and flavouring ingredient of culinary preparations, and was also used in medicine and for dyeing. The valuable Saffron was obtained by drying and crushing the stigmas of a wild autumn Crocus.

The only species of wild autumn crocus native to Great Britain was Colchicum autumnale (Meadow Saffron) a not too common plant and completely absent from areas that did not have lime rich soils

Legend tells us that Knights of the Order of St John of Jerusalem found a different species of crocus growing in Mediterranean countries while travelling to and from the crusades. They noticed that it would grow in poorer soils than its British relative, and brought back bulbs to give to their tenants.

For over four centuries the Knights of the Order of St John of Jerusalem Hospitallers were great land owners over much of England, and it is to them that the distribution of the alien crocus, *Crocus nudiflorus* (Autumn Crocus) is credited.

In an exercise to see if a comparison of scientific and archaeological data would throw any new light on an old mystery, I chose the Rochdale - Oldham area of Lancashire to list the sites where *Crocus nudiflorus* still grows and then to investigate the history of land ownership in the area.

A most interesting pattern emerged in so much as each autumn crocus site correlated with evidence of the land having been owned at one time by the Knights of St John.

Dealing with the Lancashire possessions were two preceptories, one at Newland, in Yorkshire, and the other at Yeaveley, in Derbyshire. Under these were two camerae (sub-offices), one at Woolton and the other at Stede, near Ribbchester, where what was a Norman chapel still stands. The camerae date from 1190 and 1292 respectively.

The first complete list of possessions of the Knights of St John Hospitallers in Lancashire, is the *Placita Deo Quo Warranto*, taken in 1291 (County Record Office). The list comprises 98 holdings including Middleton, Chadderton, Crompton, Oldham, Milnrow, and Healey; all sites where the autumn crocus grows.

Between the return of the *Deo Quo Warranto* in 1292, and the dissolution of the chantries and minor religious houses by Henry VIII in 1548, the Hospitallers did not greatly increase their holdings in Lancashire, rather some of their properties were sold or otherwise parted with.

The Kuerden manuscript (College of Arms) folio V 83B, gives a list of the free tenants of St John of Jerusalem in the county of Lancashire A.D. 1540. In all there are 23 listed tenants in the

Oldham - Rochdale area, including Robert Wild for Colshog in Crompton, Ralph Standish, Edmund Ashton and Thomas Ratclif, for the manor of Chadderton, Robert Holt, for the manor of Rochdale Milhouse, and Rhomas Hyl, for Hollingworth; autumn crocus is known to survive in these four areas.

A manuscript in Rochdale Library about an inquisition taken at Rochdale on November 13th 1610 gives details of Hospitallers holdings still in the parish which include the Hollingworth and Milnrow sites in addition to Buersill and Hellfield where the crocus might still linger.

Although no longer needed for culinary use, we are still indebted to the Knights of St John, for a rare and beautiful flower.

ALLAN MARSHALL, Ellenrod Estate, Ellenrod Farm, NEWHEY, Rochdale OL16 4NU

TED BANGERTER - ON REACHING 80!

A past Hon. Gen. Sec. of BSBI, Ted Bangerter, now living in Kiwi-land down-under celebrated his 80th birthday this year. A card for him was signed at the AGM in Liverpool in May and Ted replied:

"What a marvellous surprise; not only the card but it arrived exactly on the day! I would like to take this opportunity to thank all those people - among whom I recognise many old friends - who signed it.

I do not indulge in much botanical activity these days although I still collect the odd plant for the Aukland Institute and Museum. My main occupation is tidying up my card index, which has been the basis for my 12 papers in the Museum's *Records*. This series is acknowledged in *New Zealand Journal of Botany* on Aukland's flora. I appear in the 'Bibliography of First Records' in vol III of the *Flora of New Zealand* and in vol IV I am amongst those who are especially thanked. So I feel that I have done my bit out here in N.Z.

Anyway, I've greatly enjoyed it, and I may say that I'm not at all modest about my honorary membership of the BSBI. I shout my mouth off about it whenever possible!"

EDWARD B. BANGERTER, 3/24 Inverness Road, Browns Bay, AUKLAND 10, New Zealand

COMPUTER CORNER

DMAP - RECENT ENHANCEMENTS

DMAP is a computer program for distribution and coincidence mapping using IBM-compatible PCs. The basic features of the program have been described in earlier issues of *BSBI News*. This note lists some recent enhancements made to the DMAP package.

- * A wider variety of plotting symbols is available.
- * Text (e.g. place names) can be incorporated on the maps.
- * A variety of solid, dotted and dashed lines can be used for boundary drawing.
- * Grid line spacing is selectable.
- * The selection of Printer, PC-Paintbrush or PostScript output is menu-driven.
- * There are improved facilities for exporting maps to Desk-Top Publishing packages for Flora production (e.g. see the account of the production of *Wild Flowers of North East Essex* in *BSBI News* No. 57).
- * A simple database program for grid square recording is supplied.
- * A text editor program is supplied for data entry and editing.
- * A digitising program is supplied for digitising boundaries using a graphics (digitising) tablet.
- * A 'Special Installation' of DMAP is available for National mapping of the whole of the British Isles.

If you would like further information about DMAP and its availability, or if you are an existing user and wish to update to the latest version, write to the author at the address below.

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ALIENS AND ADVENTIVES

ALIENS AND ADVENTIVES NEWS

May I thank everyone who sent appreciative and warm-hearted letters in response to my articles in the last issue. It has been a pleasure to correspond with you, and it is encouraging to re-open the A&A News feature in such an atmosphere of goodwill.

I have, however, received rather few botanical records through the post so far, except that a long and stimulating collection arrived from John Palmer just too late to be fully processed before the deadline. Many thanks for this list. Its most interesting items will be faithfully included in the December issue of BSBI News.

John and I have long shared an unusually keen eye for foreign trees and shrubs which self-sow out of cultivation, and so I felt that this might be an opportune moment to discuss the subject in general terms. Towns above all provide numerous niches where the fallen seeds of exotic woody plants may settle; these are often cracks in brickwork, crevices in concrete, edges of paving stones and bare, dry soil beneath municipal shrubberies. Such habitats provide the open surface and heat-storage capacity which favour germination. Unfortunately, of course, they also tend to be heavily trampled, weeded, herbicided or otherwise rough-handled each year, so that the vast majority of our tiny arboreal adventives have time to produce only the first pair of cotyledons and maybe a juvenile leaf or two, before perishing without trace. In London, between late March and early May, I find that endless fascination may be derived from identifying these seedlings; much creative pleasure too, is derived from fresh-mounting them as delicate miniatures for herbarium reference. Indeed, so remunerative is a typical urban spring, especially during wet seasons, that it would take something like twenty pages of each BSBI News issue to do justice to all the information gleaned. Alas, I must discipline myself to be brief! [Quite so. Ed.]

Even new-to-Britain seedlings are not uncommon here. Even chance new-to-science hybrids will continue to arise in parks as they have done before in nurseries. Some seldom-recorded self-sowers are encountered so often in London that I have come to feel they are scarcely worthy of separate mention any more; these include: Acer negundo, A. saccharoides, Alnus cordata, Berberis thunbergii, B. gagnepainii, Koelreuteria paniculata, Viburnum rhytidiophyllum, Ribes sanguineum, Crataegus x prunifolia, Rosa tomentosa (alien here) and Sorbus intermedia. Once in a while, a seedling or two does manage to survive its first year and develop into a small sapling bearing normal adult foliage. Therefore the most practical philosophy, nowadays, is not to sally forth open-eyed and open-mouthed, but simply to assume that every planted tree and shrub which bears fruit in our climate will sooner or later regenerate - somewhere. One just expects it to happen and one just looks until it does.

This habit of assuming things transfers equally comfortably to herbaceous plants. For example, on Walthamstow Marshes (v.c. 18), ten different species of *Rumex*, both native and alien, have, in twenty years, produced ten additional hybrids, most of them detected because I first postulated their presence, imagined their morphology, and focussed my eyes accordingly. Others are still anticipated and remain to be sought. One particularly tall half-alien taxon is *Rumex crispus x R. cristatus*, represented by a single example known there since 1983. Its distinctive characters are beautifully depicted on our front cover by Laura Andrew. According to Prof. Clive Stace in *Hybridisation and the Flora of the British Isles* (1975), it has previously been recorded only in two British vice-counties (this one and 16); he quotes its binomial, *R. x dimidiatus*, as a *nomen nudum*.

Finally, back to your letters, it is a little sad to report the ultimate demise of our three-year-old *Lavatera arborea* (*BSBI News*, No 57, front cover). However, I hasten to reassure that another is growing rapidly and should yield ample seed for all who have requested it. In the meantime, keep in touch and keep the records coming in as well.

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

ALIENS AND ADVENTIVES RECORDS

Please note that I can only include vice-county numbers if you tell me what they are. With regret, I find it impossible, more often than not, to trace precise vice-county boundaries on to the street maps which one is obliged to use for field work in Greater London; this problem is particularly hopeless south of the Thames where the old v.cc. of 16 & 17 have indefinably merged into the new boroughs of Lambeth and Southwark.

V.c. 21 Diplotaxis erucoides. Thames shore west of Sunbury Lock, 51/105678, 2.4.91, J.S.

Badmin, det. R.M. Burton, conf. T.C.G. Rich.

Solanum cornutum. Upham, near Winchester, Hants, weed in garden of Mrs J. Carrie, 1990, reported in local press, det. R. Lancaster, and communicated to me by R. Vickery, V.c. 16.5.91. A pan-tropical weed known as Buffalo Bur. native in California, Texas and Mexico and described in my North American floras under S. rostratum. Several past British records in bird-seed and shoddy.

Eruca vesicaria subsp. sativa. Charlbury, Oxon, a large overwintering plant escaped from nearby garden, 42/361196, submitted by W.D. Campbell via Ms J. Dunn. Commonly V.c. 23 known as Garden Rocket, this early-flowering crucifer is regularly grown in those parts of London which house a high proportion of people from southern Europe, and self-sown examples are not infrequent on roadsides and waste ground. A notably drought-resistant

V.c. 20 Ranunculus parviflorus and Erodium maritimum. Ware, Herts., self-sowing each year as weeds in the garden of C.G. Hanson, often in abundance. They behave the same way in

my own garden in Tottenham. The *Erodium* is of Guernsey origin (1980).

V.c. 21 Duchesnea indica, Leycesteria formosa, Symphoricarpos x chenaultii and Aesculus indica. All self-sown and well established (the latter in large numbers) in Queen's Wood, Middx, D. Bevan, 1989-91.

V.c. Guizotia abyssinica. Exeter, Devon, canal bank, a single plant, 1990, C. Westall, det. B. Wurzell. A characteristic bird-seed alien, but odd ones not infrequently turn up on their own by roadsides in the London area, and probably arise from seed scattered with Canary grasses, Millets, etc, several years before.

The following are a selection of my own observations in the London area recently:

Tradescantia virginiana x T. (?)ohiensis. A hardy perennial pavement weed in Norfolk Avenue, South Tottenham, 1987-91, identified only this year when one (of approximately V.c. 21 ten plants) flowered for the first time. So strikingly pretty did it appear that the whole colony then disappeared by unknown hand within a week. The North American Spiderworts form a group of upright, showy, stout herbs rather prone to fertile hybridization. The forms familiar in British gardens are either called T. virginiana or referred to T. x andersoniana, but the pure species is doubtfully grown here and the hybrid binomial cannot correctly denote a vague assemblage of plants whose parentage may involve any combination of T. virginiana, T. ohiensis and T. subaspera. Steyermark's Flora of Missouri (1968) is my only reference work which includes these three species in a single

key. From that information, it seems probable that the Tottenham plant does **not** include subaspera in its ancestry. That species is distinguished by its rather zigzag stems, more distinctly lanceolate leaves and definitely glandular sepals.

Escallonia 'Donard's Seedling'. A pale rose form of E. rubra x E. virgata (= E. x langleyensis) with four spontaneous seedlings beneath a planted hedge at Potter's Field, Bermondsey, L.B. Southwark, 2.10.90. Most urban Escallonia hedges are derived from crosses between these parameter they are composite planted and small scale responsation is V.c. crosses between these parents; they are commonly planted and small-scale regeneration is

occasionally observed amongst paving-stones.

Philadelphus 'Lemoine hybrids'. Care should be taken when one records Mock Oranges in V.c. 21 wild or semi-wild circumstances. The majority of examples in gardens are not true P. coronarius (with glabrous or only very sparsely hairy leaves), but belong to a very complex horticultural assemblage derived from crosses involving P. coronarius, P. inodorus, P. pubescens, P. microphyllus and possibly others. Of the several naturalised plants I have found in the London area, only a small seedling by the R. Lea near Stratford (in 1986) appeared to match P. coronarius. Mature bushes at Coppetts Wood (1986-1991) have densely pubescent leaf undersides and are certainly hybrids.

Rosa rugosa x R. arvensis (= R. x paulii). A very robust stand of this rose established on the railway bank at East Dulwich Station, L.B. Southwark, 1990, beautifully combining V.c. its diluted rugosity and pure white flowers (from R. rugosa var. alha) with the purplish stems and trailing habit of R. arrensis. I am indebted to Ms A. Rutherford for her exposition on R. rugosa hybrids in BSBI News, No 56, for this immediately clarified another enigma for me. Other roses planted and naturalised in North London have also shown this quality which I call diluted rugosity; I now realise that they are Rosa 'Hollandica', whose

non-rugose parent is assumed to be the Cinnamon Rose, R. majalis. This latter, in its pure form, is also naturalised in North London, firstly within yards of Karl Marx's grave in Highgate Cemetry and secondly in dense woodland in Abney Park Cemetery. Clearly it was more popular in Victorian times than it is now.

V.c. Medicago falcata (if one still considers it a distinct species) and its hybrid with the true Lucerne, M. sativa, were found to grow in a number of places in the northern part of L.B.

Southwark (effectively Docklands) in 1990. Potentilla intermedia. Two well grown examples on gravelly path at Stave Hill Nature Reserve, Rotherhithe, L.B. Southwark, July 1990. The warden, Ms D. Lakey, had this V.c. record published in the local press.

V.c. 21 Lonicera ledebourii (one self-sown on old wall) and Chionodoxa siehei (naturalised and self seeding in lawn) noted in Springfield Park, L.B. Hackney, 1990/91.

Prunus sargentii. Two seedlings 2cm tall beneath parent tree at Wapping, L.B. Tower V.c. 21 Hamlets. Even at that juvenile stage the marginal toothing of the true leaves was quite distinct from P. avium.

V.c. 21 Phacelia tanacetifolia. Kenwood (Hampstead Heath), Middx, one large plant by path. No other aliens in the vicinity. To have reached those dimensions by May 1991, it must have overwintered and survived intense cold. One may speculate whether the original seed fell

from a sock... or a dog?

V.c. 21 Acer negundo. A much more frequent alien in London than has yet been recorded elsewhere. Recent observations include four different parts of Tottenham, including hundreds of new cotyledons at St Ann's Hospital, and twenty one-year-old seedlings as pavement weeds in residential back streets. This North American maple is dioecious, and both sexes

Sorbus domestica. True Service tree, also known as Whitty Pear, is widely naturalised in the grounds of St Ann's Hospital, South Tottenham. Six mature planted trees, two of them enormous, were first noted in May 1990. I have since found self-sown examples V.c. 21 from hundreds of new seedlings to more than twenty hedgerow saplings 30cm - 2m tall. The cotyledons of this species are much larger and more broadly orbicular than those of the S. aria and S. aucuparia groups; curiously, as often observed in various Acer species, they are sometimes arranged in threes (or is one of them aberrantly bifid to the base?). CTM (1987) gives no explanation why this European tree should merit inclusion in its pages; only readers familiar with Norman E. Hickin's delightful book *The Natural His*tory of an English Forest (1972) will appreciate how much historical passion was aroused by a single venerable Wyre Forest specimen first documented in 1678 and last lamented in 1862. It was not reported as ever self-sowing there, but, on the same site in 1913, a seedling raised in cultivation from it was ceremoniously replanted. By 1965, this had reached c.16m. The Tottenham trees fruit abundantly and vary between forma pyrifera (pear-shaped) and forma pomifera (apple-shaped). Fallen ones are much sought by Blackbirds, but only palatable to human taste when 'bletted' (half decayed) like medlars. S. domestica appears to be very rarely planted in urban parks, but small examples could possibly be confused with other Sorbi whose leaves are pinnate.

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CABBAGE PATCH VIII

CARLISLE'S COLLECTION OF CUMBRIAN CASUAL CRUCIFERS

During examination of herbarium material in Carlisle Museum and Art Gallery (CLE) for the forthcoming Flora of Cumbria, an extremely interesting collection of new or unusual crucifer specimens came to light. These include ten first v.c. records, two of which are the first authenticated British records. Many of the records are from Silloth on the Solway coast, and illustrate the importance of the port's ballast tips and dock as a source of aliens, particularly at the end of the 19th century.

The records are given in the order in which they occur in the Crucifer Handbook (Rich 1991),

and are from Cumberland, v.c. 70, unless otherwise stated.

Neslia paniculata (L.) Desv. sensu stricto. Ruins, Saltworks, Silloth, J. Leitch, 18/9/1889. Silloth, C.W. Muirhead, 17/7/1939. First confirmed records for the species sensu stricto (Hodgson 1898) gives two other records).

Brassica juncea (L.) Czern. Behind old sheds, Silloth, J. Leitch, 31/8/1887. Mill yard, Whitehaven, R.H. Williamson, 14/7/1924. These two records predate the 1979 Smithfield record published as the first v.c. record (Watsonia 13: 132).

Eruca vesicaria (L.) Cav. subsp. vesicaria. Convalescent Institute, Silloth, J. Leitch, 31/7/1887. The majority of British records for E. vesicaria probably refer to subsp. sativa (Miller) Thell., and this is the first British specimen of subsp. vesicaria seen by TCGR. First authenticated British record of the subspecies, and first v.c. record of the species.

Matthiola longipetala (Vent.) DC. subsp. bicornis (Sibth. & Sm.) P.W. Ball. Gravel beds, River

Eden, opposite Grinsdale, T.S. Johnstone, 18/9/1902. First v.c. record of the species.

Malcolmia maritima (L.) R. Br. Silloth, C.W. Muirhead, 8/1939. First v.c. record.

Malcolmia africana (L.) R. Br. V.c. 69, Askam Pier, G. Wilson, 24/6/1951. Amazingly, rediscovered in the same locality by P. Burton, 1990 (LANC). First v.c. record.

Malcolmia crenulata Boiss. Convalescent Institute, Silloth, J. Leitch, 18/5/1890. This is the only substantiated British record for this casual, though it was listed in Druce's British Plant List and in Dunn's Alien Flora. This species is not included in the Crucifer Handbook.

Lepidium perfoliatum L. Opposite Convalescent Institute, Silloth, J. Leitch, 18/5/1890. Ballast on sandhills, Silloth, C.W. Muirhead, 17/7/1939. First and third v.c. records.

Lepidium sp. (a side shoot, possibly of L. virginicum L.). Ballast on sandhills, Silloth. C.W. Muirhead, 17/7/1939.

Myagrum perfoliatum L. Carr's Mill, Silloth. T.S. Johnstone, 31/8/1901. First v.c. record (see also BSBI News 47: 34-35).

Moricandia arvensis (L.) DC. Railway ballast near Convalescent Institute, Silloth, J. Leitch, 6/8/1887. (Also reported from Silloth by A.W. Trethewy, B.E.C. Report for 1919, 5: 640. His herbarium is now in **K** but there is no specimen). First v.c. record, and one of only about six British records. This species is also not included in the Crucifer Handbook.

We should like to thank Mr D. Clark, Curator of the Carlisle Museum and Art Gallery, for loan of the specimens, and Mrs M.C. Foster for information on other earlier records.

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THE SCOTTISH CABBAGE PATCH

NEW ZEALAND BITTERCRESS, CARDAMINE UNIFLORA

Soon after the BSBI Crucifer Handbook fell through the letter box it was followed by an anonymous Erophila swimming in a coffee-jar lid on my doormat (of which the least said the better) but then by a strange Cardamine through the post that keyed out freely as C. hirsuta but didn't look right. Indeed my correspondent complained bitterly that he could tell it easily from that species by its failure to give in decently and pull out of the ground when weeded and that instead it seemed to creep. Then there were the larger flowers which were usually single.

During a visit to my correspondent by my wife, it emerged that his son, who also has the weed, was a friend of Ron McBeath of the Royal Botanic Garden, Edinburgh and that Ron had the weed too in the rockery there and had 'caught it' from New Zealand which is interesting as the 'jizz' of the plant is reminiscent of Epilobium brunnescens. Ron had successfully keyed it out to Cardamine uniflora (previously C. hirsuta var. uniflora), though the genus Cardamine is in need of revision, not least the New Zealand species. Whatever its taxonomy, it has arrived and I think we will see more of it, so please keep a look out, especially in well-drained places in the gardens of keen plants-people, but also more widely, and don't trust it, it may be dangerous.

Cardamine uniflora is distinguished from C. hirsuta by tenacious roots, light green colour, frequent formation of plantlets at the terminal pair of leaflets enabling the leaves to act as stolons, slender decumbent stems without stem leaves, leaves frequently trifoliate, flowers single or in small umbels. Petals 5.5mm, narrowly ovate, opening flat. Fruit forming more slowly. Fruit narrower, curved.

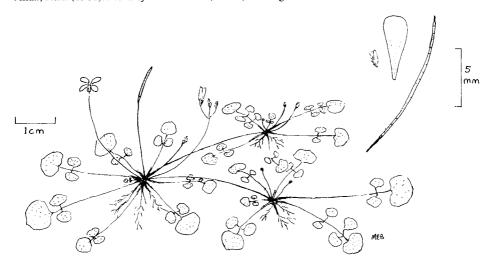
Details of the records are:

- V.c. 83 Midlothian. Royal Botanic Garden GR 36/24.75. Rock garden weed. R. McBeath from 1975 or earlier.
- V.c. 81 Berwicks. Silverwells GR 36/80.66. Garden weed especially flower pots. A.R. Jermyn 1991 but known since c.1988 det. D. McKean, herb. M.E. Braithwaite, herb. T.C.G. Rich. Reston GR 36/88.62. Garden weed, A.R. Jermyn 1991.

Thanks to Reg and Jim Jermyn, Douglas McKean, Ron McBeath, Tim Rich and my wife Paddy for their help in sorting me out.

References

Rich, T.C.G. (1991). Crucifers of Great Britain and Ireland, BSBI Handbook no. 6, London. Allan, H.H. (1961). Flora of New Zealand, vol. 1, Wellington.



Cardamine uniflora (Hook. f.) Allan, del. M.E. Braithwaite © 1991

MICHAEL BRAITHWAITE, Clarilaw, HAWICK, Roxburghshire TD9 8PT

SORROW-WAX

Last December, while walking through the St Pancras and Islington Cemetery, near Finchley, North London, my eye was caught by a particular pile of wreaths which had been placed on a newly interred grave. Several of them had their conventional designs of Chrysanthemums. Irises and Carnations interrupted by large tufts of a yellow-green colour which glowed with astonishing vividness for an overcast day. Closer investigation revealed that these were bunches of *Bupleurum rotundifolium*.

No horticultural reference book in my possession mentions this species being grown for any purpose, yet these examples could only have been raised professionally under glass to achieve vigorous and pristine condition in mid-winter. Nor need their humble cornfield origin be any cause for apology - from anyone's point of view they were strikingly beautiful.

Strangely, too, they embraced a double bereavement. We shall never know the person mourned for. And the mourners may never know that a portion of their floral tribute has itself all but departed this land (Clapham *et al.*, 1987). Unless that was the idea?

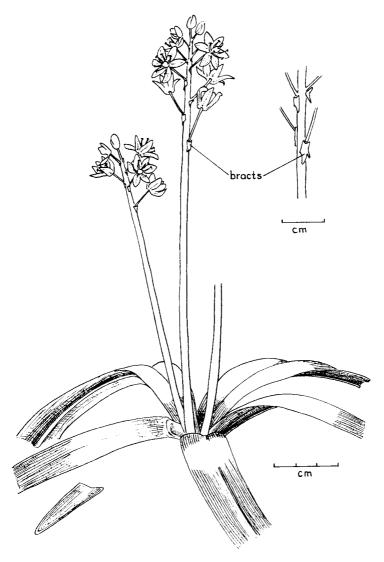
Reference

Clapham, Tutin & Moore (1987). Flora of the British Isles, 3rd ed. Cambridge.

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

SCILLA BITHYNICA

Alongside the River Cray at St Mary Cray, Kent, there is a pleasant walk. In March 1990, my wife and I found a clump of scillas, growing together with *Ipheion uniflora*, which was new to me. Both species were well naturalized under trees and bushes, spreading for some metres along the bank, and in full flower. The scilla had a small 'out-station' visible on waste ground on the other side of the river.



Scilla bithynica Boiss. del. S. Buckingham © 1991.

I was able to identify the specimen I took as *Scilla bithynica* Boiss., although it is not mentioned in the *Flora of the British Isles*, edn 3. *Flora Europaea* vol. 5, page 42, lists it for E. Bulgaria and ? Romania. In their book *Bulbs - the bulbous plants of Europe*, Grey-Wilson and Mathew comment on its 'surprisingly restricted' distribution and mention that it will naturalize itself readily in British gardens.

In subsequent correspondence, Rodney Burton informs me that in 1989 he found it 'was one of the most abundantly established plants in a long-derilict garden of Warley Place in Essex'. A specimen of the St Mary Cray plant was sent by me to Eric Clement and is now presumably in **herb**. **E.IC**.

I am most grateful to Sue Buckingham of Tonbridge for her accurate and evocative drawing see page 40) - her first effort she tells me, but surely not her last.!

Postscript - indeed almost a post-mortem! In April 1991 I revisited the site. The River Authority had spent the winter with devastating effect. The river had been virtually canalised, with the banks cut back, bushes destroyed, the outstation on the other bank removed, and the whole site now an amenity 'green desert'. Approximately one third of the main site of *Scilla bithynica* remains together with some *Ipheion*. Being bulbous no doubt they will survive, but any flowering will be much reduced and the plants weakened by their exposure to treading. Further spread now seems less than likely for what was once a flourishing, and probably unique, colony.

DAVID NICOLLE, 15 Parkhurst Road, BEXLEY, Kent DA5 1AX

MEXICAN ORANGE, CHOISYA TERNATA, NATURALIZED IN A WEST KENT WOODLAND

In the upper part of Darenth Wood (v.c. 16), on the edge of an escarpment, *Choisya ternata* H.B.K. has gradually spread through the natural woodland to form a patch 60 feet long by 20 feet wide. In gardens it is not normally a spreading species, but because of the deep leaf litter, branches near the ground have been able to root extensively. Subsequently these connecting branches rot away, leaving a colony of dozens of individual shrubs.* These are only 1-1½ feet high, partly due to the poor soil and the competition from tree roots and brambles. Additionally, the species can suffer in severe winters, and, although there is some protection from the deciduous woodland, at an altitude of 225 feet these plants are prone to be cut-back.

The colony probably originated 45-50 years ago, during the second world war, when there was a hutted hospital, long since demolished, on the flat ground at the top of the wood. (Another relic of that time is *Thymus vulgaris* L. which is well established and increasing in nearby grassland).

Choisya ternata is also established in leaf-litter in a wood near Hartley Green (v.c. 16), but to nothing like the same extent.

* By similar means, *Osmaronia cerasiformis* (Oso Berry) is naturalising itself well in two separate patches on Chislehurst Common (v.c. 16).

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

SALIX CORDATA

In response to Harold Fowkes note in BSBI News 56, I quote:

1. Little (1953)

Salix eriocephala Michx. Missouri River Willow.

Salix cordaia Muhl. in Muhl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 4: 236, pl. 6, fig 3. 1803 (after May). Not Salix cordata Michx., Fl. Bor.-Amer. 2: 225. 1803 (March).

Other common names: cordate willow, diamond willow, heartleaf willow, Missouri willow.

Range: Southern Newfoundland to Nova Scotia, Maine, Quebec, Ontario, Minnesota, North Dakota, eastern Saskatchewan and northeastern Montana, south to northwestern Nebraska, Kansas, Missouri, Kentucky, western Tennessee, and Virginia. Also local in Arkansas, Mississippi, Alabama, Georgia. and North Carolina.

Salix eriocephala Michx. includes variations known as two distinct species: S. cordata Muhl. and S. missouriensis Bebb. Fernald (Grays's Man. Bot. ed. 8, 511-512, 1950), after determining in the reference cited the dates of the names published in 1803 maintained the two species under the names S. rigida Muhl. and S. eriocephala Michx. However, when the two are united as varieties of one species, S. eriocephala Michx. has priority.

2. Gleason & Cronquist (1963)

Salix cordata Michx. Heart leaved willow. Sandy and alluvial shores; Newfoundland and east Quebec to Nova Scotia, north Maine and west around the Great Lakes to Illinois, Wisconsin and north Michigan, north to Hudson Bay. (This is the distribution within the area covered by Gleason & Cronquist).

References

Gleason, H.A. & Cronquist, A. (1963). Manual of Vascular Plants of Northeastern United States and Adjacent Canada. Van Nostrand. Princeton NJ.

Little, E.L. (1953). Check List of Native and Naturalized Trees of the United States (including Alaska). Forest Service. U.S. Government Printing Office. Washington DC.

CHRISTOPHER J. PERRATON, 178A Woodrow Road, MELKSHAM, Wilts, SN12 7RG

SALIX CORDATA AND OTHER WILLOWS

In BSBI News 56: 25 (1990), Mr H. Fowkes raised certain questions re Salix cordata.

During August 1989, while visiting Nuclear Electric's Heysham Nature Reserve (North Lancashire) with John Palmer, John spotted two unusual willows. Specimens were collected and later, from the description in A Field Guide to Trees and Shrubs by George A. Petrides (second edition) - a Peterson Field Guide Series volume covering north-eastern and north-central United States and south-eastern and south-central Canada, I identified one specimen as probably S. cordata. This was sent to Mr R.D. Meikle who confirmed it as S. cordata.

Early in 1990 I met Dr P. Nolan, Environmental Initiatives Officer for Nuclear Electric. He was able to supply me with a list of the willows that had been introduced onto the site in March 1983. This list included *S. cordata* and it also established that the cuttings had originated from Long Ashton Research Station, University of Bristol, and that cuttings had been despatched to a number of other sites at the same time. Other alien willows introduced to the Heysham Reserve in March 1983 included: *Salix incana* (= *S. elaeagnos*, *S. rosmarifolia*), *S. rigida* and *S. candida*.

Other introductions included a number of cuttings of hybrids of certain native willow species, also *S. viminalis* "Bowles Hybrid". Collectively, this group were referred to as 'Biomass Types'. In the data supplied, reference is also made to an article in *Landscape Design* (May 1989) which suggests that 4% of the likely future energy demand could come from biomass.

LEN LIVERMORE, 8 Durham Avenue, SCOTFORTH, Lancaster, Lancs. LA1 4ED

AMARANTHUS BOUCHONII IN WEST NORFOLK

Amaranths are said to be usually casual in Britain, but I have recorded *Amaranthus bouchonii* Thell. in a field at Weeting in Norfolk for 24 years, that is in almost every year since 1967. The few years in which I have not seen it were those in which I was unable to visit the site. The field has been used to grow Barley or Sugar Beet for the whole period. In Barley years the *Amaranthus* plants can be very small, and confined to the field edges, presumably because of the use of broad-leaved weed killers, while in Sugar Beet years, *Amaranthus* flourishes, sometimes with thousands of plants overtopping the crop. In one year a heap of pig manure in the corner of the field held *Amaranthus* plants four foot tall.

I have seen Amaranthus bouchonii in an Asparagus field at Cockley Cley in 1987 and 1989, and Gillian Beckett tells me that it is recorded in the card index to the Norfolk Flora from what is probably the same Asparagus field in 1976. I have found it in eight other tetrads in West Norfolk, without checking for recurrence, and Gillian has received records from a further three tetrads in 1989 and 1990 from people working on the projected 'Flora of Norfolk'. It grows chiefly in the arable fields of

the Breckland, but also in the Fenland arable, and in 1990 was found at Kings Lynn docks, whence Barley is exported. It does appear that *Amaranthus bouchonii* has become a part of our Norfolk flora, and is not just a casual.

JEAN GAFFNEY, "Lot 1", Whitsands Road, Swaffham, Norfolk PE37 7BJ

CONSERVATION NEWS

SPECIES RECOVERY PROGRAMME

General Outline

The species Recovery Programme is aimed at rescuing, reviving and restoring populations of plants and animals that are threatened with extinction.

It is a programme for positive action over the next 3 years, during which English Nature will be working in partnership with many organisations on selected species.

The first phase will concentrate our resources on 6 new species programmes - 4 plants and two animals. These are the Fen Ragwort (Senecio paludosus), the Plymouth Pear (Pyrus cordata), the Ribbon-leaved Water-plantain (Alisma gramineum), the Strapwort (Corrigiola litoralis), the Fen Raft Spider (Dolomedes plantarius) and the Lagoon Sandworm (Armandia cirrhosa). [Further details on each of these species will be published in the next issue of BSBI News. Ed.]

Other species that are in need of urgent action will not be neglected. We will be encouraging and supporting work on several rare species. Some of these are the subject of existing work, such as the Red Kite, the Large Blue Butterfly and the Lady's-slipper (*Cypripedium calceolus*). Others will be new initiatives, and we will be seeking advice and co-operation from various conservation organisations and local experts to help us in their prioritisation during the coming months. These will form the second phase of the programme.

The long-term self-sustained survival of the species is our ultimate aim, and we are all aware that this is a further aspect of the work, and one that will be borne in mind for the future.

LYNNE FARRELL, English Nature, Northminster House, PETERBOROUGH PE1 1UA

A COLOUR GUIDE TO RARE WILD FLOWERS

The Conservation Committee considered a book under this title written by BSBI member John Fisher and concluded that this was not in the interests of conservation. With the agreement of the Executive Committee, a letter was sent to Mr Fisher pointing out that writing the book was an action contrary to object 2(c) of the Society 'To promote the conservation of the British flora'.

John Fisher has since resigned his membership of the BSBI.

FRANKLYN H. PERRING, 24 Glapthorn Road, OUNDLE, Peterborough PE8 4JQ

MANAGEMENT OF CHURCHYARDS

A specialist churchyard meeting was convened by Eve Dennis on February 18th 1991, and in her report of the meeting Eve outlined Frank Dobson's grazing trials for grass management in churchyards:

'A wide range of animals have been used for grazing churchyards, namely geese, rabbits (including tame ones) goats and sheep. Old churchyard walls may have sheep holes in them, e.g. Watton in Surrey. Trials on grazing and mowing regimes have been continuing at the Nettle-combe Field Study Centre in Somerset and at Aston Rowant National Nature Reserve in Buckinghamshire. Sheep are the most favoured species where animals are used for grazing today but there are problems of public liability insurance and fencing and over-trampling. It was noted that trampling after spring or summer flower seeding might be beneficial. Also sheep will eat

young Japanese knotweed and bracken where either of these are problems. Numbers of sheep and length of time on which they are allowed in the fenced-in area are critical. The general consensus of opinion was that sheep grazing was very compatible with the management of grassland and churchyards.'

Members who are concerned with the management of local churchyards, or who have queries from local councils can have further information from:

Miss Eve Dennis, The Arthur Rank Centre Church and Conservation Project, National Agricultural Centre, Stoneleigh Park, Warwickshire CV8 2LZ

The Nature in Churchyards, Conservation Guidelines leaflet is available still from the above address, or from BSBI, c/o Dept. of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD.

MARY BRIGGS, Hon. General Secretary

NOTICES (BSBI)

WILLOW SYMPOSIUM - 27-29 SEPTEMBER 1991

Due to an unfortunate oversight, details of this Symposium, to be held at the Royal Botanic Garden Edinburgh from 27-29 September, were omitted from the last issue of *BSBI News*. Time is now very limited but there may still be places available for those who contact the organiser immediately.

The following notes, taken from the Symposium leaflet, may what some appetites for what promises to be a very interesting and informative meeting.

Willows grow in every continent except Australasia and are most numerous in cold temperate northerly latitudes where, in the Arctic and subarctic particularly, they often form dense communities which dominate the landscape. The Willow family (Salicaceae), contains a large number of species - 70 in Europe, and 23 in Britain; far more than any other native tree family.

Willows have long been important economically. For centuries they have been coppied to provide wicker for basket making and other crafts, and wickerwork furniture has been in use since Roman times. They are easily propagated from cuttings, and are much used in horticulture. In land-scaping, orange-stemmed varieties provide Winter colour, dwarf varieties are used in the Rock Garden, and the Weeping Willow is a familiar landscape tree. Cricket Bats are made from Willow, and the tree is well represented in art and literature, from Willow pattern designs to the ever popular 'Wind in the Willows'.

Botanically, the family is very interesting. The flowers are grouped together in clusters called catkins, which appear in Spring at the same time as the leaves. Willows are dioecious - male and female sexes occurring in separate plants. Many catkin-bearing plants (Amentiferae) are wind pollinated, but Willows differ from the closely related poplars for example, in being insect pollinated. They provide an important nectar source in Spring for bees and other insects.

This Symposium is the fourth in a series about trees and like its predecessors (Oak, Birch, Sitka Spruce), its three day programme of expert lectures and discussion encompasses most aspects of current research and thinking. Topics include Willow evolution, physiology and biochemistry, ecology, plant health, economic and creative uses.

The proceedings will be jointly edited by Professor J. Raven and Dr R. Watling, and published

by the Royal Society of Edinburgh.

For details and booking forms please write to: Dr D.R. McKean, Willow Symposium Organiser, Royal Botanic Garden Edinburgh, Inverleith Row, EDINBURGH EH3 5LR as soon as possible, or telephone 031 552 7171 ext. 273.

EDITOR

ULMUS NEWS-LETTER

Issue Number 1 of an ULMUS NEWS-LETTER edited by Guy Messenger will be available for distribution by post three weeks after the publication of *BSBI News* 58 (the current issue). Anyone wishing to receive a copy (free of charge) is asked to send a S.A.E. (A5 size) to Guy Messenger at the address below by October 1st 1991. Principal topics for the first three projected issues are:

- (1) English Elms in Cornwall
- (2) What did A.R. Horwood really mean by Ulmus elegantissima
- (3) Dutch, Huntingdon and Lineage Elms

Contributions are invited on other *Ulmus* topics, but the first issue will consist of four A5 pages printed double sided on a folded A4 sheet (postage will therefore be 22p or 17p according to class). It is hoped to produce three issues per annum and to charge a small subscription for issues after the first.

GUY MESSENGER, 5 Wheatley Avenue, UPPINGHAM, Rutland, Leicestershire LE15 9SN

ADVANCE NOTICE BSBI Field Meeting, Crete - April 1st - 15th, 1992

Leader: Mary Briggs

This meeting will be based in three centres on the Island: Chania for the west, Plakias for the south and Stalis for central and eastern areas.

For further details, cost and booking instructions please write to the Hon. Gen. Sec. at the address below.

MARY BRIGGS, 9 Arun Prospect, PULBOROUGH, West Sussex RH20 1AL

NOTICES (OTHERS)

REGINALD FARRER:

Dalesman, Plant-hunter, Gardener

This is the title of a monograph on Reginald Farrer edited by John Illingworth and Jane Routh. The multi-disciplinary approach represented therein offers an unusually comprehensive view of Reginald Farrer's work. He is known as an exuberant, many-sided individualist - rock garden enthusiast and field botanist, writer, traveller and explorer, artist and plant collector.

This monograph is published to coincide with an exhibition, in tribute to Reginald Farrer, at Lancaster in July and August. It is published by the Centre for North-West Regional Studies, University of Lancaster, Occasional Paper no 19; ISBN 0 901272 85 X; paperback, 120pp, illustrated in b & w; £4.95.

GEOFFREY HALLIDAY, Department of Biological Sciences, University of Lancaster, LANCASTER LA1 4YQ

EXTRA MURAL COURSES IN LONDON

The University of London offers a 2 year part-time course for the Certificate in Field Biology. This is based on home study with a fortnight residential course each summer. The course enrols this autumn for the start next January. For further details of this and other University Awards in Environmental Science write to:

Science Desk, Birkbeck College, University of London, Centre for Extra Mural Studies, 26 Russell Square, London WC1B 5DQ (tel. 071-631-6688).

Also from this address details of evening and weekend courses in the south-east. These include some with BSBI members as tutor, e.g., 'Plant Habitats of Southern England' at the Natural History Museum with Eric Groves, and 'The Living City: London's Natural History' at Highgate Library with David Bevan.

MARY BRIGGS, Hon General Secretary

RESEARCH AND TRAVEL GRANTS

THE BOTANICAL RESEARCH FUND

The Botanical Research Fund is a small trust fund which annually, in May, makes modest grants to individuals to support their research studies or more generally to assist their advancement in the botanical field. It is available to professionals, amateurs and students who are unable to obtain support from other sources.

Applications should be made to me at the address below:

Prof. KEITH JONES, 57 Marksbury Avenue, RICHMOND, Surrey TW9 4JE

WARBURG MEMORIAL FUND

The Botanical Society of the British Isles and the British Bryological Society have a joint Fund from which an occasional small grant (c.£75 - £150) for travel for field work is made to a botanist under the age of 25. Young botanists wishing to be considered for this award should send:

- 1. Full Name and address
- 2. Date of Birth
- Short details of project involving travel, including an estimate of expenses, information, relating to the candidates experience, and other qualifications for carrying out the proposed work
- 4. Names and addresses of two referees to whom the Trustees can refer, if necessary, to: The Secretary, Warburg Memorial Fund, c/o BSBI, Dept. of Botany, The Natural History Museum, Cromwell Road, LONDON SW7 5BD.

MARY BRIGGS, Hon, General Secretary

BRITISH ECOLOGICAL SOCIETY SMALL GRANTS SCHEME

These grants are made to amateur and professional scientists undertaking surveys of habitats which are threatened or of special ecological interest, or which have a history of ecological work.

Application forms are available from: BES, Burlington House, Picadilly, LONDON W1V 0LQ

Recent awards (c.£300 - £500) included:

Mr Peter A. Shepherd to investigate and appraise the status and distribution of the rare arctic plant species, *Saxifraga rivularis* in North West Scotland.

Mr Laszlo Nagy to investigate four rare or local plant species at Meikle Kilrannoch including a species of *Cerastium* which is endemic to the site.

Dr Alison McDonald to establish the management necessary to maintain an ancient plant-community on a traditional hay meadow site beside the River Thames.

Dr Martin Kent to study the association of plant species of the islands of Barra, Vatersay and Sandray in the Outer Hebrides.

MARY BRIGGS, Hon General Secretary

THE OLEG POLUNIN MEMORIAL FUND

Oleg Polunin (1914-1985), who was a master at Charterhouse for over thirty years, is remembered as a widely cultivated man, whose particular gift as a teacher was to inspire and lead young Carthusians in botanical field work. He himself took part in important expeditions to Nepal and the Himalayas, and, as a result of his travels there and in the remoter parts of Europe, published his great series of botanical field guides. These one him world-wide repute among botanists and biologists and those who love to study flowers in their natural habitat. Field work was the key to his achievement and it was his earnest desire that pupils of Charterhouse should be encouraged to continue their botanical studies in the field after completing their schooling.

The Fund has been established by his wife, his family and friends in memory of Oleg Polunin and in gratitude for the generous support given to him by the Governing Body of Charterhouse during his lifetime.

Purposes of the Fund

The object of the Fund is to give assistance to those wishing to undertake botanical/biological field-work, abroad or in the U.K., and can be awarded to an individual or a member of an organised expedition.

Report

It is a condition of all awards that the recipient will present to the Headmaster a written account about the field study which may then be published in the *Carthusian*, and, if requested to do so, will agree to give a talk to Carthusians about the project.

Application Procedures

Applicants should apply in writing to the Headmaster, Charterhouse, Godalming, Surrey GU7 2DJ, giving a clear statement about their proposed field studies, where they will be undertaken and when, the extent to which they will be supervised and the amount of grant requested.

Applications should be submitted to the Headmaster by 1st February each year. Awards will only be made if, in the opinion of the adjudicators, the proposed field studies and applicants are of sufficiently deserving merit.

Amount of Grant

Individual awards will normally be for amounts up to £500.

Persons who may be Eligible

Applicants should normally have Charterhouse connections, past or present, and priority will be given to post-graduates, under-graduates, final year pupils at school, Old Carthusians who have come late to an interest in Botanical/Biological subjects, and Assistant Masters being members of Brooke Hall. Other persons, not having Charterhouse connections, but with strong botanical or biological interests, will also be considered. [My emphasis. Ed.].

Oleg Polunin Memorial Awards 1987 - 1991

- 1987: John Whitehead, Merrist Wood Agricultural College; Conifer Expedition to Chile.
- 1988: J. William Duckworth; Cambridge Madagascar Rainforest Expedition 1988.
- 1988: Mark Nesbitt (OC); botanical work in Pontic mountains of Turkey (in particular crop plants emmer and einkorn wheat).
- 1989: Leonard J. Thomas, Forest Research Sibuyan 1989 (University of Sheffield); expedition to Philippines (altitudinal zonation in the rain forest etc.).
- 1989: Paul Whitehad: to present research on Red Data Book-listed Oil Beetle, *Meloe rugosus* (found at Broadway, Worcs.) to Asociacion Europea de Coleopterologia, Barcelona.
- 1989: Miss Jeanette Fryer; to go to Sweden to continue research on the genus Cotoneaster.
- 1990 : Scott Akker and Rosie Highstead (both OCs): to join the Cambridge Tanzanian Rainforest Survey 1990, June September, jointly with 4 other Cambridge undergraduates and two Tanzanian students.
- 1990 : Olwyn Griffin, School of Botany, Trinity College, Dublin: to study taxonomy of the Loganiaceae in Thailand.
- 1990: Dr Gavin Hardy: for botanical fieldwork for a Seaweed Flora of Berwickshire.
- 1990: Kathryn Jenkins (OC), Nottingham University; for a botanical survey of Nepalese alpine flora.

PETER ATTENBOROUGH, Headmaster, Charterhouse, GODALMING, Surrey GU7 2DJ

REQUESTS

CLIMATE CHANGE AND THE LIZARD ORCHID IN BRITAIN

Ronald Good attributed a rise in the number of records of Lizard Orchids (*Himantoglossum hircinum* (L.) Sprengel) between 1900 and 1933 to a climate change which increased the proportion of Britain suitable for the growth of the plant. Since then, both climate and the distribution of the Lizard Orchid have continued to change, and we wish to look again at how the two are related, especially in light of the 'greenhouse effect'.

We would be pleased to receive details of any records of Lizard Orchids in Britain. Please include for each record as much detail as possible - grid reference and place-name (preferably from standard OS maps), dates on which the plants were seen, recorders name, habitat, number of plants and presence of seedlings, and any other anecdotal information such as whether the plants flower every year, previous records from the site, etc.

Information will be treated in confidence and postage refunded.

T.C.G. RICH & M.J.Y. FOLEY, Unit of Vegetation Science, Dept. of Biological Sciences, University of Lancaster, LANCASTER LA14YO

LYTHRUM SALICARIA

I am writing for assistance in an ecological study of a marsh herb, purple loosestrife, *Lythrum salicaria* L. This plant is a troublesome invader of wetlands here in the United States and Canada. It has been suggested that the North American population may be composed of vigorous genetic combinations of separately introduced ancestors from different parts of the plant's natural range.

To test this hypothesis I would like to compare plants from different worldwide locations with North American Lythrum salicaria plants in regard to seed and seedling ecology and competitive abilities. For this purpose seeds of European plants are required and I would very much appreciate any assistance that could be offered in obtaining them.

The ideal collection method would be to sample and send intact 1 healthy looking fruiting spike from each of 10 individual plants. The month of November would be a good time to do this. A few comments about the location of the sampling site, the habitat, and the approximate size of the *Lythrum* population would also be helpful.

Any help that members of the BSBI can offer will be very much appreciated and would be an enormous benefit to this research project.

ROBERT A. KLIPS, Department of Plant Biology, The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210-1293, U.S.A.

AN ODD LYSIMACHIA

While checking through the herbarium of the late Mr Archie Kenneth I came across an odd specimen of *Lysimachia* which had the same filiform, single flowered inflorescence as *L. nemorum* but the leaves were lanceolate as in the accompanying photocopy. None of our British or European material in the herbarium here at RBG Edinburgh have other than round bases to the leaves.

Kenneth's plant was found on a ditch-side in a forestry plantation in Kintyre, v.c. 101. It is possible that the plant was introduced but I have not been able to match it with anything else, though it does have some resemblance to some forms of *L. lanceolata* from N. America.

I would be most interested to know if anyone else has seen such a plant growing in Britain, or can provide any suggestions as to its true identity.



Photocopy of specimen of Lysimachia in E

DOUGLAS R. McKEAN, Royal Botanic Garden, Inverleith Row, EDINBURGH EH3 5LR

WHERE HAVE ALL THE MILITARY ORCHIDS GONE?

In our attempt to ascertain and understand the range and status of the Military Orchid (*Orchis militaris*) in England in the last century members of the Chiltern Military Orchid Group visited The Natural History Museum on 4th February 1991 to examine specimens held in their herbarium. None of the specimens examined had been collected by the Museum, they all appeared to have been acquired as bequests. It would seem that it was the 'in thing' for the keen 19th century plant hunters to leave their collections to the Museum.

It was quite fascinating to read the notes of these collectors and of those of Lousley and others who had examined these specimens before us.

The orchid was clearly restricted in its range and rare in the 19th century, rare enough to attract several plant hunters and a letter attached to one of the herbarium sheets chronicles its decline at one site and illustrates why it is even more restricted and rare today.

The letter gave data for a wood on the Herts./Middlesex border and read:

20 plants in the Herts. side	June 1885	(5 plants, J. Benbow) +
1 plant in the Middlx, side	23/05/1889	
1 plant in the Herts, side	17/06/1889	(1 plant, J. Benbow)
12 plants in the Herts, side	23/05/1890	(4 plants, J. Benbow)
8 plants (side not given)	22/05/1891	•
4 plants (side not given)	22/06/1892	(2 plants, J. Benbow)
4 plants (side not given)	10/06/1895	(2 plants, J. Benbow)
0 plants	1896	•
1 plant (side not given)	14/06/1897	(1 plant, J. Benbow)*
2 plants (side not given)	10/06/1898	(1 plant, J. Benbow)*
0 plants	1900	
0 plants	1901	
1 plant (side not given)	23/06/1902	

The figures in brackets indicate specimens now in the Herbarium of the Natural History Museum.

+ A note on these sheets indicated 2 additional specimens taken: 1 was sent to Maj. Haselhurst; and 1 was given to Rev J.C.P. Reader, Hinckley, Leicestershire

* 3 specimens on one sheet, 2 of which were given these dates, i.e. he took the only plant to flower in 1897 and one of only 2 in 1898

In a letter filed with the 1890 specimens the collector, J. Benbow commented: "Several plants on Middlesex side, some unfortunately taken up with roots by my son and nephew." and "It appears to have been eradicated on the Middlesex side since many taken up by the roots". Several of the plants on the sheets in The Natural History Museum had tubers on them and, as I have quoted, he quite freely admits he and his son eradicated it on one side of the wood by 1890 - we can add that he had succeeded in eradicating it from the whole wood by 1902. From one of his herbarium sheets we examined it would seem that the orchid also managed to establish itself on a chalk bank near the wood - but not for long, for as soon as these plants flowered they were added to the Benbow Collection.

Benbow's letter indicates that there were 53 flowering plants between 1885 and 1902 at this particular site, 16 of which are now on herbarium sheets in The Natural History Museum collected by J. Benbow himself, which, with 2 he sent to other collectors accounts for 33% of those plants. From the drastic drop in numbers following the 1889-90 seasons we suspect that many of the plants not accounted for by Benbow are residing in other collections, perhaps now, in herbaria attached to local museums. If any members know of, or care to enquire about, herbaria in their local museums and would care to have a look through them we would be pleased to hear about any specimens of Military orchid with details of the locations from which they were collected and names of the collectors.

MAURICE YOUNG & BILL HAVERS, 6 South Place, MARLOW, Bucks SL7 1PY (tel. 0628-472000)

[A quick look at the specimens of Orchis militaris in NMW revealed the following:

Kent - 1905, 1 specimen, whole plant, no roots.

- v.c. 24 1847-1959, 4 whole plants, 1 with partial root system and 1 with entire root system [1847], and 12 separate florets on 3 sheets.
- v.c. 26 1955-1957, 4 whole plants (without roots) and 1 flowering spike bearing the annotation "hundreds of heads found broken off" [1956].

Jersey - 1923, 1 floret and part of 1 leaf.

Ed.]

BOOK NOTES

Reviews of the following books will be included in the February 1992 issue of Watsonia vol. 19(1):

- Plant Form: an illustrated guide to flowering plant morphology. A.D. Bell. Pp. xiii + 341; 315 figures, many in colour. Oxford University Press, 1991. Price £50 h/b (ISBN 0-19-854279-8), £25 p/b (ISBN 0-19-854219-4).
- The Families and Genera of Vascular Plants. Edited by K. Kubitzki. Vol. 1: Pteridophytes and Gymnosperms. Edited by K.U. Kramer & P.S. Green. Springer, 1990. Pp. 430; 216 figures. Price DM 298 (ISBN 3-540-51794-4).
- Flora of eastern Saudi Arabia, J.P. Mandaville. Pp. x + 482; 268 colour plates. Kegan Paul International, 1990. Price £95 (ISBN 0-7103-0371-8).
- The Cornish Flora: Supplement 1981-1990. L.J. Margetts & K.L. Spurgin. Pp. vi + 119; map on rear end-papers. The Trendine Press, 1991. Price £14 (ISBN 0-9512562-2-X).
- Crucifers of Great Britain and Ireland. T.C.G. Rich; illustrated by C. Dalby, P. Donovan, G.M.S. Easy, T.G. Evans, H.S. Thompson and H.A.D. Yagoin, B.S.B.I. Handbook no. 6. Pp. [v] + 336; 60 distribution maps. Botanical Society of the British Isles, 1991. Price £9.95 (ISBN 0-901158-20-8).
- British Plant Communities. Vol. 1. Woodlands and scrub. J.S. Rodwell (ed.), C.D. Pigott, D.A. Ratcliffe, A.J.C. Malloch, H.J.B. Birks, M.C.F. Proctor, D.W. Shimwell, J.P. Huntley, E. Radford, M.J. Wigginton & P. Wilkins. Pp. x + 395; 25 figs, numerous maps & tables. Cambridge University Press, 1991. Price £70 h/b (ISBN 0-521-23558-8).
- The Orchids of Suffolk: an Atlas and History. M. Sanford. Suffolk Naturalists' Society, Ipswich. 1991. Price £15 (ISBN 0-9508154-3-8).

- Recovery: a proposed programme for Britain's protected species. Compiled by A. Whitten, with a Foreword by D.R. Langslow. Chief Scientist Directorate, Nature Conservancy Council, Peterborough. 429 pp. Unpriced.
- 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.
- *Microspores: evolution and ontogeny. Edited by S. Blackmore & R.B. Knox. Pp. x + 347; illustrated. Academic Press, London. 1990. Price £49.50 h/b (ISBN 0-12-103458-5).
 - [The 15 review articles, which include contributions from the editors and 21 other authors, summarise current knowledge of the processes of microsporogenesis (including pollen production in higher plants as well as treatments of several groups of cryptogams) and discuss some of their evolutionary implications].
- *Atlas of the Bryophytes of Britain and Ireland. Ed. M.O. Hill, C.D. Preston & A.J.E. Smith. Volume 1. Liverworts (Hepaticae and Anthocerotae). Pp. 351; 298 distribution maps, including 8 maps of environmental factors. Harley Books, Great Horkesley. 1991. Price £19.95 (ISBN 0-946589-29-1).
 - [The first of a three-volume series covering the bryophyte flora of the British Isles. All 289 species recognised in A.J.E. Smith's recently published systematic treatment of the Liverworts are mapped. Habitat requirements, number of grid square occurrences in Britain and Ireland, reproductive biology, phytogeographical status and external distribution are summarised in the notes which accompany each map.]
- *Énumération des planies à fleurs d'Afrique tropicale. Vol. 1. Généralités et Annonaceae à Pandanaceae. J.-P. Lebrun & A.L. Stork. Pp. 249. Conservatoire et Jardin botaniques de la Ville de Genève. 1991. Price not stated (ISBN 2-8277-0108-1).

 [A check-list of the flora of Tropical Africa, including detailed bibliographies for families and genera and full synonymy for species, but no indication of distribution within the area (which excludes North Africa and Southern Africa). Details of all recent Floras are provided; this provides an invaluable quick reference for prospective visitors to the area as well as for herbarium curators.]
- Quantitative approaches to phytogeography. Ed. P.L. Nimis & T.J. Crovello. Pp. vii + 280. Kluwer Academic Publishers. Dordrecht. 1991. Price £95 (ISBN 0-7923-0795-X).
- *The flora of walls in the Chew Valley. R.M. Payne. Reprinted from Somerset Archaeology & Natural History. Proceedings of the Somerset Archaeological and Natural History Society, vol. 33, pp. 231-242. [Report of a survey of 305 walls in the Chew Valley in 1988 and 1989.]
- *When the wind blew. A. Whitbread. Pp. 61; many line drawings. Royal Society for Nature Conservation, 1991. Price £6.95; available from R.S.N.C., The Green, Witham Park, Lincoln LN5 7JR (ISBN 0-902484-08-7). [Published to overturn some of the myths associated with woodland management following the violent storm of October 1987. It is based on practical experience of the author as he tried to prevent damage to woods from over-enthusiastic clearing up afterwards.

 Frank Perring.]

JOHN EDMONDSON, Botany Dept., Liverpool Museum. William Brown Street LIVERPOOL L3 8EN.

NEWS FROM OUNDLE BOOKS

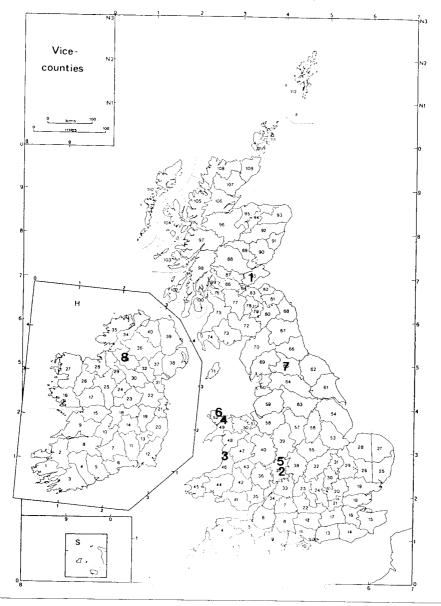
With this issue of *News* you will receive our latest book list. During its preparation, Parcel Force increased their charges to the extent that it is now cheaper to send some items separately. In September, letterpost charges will rise. Because of this I may have to levy an extra amount occasionally: please bear with me but I would ask members to continue to support the sales which enable me to continue the BSBI Publications side of the business.

MARGARET PERRING, BSBI Publications, 24 Glapthorn Road, OUNDLE Peterborough PE8 4JQ

REPORTS OF FIELD MEETINGS

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

The map shows the *approximate* locations of the field meetings reported below.



1990

LOMOND HILLS, KINROSS, FIFE (v.c. 85). 10th - 12th JUNE [1]

The main object of this meeting of the *Hieracium* Study Group, blessed by good weather and attended by some half dozen members and friends, was to rework an area from which several old and ambiguous hawkweed records had been made last century.

A good track from Kinnesswood led easily up on to Bishop Hill and its sandstone scarp soon produced a few plants in bud. Progressing northwards towards the calcareous rocks near the Carlin craig, *Hieracium subrude* proved to be quite frequent and there were a few plants of *H. argenteum* and *H. caledonicum*, as well as a small colony of spotted-leaved plants reminiscent of *H. saxorum*. Near the Carlin, crumbly outcrops had a flourishing show, in full flower, of an apparently undescribed member of the *H. britannicum* group and a conspicuously green plant in bud, later identified as *H. flocculosum*. *Asplenium viride* and *Galium boreale* were seen nearby. No sign was seen of *Oxytropis halleri* formerly known from this location. The old limestone working on top of the hill yielded little but *Saxifraga hypnoides*. The descent by way of Kinnerton crags produced more of the *H. britannicum* group plant and floccose-leaved *H. vulgatum* was collected nearby.

Sunday was divided between the coast east of Inverkeithing and Glenqueich, which lies astride the v.c. 85/87 boundary. No species of *Hieracium* of interest were seen on the coast but *Allium scordoprasum*, A. vineale, Asplenium marinum and Diplotaxis tenuifolia were noted. At and near Glenqueich the most notable plants were Rumex alpinus (v.c. 87), Trientalis europaea (v.c. 87), Hieracium duriceps (v.c. 85 & 87) and Geranium lucidum (v.c. 85).

On Monday a reduced party braved rocks, chains and the vagaries of the tides to confirm a tentative sighting of *Crambe maritima* at lie in east Fife. The cliffs nearby had a sprinkling of *H. subrude* and other plants of interest noted were *Geranium sanguineum*, *Rosa pimpinellifolia*, *Ligusticum scoticum* and *Astragalus danicus*.

The meeting was successful in confirming the existence in v.c. 85 of three of the commoner Scottish hawkweeds and in finding *H. flocculosum* and *H. piligerum* (new v.c. records) as well as the two undescribed plants related to *H. britannicum* and *H. saxorum*.

D.J. McCOSH

MALVERN HILLS, WORCESTERSHIRE (v.c. 37) 23rd JUNE [2]

Ten people attended the joint Worcestershire Flora/BSBI meeting at Malvern for the study of local hawkweeds.

Apart from one or two heavy showers in the morning, the weather was perfectly dry and sunny. During the morning a few wall sites were visited at West Malvern. Hieracium strumosum, H. diaphanum, and two good groups of H. subamplifolium, all examples of Sect. Vulgata hawkweeds were found. Also one or two plants of H. perpropinguum Sect. Sabauda, although these were well short of flowering. At Lower Dingle we found a single plant of a species of the H. exotericum group with stellate hairs on the leaves. At Earnslaw Quarry, The Wych, H. strumosum was scattered and again another species of the H. exotericum group was located, probably referable to H. stenstroemii, a characteristic species of the Cotswolds and Wye Valley woodlands, and if confirmed will be a new v.c. record. Other interesting plants at this last site included Carex muricata subsp. lamprocarpa, Nymphoides peltata, Epilobium lanceolatum, and three small clovers, Trifolium striatum, T. micranthum, and the rarer T. ornithopodioides. During the afternoon Berrington Quarry, Little Malvern was visited. On the side of the track to the quarry a mixed population of two H. exotericum group species were examined. One remained unnamed, but the other was the reasonably distinctive introduction H. grandidens, a first record for v.c. 37. In the quarry H. diaphanum was plentiful, and also H. strumosum. The party also took time to study the interesting and varied flora of the quarry which included Desmazeria rigida, Ficus carica, Carlina vulgaris, Chenopodium bonus-henricus, Trifolium striatum, Rosa micrantha (fortunately in full flower) and the hybrid R. canina x R. obtusifolia.

Later in the day a few members then left to visit sites in the Bromsgrove district. En route a brief stop was made at Newland Common where *Oenanthe pimpinelloides* was seen in full flower. Three sites were visited near Bromsgrove. *Hieracium strumosum*, *H. perpropinquum*, and *H. diaphanum* were seen again. However, at one site near Burcot, growing with the above, a few plants of

H. lepidulum were found. This delicate little hawkweed of Sect. Vulgata is predominantly a south-eastern species. This was another new v.c. record. Nearby, on the banks of the Lickey Incline railway, a strong colony of an as yet unidentified species of hawkweed of the Sect. Tridentata was discovered, not yet in flower. Hopefully this will be named during the next season. I would like to express my gratitude to Jim Bevan of the Hieracium Study Group, who accompanied us throughout the day, for his invaluable help and encouragement in dealing with this critical group.

R. MASKEW

YNYS-LAS, CARDIGANSHIRE (v.c. 46). 14th JULY [3]

25 members and friends met at the Golf Course car park on a very hot day with a strong east wind. Moel Ynys pool, a much disturbed, artificially steep-sided, slightly brackish lagoon was inspected and grappled, and Potamogeton pusillus, P. pectinatus, Ranunculus baudotii and Myriophyllum spicatum were found. Across the road, the Hen Afon Leri SSSI, marshes along the old course of the river, were found to be very over-grazed by horses, and although such species as Eleocharis uniglumis and Oenanthe lachenalii were found, Baldellia ranunculoides seemed to have disappeared and Typha latifolia badly killed back (probably by incursions of unusual amounts of salt water in the January gales). After lunch the dunes of the NNR were toured. The dactylorchids were over, but most of the other specialities of the site were seen. Adrian Fowles demonstrated the two plants of Sisyrinchium montanum known here since at least 1965. New records for the v.c. were the glabrous form of Sonchus arvensis, at the highest point of the dune boardwalk, Arenaria serpyllifolia subsp. macrocarpa, in the slacks, and Elymus pycnanthus x E. repens. Exceptionally luxuriant Listera cordata and Ophioglossum vulgatum were seen on the unmown part of the Golf Course. We were pleased to see that Crassula helmsii had apparently been successfully exterminated from one of the slacks by the NCC (but unfortunately it had reappeared by December). Tim Rich found Juncus ambiguus in its second site in the v.c. in the car park. The meeting ended with a visit to the colony of Orobanche rapum-genistae in gorse and broom scrub east of Borth church, and John Akeroyd demonstrated Rumex crispus var. uliginosus in the fine tidal marsh alongside the Leri (we had seen var. littoreus at the back of the shingle beach earlier in the day).

We are grateful to Mr Ormerod, the Golf Club and the NCC for permission to wander.

A.O. CHATER

BANGOR, CAERNARFONSHIRE (v.c. 49). 20th-23rd JULY [4]

(Quadrennial, Annual General and Welsh Exhibition Meetings)

Comfortable accommodation in Bangor Normal College's main Hall of Residence pleasantly situated alongside the Menai Strait was the base for 18 members attending the Welsh AGM and Exhibition Meetings and associated field excursions.

After the evening meal on Friday, Nigel Brown gave an introduction to the flora of Caernarfonshire, second only to Glamorgan (v.c 41) in its variety of indigenous plant species in Wales and stressed the important biogeographic and ecological aspects of the count's flora, e.g. its arctic-al-

pines, coastal plants and oceanic west european element.

On Saturday, members divided up into small parties and recorded plants in selected tetrads within 10km of Bangor. Several alien species were found most notably Lobularia maritima, Coronilla varia and Lathyrus latifolius; a number of plant rich bogs were located including one with the most wonderful cranberries (Vaccinium oxycoccos)! All the day's records (over 260 species in four tetrads) provided excellent data for the newly established 'Flora of Caernarfonshire Project' which was outlined later that evening after an interesting exhibition meeting held in one of the College's laboratories. Before that however the formal business of the AGM was conducted in the pleasantly green surroundings of the University College of North Wales' Botanic Garden near the Menai Suspension Bridge. A conducted tour of the indoor and outdoor plant collections proved very popular and included the conservation collection which enabled members to scrutinise closely related saxifrages such as Saxifraga cespitosa, S. rosacea and S. hypnoides as well as learning about the conservation efforts on behalf of Cotoneaster integerrimus and Lloydia serotina. The grounds of the

Botanic Garden contain a woodland SSSI and attractive natural meadows with good populations of *Ophioglossum vulgatum* and several *Dactylorhiza* spp.

Further recording on a similar basis took place on Sunday in the upland valleys and hills near Capel Curig. Some fine Oak woodlands, wet meadows and heaths were explored revealing at least 245 species in four tetrads. Highlights included *Osmunda regalis*, *Rhynchospora alba*, *Hypericum x desetangsii* (*H. maculatum* subsp. *obtusiusculum x H. perforatum*), *Carex laevigata* and sheets of *Wahlenbergia hederacea* in flower.

Fine weather throughout and excellent company added to the enjoyment of the weekend which amply proved that AGMs and concentrated fieldwork can indeed be fun! Thanks are due to the staff of Bangor Normal College for making our stay so comfortable and to all the landowners who, without exception, gladly allowed us access.

N. BROWN

TEME VALLEY, WORCESTERSHIRE (v.c. 37), 22nd JULY [5]

This was a joint meeting with the Worcestershire Flora Project to record for the forthcoming Worcestershire Flora in an underworked tetrad in 32/6.6. Twelve members and friends met on a fine summer's morning at Stanford Bridge in the attractive and unspoilt Teme Valley. The area is a rejuvenated, large river valley, characterised by steep valleys with ravine woods, orchards and unimproved grassland. The group divided into three parties to cover as much ground in tetrad Z as possible. The first party worked the R. Teme and areas around Eardiston village. Several of the R. Teme specialities were found including Scrophularia umbrosa, Campanula trachelium, Potamogeton perfoliatus and Lysimachia vulgaris, but the best find was Nasturium microphyllum. The second group visited Little Park and Hollow Linkhill recording Epipactis helleborine, Campanula trachelium, Rhamnus catharticus (scarce in the Teme Valley) and both Veronica agrestis and V. polita growing together in a gateway. The third group visited Frith Common and adjacent lanes; highlights included Ceratophyllum demersum, Rumex x pratensis (R. crispus x R. obtusifolius), Galeopsis bifida and Blechnum spicant. The teams met up at lunchtime to compare notes. A total of 332 species were recorded for the tetrad, making this a most worthwhile visit to one of the less rich tetrads in the Teme Valley.

In the afternoon a visit was made to Southstone Rock which is reputed to be the largest tufa deposit in Britain. It is located within a typical Teme Valley 'dingle' woodland, and is an impressive rock outcrop, the size of a double decker bus. The actively growing calcareous tufa deposits were examined and a number of interesting species located. These included Mimulus guttatus x M. luteus, Helleborus foetidus, Campanula latifolia, C. trachelium, Dryopteris filix-mas x D. affinis subsp. borreri and Iris foetidissima.

J.J. DAY

NORTH EAST ANGLESEY (v.c. 52). 19th AUGUST [6]

Miserably wet conditions failed to dampen the enthusiasm of the 16 BSBI members who visited four plant rich sites around Traeth Lligwy (Lligwy Beach). The first locality of the day, a withy bed at the moist landward edge of a small dune system at Traeth Lligwy, is the site for a new addition to the Welsh flora - Equisetum x font-queri (E. palustre x E. telmateia). Discovered in 1989 by the vice-county recorder for Anglesey, R.H. Roberts, it is only the fifth record for the British Isles of this handsome hybrid horsetail which is intermediate in many respects to the parent species. There was an excellent opportunity to examine a large colony of this interesting hybrid and to compare it with E. palustre, E. telmateia and E. arvense all growing in the close vicinity.

Casual botanizing on a nearby spoil heap in the beach car park lead to another exciting find and another first for the island - a vigorous clump of Crimson Clover, *Trifolium incarnatum* with splashes of vivid red flowers.

From Lligwy Beach we travelled 2km inland to look at ferns in Plas Lligwy Woods on the limestone escarpment to the south. Beneath a canopy of Elm, Sycamore and Ash we compared *Polypodium australe* var. *cambricum*, *P. interjectum* and their natural hybrid, *P. x shivasiae* whose fronds were only just unfurling. Additional ferns in this rich lowland wood were *Asplenium scolo-*

pendrium, Polystichum setiferum, Dryopteris dilatata, D. filix-mas, D. affinis subsp. affinis, D. affinis subsp. borreri and D. affinis subsp. cambrensis.

Our third stop, the Sulphur Well Field is situated below the escarpment on, by contrast, an acidic conglomerate, and supports a rich heathland vegetation including *Gentiana pneumonanthe*, first recorded on Anglesey in 1726 by Samuel Brewer. He would have been thrilled to see it flowering so well but it has disappeared from many of its former sites on the island largely through land use changes. Even the incessant rain could not diminish the visual appeal of the gentian, one of Anglesey's most notable species, for it is found nowhere else in Wales.

With the rain now lashing the landscape with a purpose not seen for months this most enthusiastic company of botanists converged on the final locality of the day, Mynydd Bodafon, an ancient Pre-Cambrian hillock which oversees this corner of Anglesey. The old hill's dimpled outline conceals a neat little pool full of pillwort (*Pilularia globulifera*) refreshed this day by nature's most welcome deluge - a memorable finale in more ways than one!

N. BROWN

1991

SWALEDALE, N.W. YORKS. (v.c. 65). 18th MAY [7]

15 members surveyed three adjacent woods on very steep terrain overlooking the River Swale for the Ministry of Defence.

The southern part of Side Bank Wood was dominated by Allium ursinum and Mercurialis perennis alleviated by a tiny patch of about 30 plants of Paris quadrifolia. The northern section of the wood was more diverse with Brachypodium sylvaticum, Primula vulgaris and Hyacinthoides non-scripta plus a single Euonymus europaeus.

A few intrepid members disappeared over White Scar and reported *Draba incana* and *Polystichum setiferum*.

Most of High Spring Wood is regularly grazed yet had a herb layer rich in *Primula vulgaris*, *Hyacinthoides non-scripta* and *Orchis mascula*; the ungrazed section was again dominated by *Mercurialis perennis*.

Far Spring Wood proved to be the most diverse with the area below the scar wooded with *Taxus baccata* and parts of the scree colonised by *Silene vulgaris* subsp. *maritima*. *Origanum vulgare* grew in unlikely association with *Luzula pilosa* but the most spectacular sight was the super-abundance of *Primula vulgaris* with occasional pink forms and *P. vulgaris* x *P. veris*.

On the woodland edge Symphytum tuberosum was recorded with Myrrhis odorata.

The *Carex muricata* subsp. *muricata* site was again somewhat grazed but several flowering spikes were found and the vegetative growth seemed strong. Members estimated about 50 plants in the colony.

DEBORAH MILLWARD

CO. FERMANAGH (v.c. H33). 7th JULY [8]

The aim was to visit bog and lake shore sites in the northwest border of the county, which is under-visited owing to its relative remoteness.

There was a very disappointing turnout. Only three members plus a son and a dog!

We enjoyed brilliant sunshine all day, and underfoot the bogs and lake shores were at their most accessible.

The excursion began with a scramble through a scarp woodland adjacent to the rendezvous while we vainly awaited reinforcements. *Dryopteris aemula* was the only notable plant found. Next we visited blanket bog near Tullylough. It lies to the southeast of Lough Rushen, and we included an examination of the inflow stream and part of the lough shore. The bog is remarkable for the quantity of *Vaccinium oxycoccos* it supports, and on this occasion *Carex limosa* was equally abundant. The lake shore produced tufts of *Eleocharis multicaulis*, a thin sward of *Lobelia dortmanna* and a few very dwarf fronds of *Osmunda regalis*.

After lunch we paid a brief visit to Fir Lough nearby and found very much the same plants as before, including more *Osmunda*.

We then drove southwest to Keehaghan Lough, where, since it straddles two 5km squares, we examined both the northern and southern limestone shores. Here again, sedges were the principal finds; Carex serotina, C. curta, C. otrubae, C. lepidocarpa and C. elata. The hedge on the northern shore yielded an interesting collection including Prunus padus, Taxus baccata, Galium verum and Campanula rotundifolia.

Sunburnt and thirsty we eventually repaired to a hotel in Belleek for welcome pints of shandy.

R.S. FORBES

ADVERTISEMENTS

35mm SLIDE DUPLICATION

Apart from the occasional need to duplicate a slide for friends or colleagues, it is worth making a copy of any special slides that are likely to be projected frequently, as this kind of use can often lead to heat distortion and very occasionally a malfunction can instantly destroy a slide.

For those that have the means to experiment for themselves, it is often rewarding to enliven the colours of a previously dull image or remove an unwanted colour cast. Images that are under-exposed and consequently dark can be significantly brightened in the copy. Dull or plain white skies can have colour or shade added during the duplication process and small areas can be enlarged to fill the frame.

l operate a reproduction quality, duplication service for photographers and photo libraries, but would like to offer these services at reduced rates to BSBI members. I will especially look forward to copying any unusual or otherwise delightful plant portraits! If anyone is interested, they may contact me at the address below.

VAUGHAN FLEMING, P.O. Box 14 QMH, St Bartholomews Hospital, LONDON EC1A 7BE. Tel. 071 726 2441

BOTANICAL TOURS OVERSEAS - 1992

Franklyn and Margaret Perring will be involved in the following tours abroad in 1992:

Franklyn Perring	Majorca	15-22 April
Birds and flowers		
Margaret Perring	Crete	21-28 April
Botanical tour with expert photographer		·
Franklyn Perring	Crete	28 April - 5 May
Wild flowers and painting		. ,
Franklyn and Margaret Perring	Mount Olympus,	11-20 June
Walking and wild flowers	Greece	

For further details contact Wildlife Travel at the address below:

FRANKLYN and MARGARET PERRING, Wildlife Travel, 24 Glapthorn Road, OUNDLE, Peterborough PE8 4JQ (tel. 0832 273388).

STOP PRESS

MONTBRETIA - AN APPEAL FOR SPECIMENS

I would be grateful for pressed and dried specimens of naturalized montbretia - a portion of the flowering stem with some mature, open flowers will suffice, with locality and date of collection. At least two montbretias (*Crocosmia*) are naturalized in Ireland and I am anxious to see how British populations vary. I will publish any results in a future issue of *BSBI News*.

E. CHARLES NELSON, National Botanic Garden, Glasnevin, DUBLIN, Ireland

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