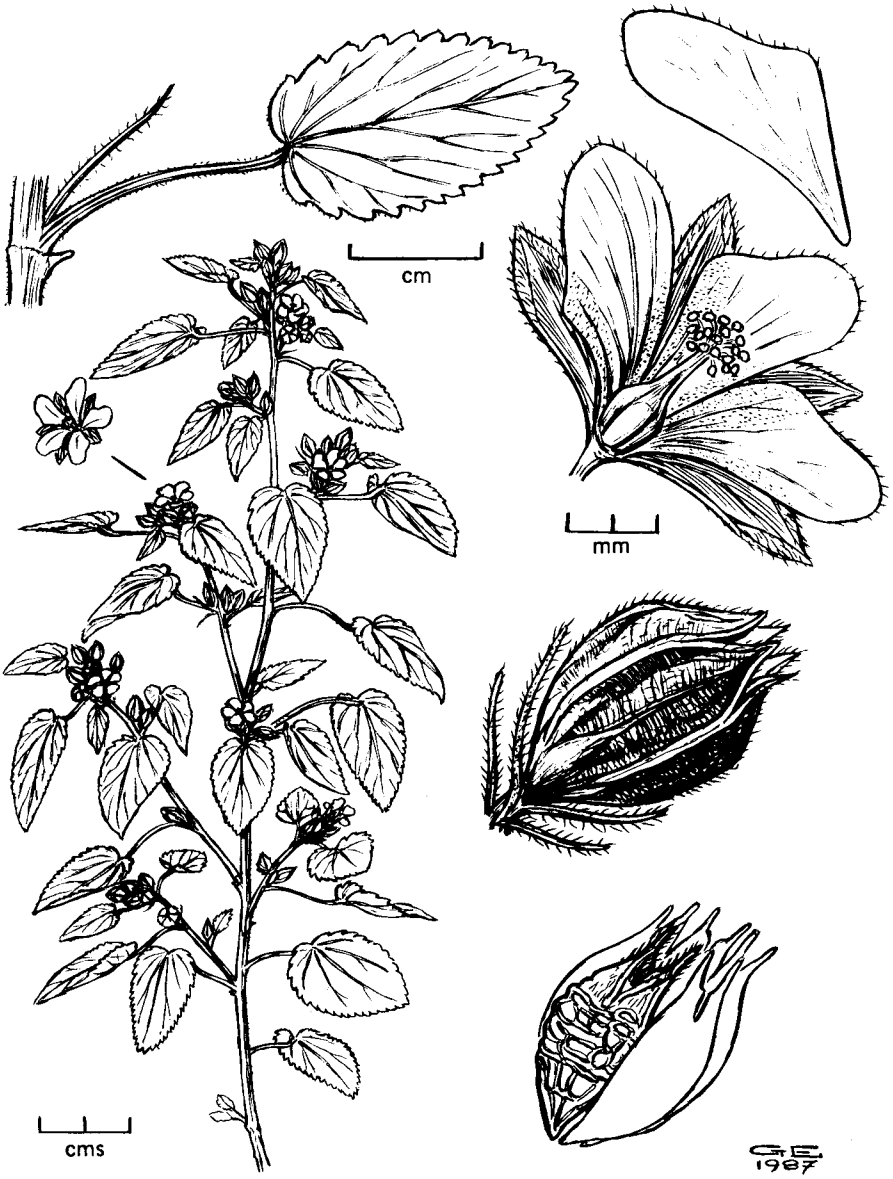
B.S.B.I. NEWS

Dec.1987
No.47

Edited by R. Gwynn Ellis
Dept. of Botany, National Museum of Wales
Cardiff CF1 3NP



Sida spinosa L. del. G.M.S. Easy © 1987

ADMINISTRATION

HON. GENERAL SECRETARY (General Enquiries) **Mrs Mary Briggs, M.B.E., White Cottage, Slinfold, HORSHAM, West Sussex** RH13 7RG

HON. TREASURER (Payment of Subscriptions and change of address) **Mr Michael Walpole, 68 Outwoods Road, LOUGHBOROUGH, Leics. LE11 3LY**
(Please quote membership number on correspondence concerning membership or subscriptions - your membership number is on the address label of your mailings).

HON. FIELD SECRETARY (Enquiries on Field Meetings) **Mr Roy Smith, 8 Ripley Road, Sawmills, Ambergate, DERBY DE5 2JQ**

SECRETARIES OF PERMANENT WORKING COMMITTEES

CONSERVATION: To be announced

PUBLICATIONS: Mr Arthur O. Chater,
Dept. of Botany, British Museum (Nat. Hist.), Cromwell Road, LONDON SW7 5BD

MEETINGS: Mrs Ailsa Lee,
3, Rosliston Road, Stapenhill, BURTON-ON-TRENT, Staffordshire DE15 9RJ

RECORDS: Mr David J. McCosh,
13 Cottesmore Gardens, LONDON W8 5PR

PERMANENT WORKING COMMITTEES FOR 1987-1988

CO-ORDINATING: J.F.M. Cannon (Hon. Sec.), A.O. Chater, Mrs A. Lee, D.J. McCosh.

CONSERVATION: See Hon. General Secretary's Note, p. 7.

MEETINGS: Mrs A. Lee (Hon. Sec.), R. Smith (Hon. Field Sec.), Dr N.K.B. Robson, Dr H.J.M. Bowen, Miss E. Young, Miss G.M. Barter, Lady Rosemary FitzGerald, J. Ounsted, B.A. Gale, Mrs M.J. Cannon, A.R. Outen, Miss E.J. Rich, Mrs E.G. Wood, Mr D.E. Allen, Mrs A. Mullin.

PUBLICATIONS: A.O. Chater (Hon. Sec.), Dr R.J. Gornall, Dr N.K.B. Robson, Dr J.R. Akeroyd, Dr B.S. Rushton, C.D. Preston, D.H. Kent, R.G. Ellis, Dr F.H. Perring, J.F.M. Cannon, Dr P.F. Yeo, E.J. Clement, A.C. Jermy, Dr S.L. Jury, A. Newton, P.H. Oswald, E.D. Wiggins, C.R. Boon, A.C. Jermy, Mrs M.D. Perring, Dr J.R. Edmondson.

RECORDS: D.J. McCosh (Hon. Sec.), D.E. Allen, E.G. Philp, Dr I.K. Ferguson, R.J. Pankhurst, Miss E. ni Lamhna (Ireland), J. Bevan, R.G. Ellis, Miss H.E. Stace (Scotland), Dr Q.O.N. Kay (Wales), D.A. Wells, C.D. Preston, A.O. Chater, R.M. Burton, Dr G. Halliday, Dr T.C.G. Rich, A.J. Worland (British Pteridological Society).

The President, Hon. Treasurer and Hon. General Secretary are ex officio members of all the above committees.

NOMINATIONS TO COUNCIL

Nominations for vacancies on Council, in writing, signed by two members of the Society and accompanied by the written consent of the candidate to serve, if elected, should be sent to the Hon. General Secretary, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG, to arrive BEFORE FEBRUARY 1st 1988. (See BSBI News **46**: 2 (1987) for the list of present members on Council.)

MARY BRIGGS
Hon. General Secretary

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CONTRIBUTIONS INTENDED FOR

BSBI NEWS 48

should reach the Editor before

29th FEBRUARY 1988

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DIARY

NB. These dates are supplementary to those in the 1988 Field Meetings Programme.

February 1988
1st : Deadline for Nominations to Council, see p. 2
March 1988
5th : CABS/FFPS Symposium on 'Is Nature Conservation Working for Plants?', see p. 34 last issue
April 1988
30th : Fritillary Meadow Open Day, Framsden, see p. 40
May 1988
1st : Fritillary Meadow Open Day, Framsden, see p. 40
7th : BSBI AGM, Jodrell Laboratory, Kew
June 1988
30th : A Holiday in Sweden (to July 13th), see p. 39
July 1988
12th-15th : European Floristic Studies Conference, Reading, see p. 39
25th : Lappland Journey - In the Footsteps of Linnaeus (to August 8th), see p. 35 last issue
September
2nd-4th : Taxonomic Workshop/Recorders' Meeting, Leicester, see p. 38
October
20th : Heathers and Heathland Symposium, London, see p. 38

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APOLOGY

If your last issue of BSBI News arrived under-stamped and you had to pay excess postage :

SORRY!

This was due to a mix-up at a local post office which dealt with the mailing. An apology has been received from the Post Office, which is extended to all members charged excess postage, with the assurance that this will not happen again.

I would like to offer my own apologies to those members affected and especially to our Treasurer Mr M. Walpole for the inconvenience caused.

EDITOR

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CORRIGENDA CORNER

Apologies to Alison Rutherford and Alan Stirling, the authors of the note on Variegated Archangels in the last issue (pp. 9-11) for failing to correct Mrs Weston's initial; her name should have read 'Mrs R. Weston'.

Apologies too, to Mr B.E. Smythies who has sent this correction for page 37 of the last issue.

"The note on FLORA OF SPAIN under 'News from Oundle Books' implies that the work is 212+486+880 pages long, whereas the page numbering is continuous throughout the three volumes, i.e. Vol. I pp. 1-212; Vol. II pp. 213-486; Vol. III pp. 487-880."

EDITOR

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I am sure I act for all members in offering deepest sympathy to Mary Briggs, our Hon. General Secretary, on the sad death of her husband Alan, who died, after a long illness, on the morning of October 16th - during the great storm. Ed.

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EDITORIAL

May I take this opportunity of wishing all members a very Happy New Year, and thank all those contributors who have helped make this another bumper issue.

The planned feature on computer produced distribution maps has had to be held over until the next issue.

To enable members living in South Wales to attend the Annual Exhibition Meeting, an enterprising local Travel Agent laid on a special train to London. In view of the 'rear-end' piece in the last issue the name of this excursion, 'The Paddington Bear Special', was particularly appropriate. Ordinary members of the public were, of course, also able to use the train for their Christmas shopping!

Rear-end

A report caught my eye in the New Scientist for the 6th August 1987 and brought back childhood memories that had remained dormant for 'nigh on 40 years'.

The report referred to a hampster born with three legs, that appeared to be growing a forth leg under its skin. Veterinary investigation showed that the abnormal growth "...was the result of three peanuts lodged in the unfortunate hampster's pouch. Two of these nuts had germinated, and the larger of the two had produced a shoot 4 centimetres long." Happily the shoots were removed without difficulty and the hampster survived.

Do other members recall being scared by elder sister's (or brother's) stories about the dangers of eating apple or orange pips in case they germinated inside the stomach? It put me off fresh fruit for years and started my life-long infatuation with Mars bars, which probably accounts, at least in part, for my increase in girth and reduction in teeth!

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GUIDANCE TO CONTRIBUTORS

The success of a journal like BSBI News depends to a large extent, on the editor receiving many relatively short contributions of topical interest. There must be many members who have something interesting, informative or just plain amusing that they would like to share with others but who are afraid to put pen to paper in case their efforts are 'not thought good enough'. **Perish the thought!** BSBI News is meant to be the place for the 'ordinary' member to express her or his opinions. The editors experience (very limited!) is available to lick a contribution into shape but I have been amazed at the almost complete lack of need to 'wield the editorial red pen' so far! So come on you out there, send in your notes or letters and I will publish them.

It is nice to have typed copy but if you don't have access to a typewriter, just write it out making sure that your handwriting is legible, especially for names of persons or places and other words which cannot easily be checked. All contributors will receive, if time allows, a proof for checking, so that you will be able to see what your note looks like before it is printed and will have the opportunity to alter anything at that stage.

Any contributions received, which appear to be more suitable for inclusion in Watsonia as a 'Short Note' will be passed on to the editor of that journal.

Suitable illustrations accompanying notes, in the form of line drawings, black and white or colour negatives, prints or slides are also welcomed.

The following advice for 'aspiring young artists' is reprinted from BSBI News **25**: 31 (1980).

First of all, **proportions.** The print area of a page of BSBI News is c. 19.5cm x 13cm giving a proportion of height to width of roughly 3 to 2, and to make the best use of the space available drawings should conform generally to these proportions, whatever their actual size. Next **size**; as large as possible within reason. Not only is it much easier for the printer to reduce than enlarge, but any blemishes are correspondingly reduced, not magnified. **Evenness of line** is important; not that all lines in a drawing should be of equal thickness or density, that way a drawing looks stodgy or lifeless. But too great a contrast between thick and thin can cause difficulties. Extremely fine lines, which become finer still on reduction, can almost disappear in the final printing.

Scale is best shown by a line marked in millimetres or centimetres, thus 1 cm. close to the drawing. Then whatever reduction the printer has to use, the scale is reduced correspondingly. Do **not** use the reduction x1/2, x2 etc. This may be correct on the artist's original but if the printer reduces it to, say, 3/5 of its size, what magnification does that then become?

Labelling is most satisfactory if the separate drawings on a page (showing for example, floral organs) are indicated by identifying letters, these being explained either on the back of the drawing itself or on an accompanying sheet.

Lest any budding illustrator is put off by the excellence of some of the drawings already published, let it be said that any drawing is welcome and if it is of an alien or adventive, so much the better. If not suitable for reproduction it will be returned together with a letter explaining why it was not acceptable.

To convey as much information as possible about a species, an illustration should include a whole plant drawing to show habit and such anatomical and/or floral details as are helpful in identification.

It should be stressed that the Editor does not consider himself competent to pass judgement on botanical accuracy, the responsibility for which must rest with the artist.

EDITOR

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THE GREAT STORM OF OCTOBER 16th

In a matter of 3 or 4 hours in the early morning of 16th October, some 15 million trees with an estimated volume of 4 million cubic metres were blown down in South-East England. Counties which have lost most trees are Kent, East Sussex, West Sussex and Suffolk, with significant damage also in Surrey, Hampshire, Essex and one or two other counties. Over half the loss is of broadleaved trees.

In conjunction with the Timber Trade and Timber Growers UK, the Forestry Commission set up the Forestry Windblow Action Committee with a number of Advisory Groups (such as Harvesting, Marketing and Restoration). One of the main jobs during the next year or two is to try and ensure that harvesting and marketing of timber is carried out in an orderly manner so that markets are not flooded and owners can get reasonable prices for their timber. Attention is also being given to restocking of blown areas, which will take 3 or 4 years to achieve. Hopefully natural regeneration will often be possible as there is an abundance of acorns and beech mast this year. However well organised all these operations are, woodland owners are going to suffer financially, particularly those who have lost immature woodlands.

From a botanical point-of view, perhaps the most serious feature has been the damage to some of the famous gardens and arboreta such as Wakehurst Place, Nymans and Sheffield Park, where the restoration may take decades. On the other hand, the opening-up of many woodlands, particularly some of the overstocked and overmature areas, will be beneficial. Many of the rather uniform plantations of conifers and broadleaves (especially beech) should become more interesting as a result of gaps being created. Seeds of woodland flowers which have been dormant for many years will now have a chance of germinating and other plants will colonize from outside. Generally also there will be benefits for

conservation with the large amounts of branchwood which will inevitably be left in the wood to decay and provide more diverse habitats for wildlife.

ROD STERN, Windblow Task Force, c/o Forestry Commission, Forest Research Station, Alice Holt Lodge, Wrecclesham, FARNHAM, Surrey GU10 4LH

It is difficult for those living outside the south east to visualise the enormous devastation that occurred on that Friday morning. It would be useful if members living in the affected areas could send me their personal observations (including photographs?), so that the whole membership may be made aware of the situation.

Alan Mitchell writes "a fallen tree shocks us into an unwanted acceptance of the impermanence of living things and of unwelcome change." But he adds "clear the debris, and we no longer see the gaps, only the remaining trees." Quite a few of his special measured specimens around Farnham and in the London Parks have survived, or are in fair order, between the chaos of the lines of fallen planes, limes and broken horse chestnuts. But in the great gardens of Kew and in Sussex where most of the big background trees were notable specimens, the loss must be heart-breaking.

EDITOR

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PROFILE

CLIVE ANTHONY STACE

In the early 1960's during my editorship of the now defunct Proceedings of the Botanical Society of the British Isles I received for publication many good and interesting papers on the flora of these islands. One, however, stands out in my memory above all others - "**Nardurus maritimus** (L.) Murb. in Britain.", its author was a young member setting out on his long study of the **Gramineae** - his name was Clive Stace. Twenty six years on that young member has become our President.

Clive Anthony Stace was born in 1938 at Tunbridge Wells, Kent and received his early education at Skinners' School in that town. Interested from an early age in natural history, and especially plants he joined the Tunbridge Wells Natural History Society where he received encouragement in his studies from the elderly Miss Aline Grasemann, with whom he remained deeply friendly until her death in 1974. In 1955 he joined the Kent Field Club as a junior member; there he met Joan and Peter Hall with whom he formed a close and enduring friendship. He entered King's College, London in 1956, and in 1958 became a member of the BSBI. During 1959, while taking part in a BSBI field meeting led by Francis Rose in the Pas de Calais and Somme areas, he celebrated the news of his B.Sc., with first class honours.

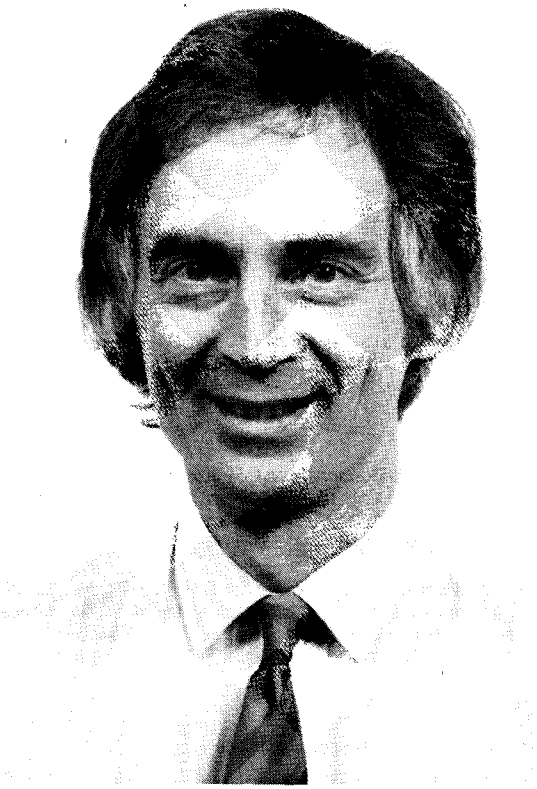
The year 1962 was an eventful one for Clive, he married Margaret Williams, received his Ph.D., and became Lecturer in Botany at Manchester, where a few years later the late David Valentine arrived as Head of Department. In 1972 he became an editor of Watsonia, advancing to senior editor, and continuing with distinction until 1983.

During 1974 he transferred to the University of Leicester as Reader in Plant Taxonomy, filling a vacancy created by the retirement of the late Professor T.G. Tutin. In 1981 he gained his D.Sc., and in 1985 was awarded a personal chair in Plant Taxonomy. Recently he has been elected as Chairman of the School of Biological Sciences at Leicester.

Among his publications are A Guide to Subcellular Botany (1963) and Plant Taxonomy and Biosystematics (1980), a second edition of which has just been completed. Best known to most BSBI members, however, will be his excellent Hybridization and the Flora of the British Isles, which he edited in 1975. Apart from the British flora, Clive has a special interest in the plants of the Mediterranean region, especially France and Spain, which he has visited for over thirty years.

His recent activities include enjoying in his spare time gardening, sunbathing in the south of France, and writing his new Flora. The Society is fortunate to have elected a President of such experience and distinction.

D.H. KENT, 75 Adelaide Road, West Ealing, LONDON W13 9ED



Clive Anthony Stace, President BSBI

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HON. GENERAL SECRETARY'S NOTES

Conservation Committee

This is not listed for 1987-8 on page 2, as at present this Committee is considering possible restructure, in order to reflect more closely the most valuable conservation role of the BSBI in the 1990s.

First appointed in 1949 as the 'Special Committee to deal with threats to British Flora', it was in 1951 renamed the Conservation Committee, and in the early years this dealt almost entirely, and urgently, with threatened plants at individual sites. Then, often the only voice for plants, but in close liaison with NCC, they were exciting times (but also sometimes frustrating and disappointing). With the growth of the County Trusts and equivalent movements, local conservation problems have more and more - and appropriately - been referred to local Trusts; leaving to the BSBI Conservation Committee, national threats, work for the legal protection of plants and associated education (codes and posters etc.), and discussions on policy.

Now, since the formation of the Conservation Association of Botanical Societies, circumstances have changed again. If CABS is in a position to speak on behalf of all the botanical societies, the function of the BSBI Conservation Committee needs to be reconsidered. The Committee met again in December and there will be a further report in BSBI News **48.**

Pot-pourri from my post-bag

Churchyard references, additional to those published in BSBI News **46** : 27 are :

Boon, C.R. (1986). Botanical Assessment of Bedfordshire's Churchyards 1982-1985. Bedfordshire Naturalist for 1986, No. 41, pp. 11-20.

Chater, A.O. (1986). The Flora of Ceredigion Churchyards (vc. 46). BSBI Welsh Bulletin No. 43, pp. 24-31.

Pell, Mrs A.M. (1986). A Survey of some of the Carmarthenshire Burial Grounds : Part 1 Capel Hendre Graveyard. BSBI Welsh Bulletin No. 43, pp. 31-35.

Pell, Mrs A.M. & R.D. Pryce (1986). Survey of Some of the Carmarthenshire Burial Grounds. BSBI Welsh Bulletin No. 44, pp. 11-14.

Phil Lusby sends further information on **Carex vesicaria** as Shoe-hay (BSBI News **46** : 23-24 (1987)); two interesting references in Farthest North (1898) and The First Crossing of Greenland (1906), both by Fridtjof Nansen, describe how he found the sennagrass invaluable in his Greenland crossing.

The note on **Euphorbia cyparissias** sterile shoots (see BSBI News **45**: 17 (1987)) prompted Prof. D.H. Lewis of Sheffield to write suggesting that the infecting fungus could be **Uromyces scutellatus.** This was confirmed by Peter James of the BM(NH) Cryptogamic Dept. David Coombe of Cambridge has also sent references to infection of **E. cyparissias** by **Uromyces pisi** in 'Strasburger's Textbook of Botany, New English Ed. 1966, Transl. P.R. Bell & D.E. Coombe!

In Britain David Coombe found **Euphorbia cyparissias** infected by a rust of the **Uromyces pisi - striatus - scutellatus** complex on the Breck at Tuddenham, West Suffolk in 1957. This is described by Gillian Butler in her paper '**Uromyces** in a population of **Euphorbia cyparissias**' in Transactions of the British Mycological Society 41(4), (1958).

Following the comments on **Asarina procumbens** in BSBI News **43**: 20-21 & **44**: 5, we have news of a new record, found in September 1987, at Lockerbie in Dumfriesshire by Mrs M. Stevens. Here the **A. procumbens** was flowering "all along the hedge bottom" - the plants in this case favouring the relatively damp habitat under a privet/hawthorn hedge. Miss E.M. Palmer told us that in the early years of this century plants were sold as rockery plants in the market and local garden shops in Nottingham.

My thanks to all the correspondents mentioned above.

Sark : Anyone planning to visit Sark, or with an interest in the Channel Islands, should not miss 'Sark' in Wild Flower Magazine, No. 410, Autumn 1987, pp. 22-23, by Marcia Marsden - who is also a member of BSBI.

Jugoslavian holiday : Fred Remblance writes that he is interested in a return visit to the Durmitor Mountains, Jugoslavia, and would be pleased to hear from any other BSBI member who may be planning a visit to this area. (His address is 10 First Avenue, Horbury, WAKEFIELD, W. Yorks WF4 6AL.)

MARY BRIGGS, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG

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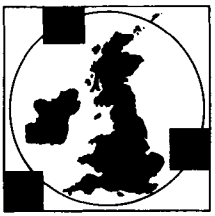


B.S.B.I. MONITORING SCHEME

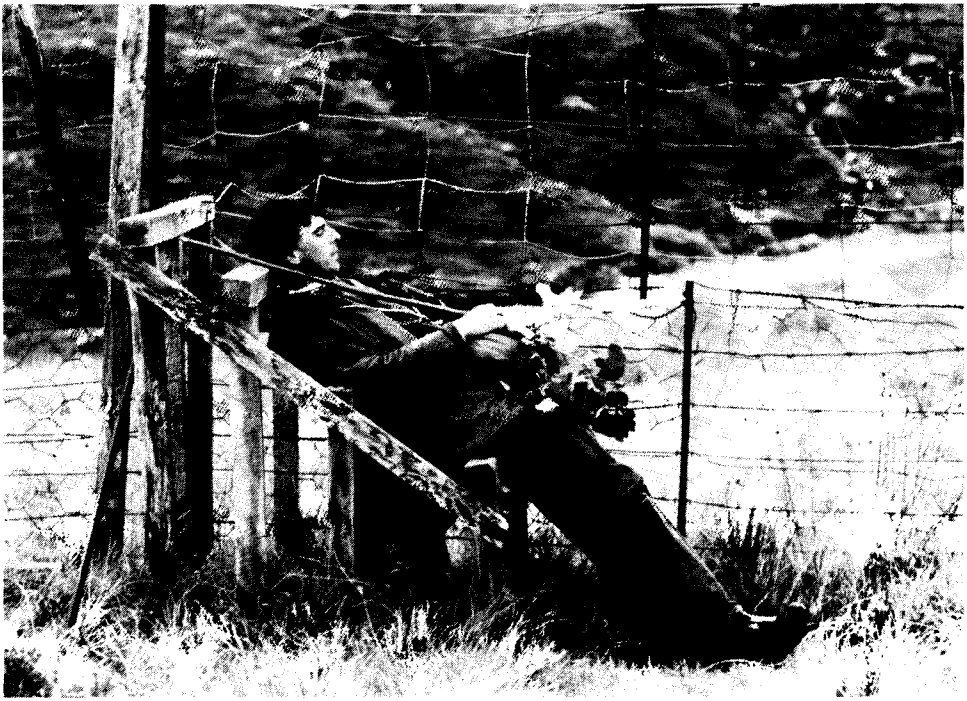
Telephone: (office hours)
Abbots Ripton (04873) 381
(outside office hours)
Peterborough (0733) 49398

Biological Records Centre,
Monks Wood Experimental Station,
Abbots Ripton, Huntingdon,
CAMBRIDGESHIRE PE17 2LS.

The weather has done its worst to stop us. Snow in the spring, rained all summer, flooded in the autumn and blown most of the SE into the North Sea. But I've already (23/10/87)

received well over 1000 cards and the deadline is a month away. I think we've done very well, but don't relax, we've got 1988 to come. Don't forget, you're never more than 10 miles from a Monitoring Scheme square as the dandelion caryopsis blows!

There are stories to tell already. Our youngest recorder is Jessica Walker aged 4, and I won't tell you what John Dony did on his 88th birthday. Ken Butler tells of struggles against the Scottish midge, Scotch mist and the Scottish bog. Robbie Matcham was sent up a cliff under threat of no pocket money and no supper to collect **Cochlearia.** Lynne Farrell has been to both Dutchman's Cap and Fair Isle. An Irish botanist was described as "very good but he doesn't see daisies". The pace has been too fast for some ...I caught poor Henry Noltie napping in Glen Cia-aig after one day's hard tetrad bashing (see photo below)!

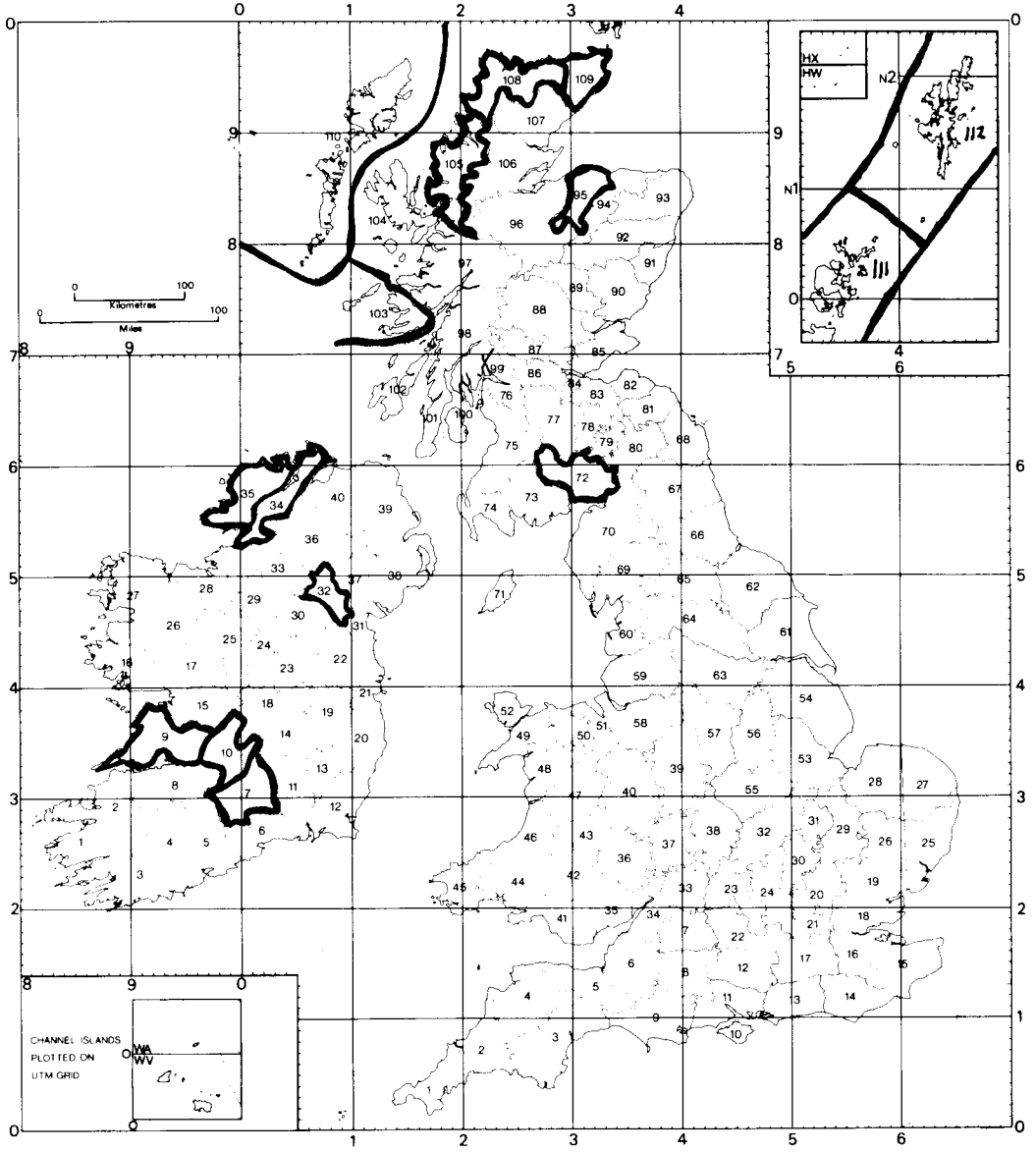


Henry Noltie caught cat-napping. Photo Tim Rich

A map showing full details of the 1987 recording will be in the next BSBI News indicating the exact squares and tetrads which need help for 1988. In the meantime, the map (see p. 10) shows the vice-counties where help is definitely needed or has been requested for next year. If you are going on holiday or visiting these areas please contact the v.c. recorders beforehand so recording can be co-ordinated.

Filling in cards

We are frantically busy working through mountains of 1987 cards (at least those received by November 31st). We - sorry, Rosemary (!) - has to deal with enormous amounts of data very quickly, and the following points will considerably help us to deal with information next year (unfortunately it's too late for this year!).



VICE COUNTIES WHERE HELP IS NEEDED OR HAS BEEN REQUESTED FOR RECORDING IN 1988

1. Please write grid references in the boxes following these examples.

	Grid reference	Tetrad letter
For 10km square records	221--5--	-
For tetrad records	221--5--	W
For 1km square records (irrespective of tetrad)	2219-52-	W
For 6 figure records	22196527	W

2. When giving localities please use names on the 1:50,000 or 1:25,000 Ordnance Survey maps and follow their spelling. Please avoid local names because although you know where you mean, we do not. Please also avoid parish names or general names for areas eg. "Pennines". Names of houses should be put in inverted commas unless named on the maps.

3. When crossing off species please take care. The aim is to make the appropriate BRC number instantly legible to the data processors who have to work at very high speed. Examples of how to cross off species (and how **NOT** to) are shown below.

Most problems arise because recorders want to read the names they've crossed off. The best approach to this which allows cards to be photocopied and names to be read is to use a soft, thick pencil (hard pencil doesn't copy) or a thin blue or black biro. Felt pens tend to fade with time.

The following methods of crossing off names are highly acceptable:

2110 ~~Typha ang~~
2111 ~~——— lat~~ — these best of all
2112 Ulex ~~eur~~
2113 ~~gal~~
2114 ~~——— min~~ — but only if done very carefully like Arthur Chater does
2119 Ulmus gla
2123 min Sp } to indicate an elm but you don't know which species
2122 pro

The following are **NOT** acceptable, and cards submitted like this will be sent back or filed in the little round basket on the floor!

~~1862~~ Scler ann
~~1865~~ ~~Scrop aur~~ — numbers obscured
1867 nod — underlining alone, which is difficult to read quickly
1868 sco and gets mixed up with underlining of subspecies
1872 ~~Scute~~ gal — meant to indicate a skull cap but not sure which species;
1874 min these get interpreted as **Scutellaria galericulata**
1875 ~~Sedum~~ acr — meant to indicate **Sedum anglicum** only, but gets
1876 alb interpreted as both **acre** and **anglicum**
1877 ~~ang~~

4. If a species is crossed off by mistake, 'correct' it by putting crosses both sides of the name, eg.

1610 X ~~Prune vul~~ X

Having crossed it out you'll no doubt find it immediately, in which case write it on the front and don't try to correct your correction. Please don't use Tippex.

5. For introductions please put 'P' and 'I' (cf. BSBI News **45**) after the name, eg.

2241 ~~Aescu hip~~ I

If you annotate your cards with other letters, write what they mean on the cards; we get very puzzled by some!

6. The way some plants change names is worse than people getting married. The most troublesome taxa are as follows (alphabetical order of old names).

Conyza canadensis	= Erigeron canadensis
Helictotrichon	= Avenula
Rorippa islandica	= R. palustris (unless you mean islandica s.s. in which case I want a voucher)
Scirpus setaceus	= Isolepis setacea
Thelypteris oreopteris	= Oreopteris limbosperma
Tripleurospermum maritimum subsp. inodorum	= Tripleurospermum inodorum

Has anyone discovered where **Polygonum convolvulus** has got to yet?

7. Please make sure you give details of the route whilst recording. I don't want to know which train you caught to get to the square!

Identification aids

The following are very highly recommended and we suggest you acquire them!

Wigginton, M.J. & Graham, G.G. (1981).Guide to the identification of some of the more difficult vascular plant species. NCC England Field Unit Occasional paper No. 1. Though intended primarily for the north of England, much of the guide is widely applicable elsewhere too. Available from the Perrings (price £5.00 incl. p&p).

Camus, J.M. & Jermy, A.C. (1987). The BM Fern Crib. By staff of the British Museum (Natural History) Fern Section. A booklet specially produced for the BSBI Monitoring Scheme to help identify pteridophyte species and hybrids which people frequently find difficult to distinguish. Available from Clive Jermy, British Museum (Natural History), Cromwell Road, LONDON SW7 5BD (price £1.00 plus a stamped addressed envelope size 23x16cm). With ferns like these, who needs anemones?

and ... coming soon ... a Monitoring Scheme Plant Crib, which aims to complement Wigginton & Graham (1981) and extend it to cover Britain and Ireland. We hope it should be ready for Easter - watch BSBI News for details!

TIM RICH, BSBI Monitoring Scheme Organizer

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IS THIS A RECORD

Chris Preston and Tim Rich conducted a rapid survey of Monitoring Scheme square 33/61 (v.c. 40, Salop) on July 31st 1987. The locality on their card is given as "Verges of M54... then verges of A5 from end of M54 to W edge of square plus countryside visible from these roads." About 25 records were made from a car driven by Tim "at speeds up to 70 mph."; the entire survey took 5-10 minutes!

Arthur Chater commenting on this remarked "The only thing I have beaten this with in v.c. 46 [Cards.] is to record oilseed rape from a Pan-Am jumbo jet."

Do other members have any examples of similar record breaking records?

It may interest members to know that the Botanical Society of Otago (New Zealand) have just initiated a motorised recording scheme. In the Society's Newsletter No. 4, 1987 October, volunteers are invited for the 'Conspicuous Roadside Exotic Distribution Assessment' scheme or 'CREDA' for short. This "is a cooperative project to determine the distribution of about 25 conspicuous exotic roadside weeds in the South Island". The scheme is being organised by an old friend from my student days in Aberystwyth, Dr J.B. Wilson, and he continues in the Newsletter "The species are chosen so they can be recognised whilst travelling at normal speeds. (Of course, there is occasional need to

stop at first to check, to build up familiarity with some species or to check a doubtful plant.)"

Perhaps Tim will copy this splendid example of antipodian resourcefulness and organise a 1988 'Monitoring Scheme Car Hunt' along similar lines?

EDITOR

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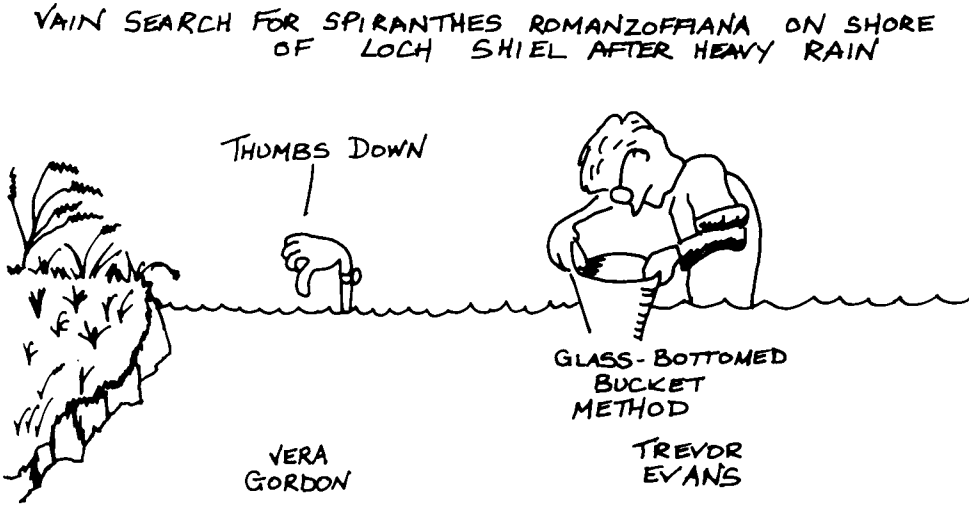
SCOTCH MIST

Those who went north after the Glasgow Recorders Conference experienced not vertical or diagonal but horizontal rain! Vera Gordon and I left the other members of the group to look for **Euphrasia heslop-harrisonii, Spiranthes romanzoffiana, Eriocaulon aquaticum** and **Saussurea alpina**; the monsoon only permitted us to see the pipewort!.

A single specimen of the Irish Lady's-tresses had been photographed on the edge of Loch Shiel only a week before but the torrential rain had submerged it, as apparently it often does. We looked in vain, as shown in the cartoon. After this failure we gave up hope, abandoned Scotland and returned to the merely wet areas south of the border.



TREVOR EVANS, La Cuesta, Mounton Road, CHEPSTOW, Gwent NP6 5BS

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[See also 'Afforestation and Plant Distribution' on page 42. Ed.]

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RECORDERS AND RECORDING

Amendment No. 6 to Vice County Recorders, December 1985

We are pleased to welcome two
New Appointments :
v.c. 63 S.W. Yorks. Dr John Hodgson, c/o Scale Laboratories, Dept. of Botany, The University, SHEFFIELD S10 2TN
v.c. 109 Caithness. Mrs Keira Ward, Uppergills, Canisbay by WICK, Caithness KW1 4YD
and send our thanks to the retiring Recorders Terry Keatinge, 109, and again to Dr Sledge, 63 (see BSBI News **45**: 3).

Changes of address :
v.c. 55b Rutland. Mr K.G. Messenger, 5 Wheatley Avenue, UPPINGHAM, Rutland LE15 9SN
v.c. 105 W. Ross. Prof D.M. Henderson, Inverewe House, POOLEWE, Ross & Cromarty IV22 2LQ
v.c. 106 E. Ross. Mr P.S. Lusby, Correen, Stichill, KELSO, Roxburghshire TD5 7TA

Supplement No. 3 to Panel of Referees and Specialists, September 1986

We are sorry to report the death of Richard Libbey, Referee for **Oxalis**. There will be an Obituary in Watsonia. **Oxalis** is temporarily vacant.

Dactylorhiza : Mr R.H. Roberts, who has refereed this difficult group for 20 years wishes now to retire. We sincerely thank him, and hope to announce a replacement Referee in BSBI News **48**. Mr Roberts will continue with **Polypodium** as listed.

The Wrong Botanic Garden! : Please note that Mr A. Radcliffe-Smith who is our **Euphorbia** Referee is based at the Royal Botanic Gardens, KEW (and not at R.B.G. EDINBURGH as listed in our panel of Referees leaflet).

Our apologies to the R.B.G. Edinburgh who received specimens of **Euphorbia** in consequence; our thanks to Douglas McKean for identifying these, and also to Mrs Enid Hyde for help in sorting this out for us.

The following v.c. Recorders and Referees have agreed to publish their phone numbers in BSBI News for the convenience of members. Frank Perring, who, on returning from holiday found a collection of specimens mouldering in plastic bags in his post, says that he would prefer to be telephoned first, before specimens are sent, to ascertain that he will be at home to receive them. (See also note on sending specimens dry - not in plastic - BSBI News **35**: 4 (1983)). If any other v.c. Recorders or Referees would like their phone numbers published, please send them to the Hon. General Secretary before February 29th for BSBI News **48**.

Vice-county or group	Recorder or Referee	Telephone number
2	Rose Murphy	0209-712069
18/19	Ken Adams	01-508-7863
35	Trevor Evans	02912-70802
36	Stephanie Thomson	0432-72217
37	John Day	0527-31576
50	Jean Green	074-574254
55b	Guy Messenger	0572-823313
64	Phyl Abbott	0532-668058
71	Larch Garrad	0624-75522
84	Jackie Muscott	031-229-1037
96	Margaret Barron	0463-236440
98	Bernard Thompson	0546-81234
103	Joan Clark	085-53221
H39	Stan Beesley	0232-862199
Arctium, Anagallis, Symphytum	Frank Perring	0832-73388

MARY BRIGGS, Hon. General Secretary
DAVID J. McCOSH, Hon. Secretary, Records Committee

BOTANICAL CORNWALL

A Newsletter has been started in Cornwall to meet the needs of a few, rather widely-scattered, botanists in the county. Its aim is to keep people in contact with one another. It includes distribution maps, short articles on botanical matters and lists new grid square records - post-1985. This latter material may have a wider appeal. Subscription charge is £1.00, including postage, details from the address below.

Miss R.J. MURPHY, Shang-ri-la, Reskadinnick, CAMBORNE, Cornwall TR14 0BH

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REPORT OF RECORDERS' CONFERENCE - GLASGOW, SEPTEMBER 1987

The 1987 Recorders' Conference was held at Jordanhill College of Further Education, Glasgow on 4th - 6th September.

72 members and guests attended and enjoyed a full programme. Three very informative local lectures illustrated various aspects of the botany of the area:

Botanising at the tip of Lanarkshire's Nose - Peter Macpherson
Water's-edge plants of Loch Lomond and surrounds - John Mitchell
Progress report on the Flora of Glasgow - Jim H. Dickson

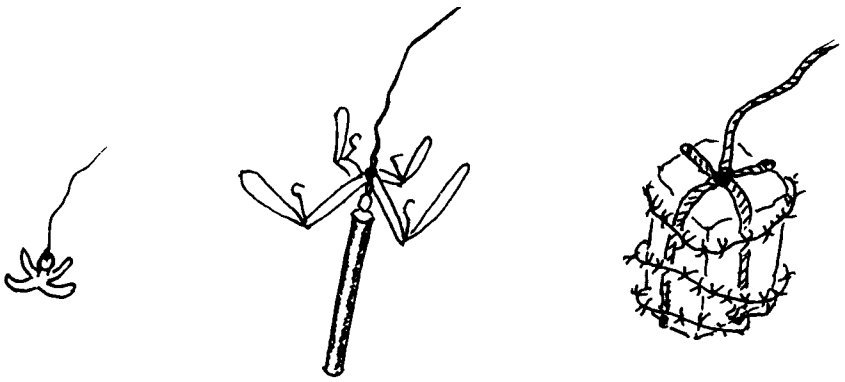
On the Saturday morning four concurrent one-hour taxonomic workshops gave those attending opportunity to select two from:

Festuca - Prof. C.A. Stace
Fine-leaved **Potamogeton** - C.D. Preston & N.F. Stewart
Rosa - A.McG. Stirling
Rubus - A.L. Newton

Once again these were appreciated with enthusiasm.

In the afternoon field meetings were organised, again a selection from :

1. **Rubus** excursion to Old Kilpatrick along a derelict railway track, led by Alan Newton. The four participants recorded six **Rubus** taxa, and the methods of collecting specimens to be worthy of a referee's attention were demonstrated.
2. **Potamogeton** excursion to Forth-Clyde Canal at Bowling and between Yoker and Drunchapel, led by Chris Preston and Nick Stewart, with 20 participants. The highlight for this group was the very fine material of **Potamogeton** x **bennettii** (**P. crispus** x **trichoides**) which is endemic to the Forth & Clyde Canal where it has been known since the 19th Century. Another feature of this group was the assortment of grapnels in use - these varied from ladylike brass hooks (family heirloom) to the functional - wire coat-hangers which bend when caught on an old pram and so the device is retrievable, to the frankly ferocious piping which bristled with barbed wire. Possibly these reflected the varied types of water habitat into which their owners usually throw?



A Grab of Grapnels - guess who the owners are! (Del. A. Lee)

3. **Rosa** excursion to Old Kilpatrick and Bowling via waste ground, railway track and canal bank, led by Allan Stirling. Eight participants recorded 5 species of **Rosa**, **Rosa** x **hollandica** and a number of hybrids for future determination. An additional 13 species were recorded for the monitoring scheme square.
4. A visit to old coal Bings south-east of Glasgow, led by Peter Macpherson with 14 participants who contributed to the Flora of Glasgow and of v.c. 77 by general recording, and among other plants, were also shown : **Hieracium flagellare, Pyrola minor, Epipactis helleborine** and the recently recorded **Cirsium arvense** x **palustre.**
5. **Ulmus** hunt in Glasgow SW and Renfrewshire led by Guy Messenger. The three participants drove through seven 10km squares for a general assessment of distribution and the extent of the impact of Dutch Elm Disease. The types of Elms used in street-planting in Glasgow were recorded and the excursion reported as enjoyable but disturbing, as most of the Elms seen have no survival mechanism if the Disease takes a real hold.

On the Sunday morning a series of 10 minute talks were interspersed with opportunity for lively and practical discussion on the progress of the monitoring scheme, with exchange of experience and questions to the Organiser. There was a final field meeting to Loch Lomond for those able to stay on for the afternoon.

Richard Pankhurst mounted a computer Demonstration - Identification of British Orchids with colour graphics; also British **Carex** and ferns, all studied with interest. And the Perring Books were available for useful and enjoyable browsing and purchase.

On the Saturday evening a joint meeting of the Beer Society of Britain & Ireland (BSBI) and the Wine & Food Society (WFS) provided a light-hearted session billed as the 'Gwynn Ellis Special', and included distribution of the new publication BSBI Newt* and presentations of decorated T-shirts.

We would like to acknowledge the help of 3 sons with the meeting :
Richard Green, for welding grapnels
Tom Pankhurst, for some computer graphics of orchids
Carl Ellis, for illustrations on T-shirts
We would also like to thank all lecturers, tutors and field meeting leaders, and in particular, the very hard-working organiser of this successful weekend, Tim Rich.

MARY BRIGGS, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG

[* Copies are available from the Editor on receipt of an s.a.e. Ed.]

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PLANT RECORDS - 1986

As a Scottish Vice-county recorder, albeit one temporarily exiled in England, I agreed to provide a comment on the 1986 plant records (Watsonia **16**(4): 439-452 (1987)) with great trepidation, in anticipation of a host of introduced species finding their first footholds in our southern climes! It was therefore with a certain amount of relief, and even pleasure, that I discovered that Scottish records were, for once, well represented, forming nearly half the 1986 total.

On looking closely at the distribution of the records, much of the credit for this achievement goes to Peter Macpherson, recorder for v.c. 77, Lanarks., with good contributions also for Angus, v.c. 90 and Coll in Mid Ebudes, v.c. 103. Despite this over one tenth of the records are actually for an English county, v.c. 39, Staffs.

Having spent most of my botanical apprenticeship in Scotland, I find that I have a very biased view of the 1986 plant records, and I make no apology for this fact. This is shown for example by my surprise at seeing entries for **Equisetum sylvaticum** and **Geum rivale** - the former recorded in East Cornwall for the first time since 1925 and the latter being the first post-1930 record for Surrey. These are both plants I take for granted in Scotland. I am also very surprised to discover that it is still possible to get a new Vice-county record for **Dactylorhiza maculata** subsp. **ericetorum.**

On the other hand, the list also held interesting discoveries regarding the distribution of plants within Scotland. Although aware of **Andromeda polifolia** in the Forth Valley in Central Scotland, it did not occur to me that this had been its northern limit until I noticed the discovery of a new site in Angus. Similarly, it came as a shock that **Carex bigelowii** had been recorded in South Aberdeen for the first time.

A study of the plant records, year by year, can provide a fascinating insight into the changing flora of Britain. From this years list it is possible to note the continuing spread of a number of troublesome alien species, with **Impatiens glandulifera** in Sutherland, **Heracleum mantegazzianum** as a first post-1930 record in Staffordshire and **Polygonum cuspidatum** recorded for the first time in Coll (v.c. 103). The spread of a number of water weeds, possibly aided by the careless disposal of aquarists stock, can also be seen with new records for **Elodea nuttallii, Lagarosiphon major** and, most worrying in the light of recent studies, **Crassula helmsii**, recorded for the first time in three new Vice-counties.

On a more cheerful note, the list includes a number of very positive records, several arable weeds amongst them, presumably discovered in the course of the BSBI's Arable Weed Survey. Examples include **Papaver lecoqii, Papaver argemone** and **Kickxia elatine.** I was particularly pleased to see a second Denbighshire record of **Myosurus minimus** from a farm gateway - as I am aware of its rediscovery in a similar habitat in Yorkshire. The record of **Bidens cernua** as an arable weed over on the west coast of Scotland in Argyll seems very curious.

The highlight of this list must however be accorded to the sedge records, chief amongst these being the latest discovery, by Dave Batty, of **Carex buxbaumii** in Argyll in the third 10km square in Scotland. The fourth **Carex recta** site is also of great interest.

I hope that next year the Scottish records will continue to be well represented, perhaps I might contribute to this by entering some of the new v.c. 87, West Perthshire, records (if only we can eliminate those which have already been published!) Unfortunately these will not include that most sought after plant **Rubus arcticus!**

HELEN STACE, 14 Curzon Terrace, South Bank, YORK YO2 1HA

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PLANT IMPORT REGULATIONS

A licence from the Ministry of Agriculture is required to import most plants collected from the wild in other countries, and charging for licences was introduced this year - £25 for an Import Licence for Private Purposes (i.e not for commercial or research uses); £150 for Scientific or Research Purposes, for up to five separate types of plant.

There are some concessions, but the regulations are very complex. We hope to confirm these with the Ministry and with the Department of the Environment, and to publish a further note in BSBI News **48.**

Meanwhile for further details of licences members should contact :

England and Wales : Ministry of Agriculture, Fisheries and Food, Plant Health Division, Room 145, Great Westminster House, Horseferry Road, LONDON SW1P 2AE (tel. 01-216-6174 or 7320 or 6808).

Scotland : Dept. of Agriculture and Fisheries for Scotland, Plant Health and Potatoes Branch, Chesser House, Gargie Road, Edinburgh EH11 3AW (tel. 031-443-4020 ext. 2425).

Many endangered and vulnerable species (eg. orchids, Cyclamens etc.) are additionally protected by restrictions on import or export through CITES (Convention on International Trade in Endangered Species.

For advice on these conservation controls contact :

Dept. of the Environment, International Trade in Endangered Species Branch, Tollgate House, Houlton Street, BRISTOL BS2 9DJ (tel. 0272-218690).

MARY BRIGGS, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG

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NATIVE v. ALIEN IN THE FLORA OF GLASGOW (OR ELSEWHERE)

These thoughts were stimulated by the discussion by Webb (1985) of the criteria adopted to choose between native and alien status of plants in the British Isles and by current work for a Flora of Glasgow (Dickson 1984, 85, Jarvis et al. 1986, Steven and Dickson 1986, Watson et al. 1987) as well as by work on the alien flora of Tenerife (Dickson et al. 1987). David Webb considers rightly that it is a complex problem. However the difficulty

is even greater than he states because there is no consideration of multiple arrivals by different methods for any plant in the area under study. Only by deciding arbitrarily that only the first establishment of a species matters, can the categories native and alien be mutually exclusive. To follow this long-standing and very widely adopted course is an oversimplification and obscures the worthwhile objective which is the full understanding of the status of the species in the studied area. After first having used multiple status categories in 1969 and later in 1984, David Allen has recently redrawn attention to such a system (Allen 1987). Bangerter and Cannon (1978) adopted Allen's categories. Any species can be both native and alien in the studied area.

The definitions being considered for use in The Flora of Glasgow are as follows.

1. **Native**
   Species arrived in the studied area by natural means, i.e. without intervention, even unintentional, by man at any time, no matter how ancient or recent, from a source area where that species is native.
2. **Alien**
   Species brought to the studied area by man, intentionally or unintentionally, even if native in the source area and already native in the studied area.
   - 2.1 **Introduced Alien** (or Introduction)
     Species deliberately brought to the studied area by man for whatever reason.
   - 2.2 **Invading Alien** (or Invader)
     - 2.21 Species, alien in the source area, arriving in the studied area by natural means.
     - 2.22 Species, alien or native in the source area, dispersed to the studied area unintentionally by man.

At the moment I have no suitably brief terms for subcategories 2.21 and 2.22. Any ideas will be most welcome.

References

Allen, D.E. (1969). The Flowering Plants of the Isle of Man. Douglas.

Allen, D.E. (1984). Flora of the Isle of Man.

Allen, D.E. (1987). The Traditional County Flora. Some New Ways of Presenting the Records. BSBI News **46**: 11 & 13.

Bangerter, E.B. & Cannon, J.F.M. (1978). Flowering plants and conifers. Chapter 11 in The Island of Mull. A survey of its flora and environment. British Museum (Natural History) London.

Dickson, J.H. (1984, 1985). Records for "The Flora of Glasgow" 1 and 3. Glasgow Naturalist **20**: 465-468; **21**: 75-79.

Dickson, J.H. et al. (1987). Invading Plants at High Altitude on Tenerife, especially in the Teide National Park. Botanical Journal of the Linnean Society **95**: 155-179.

Jarvis, M.C. et al. (1986). Records for "The Flora of Glasgow" 2. Glasgow Naturalist **84**: 473-477.

Steven, G. & Dickson, J.H. (1986). Records for "The Flora of Glasgow" 4. The Pteridologist **1**: 127-128.

Watson, K. et al. (1987). Records for "The Flora of Glasgow" 5. Glasgow Naturalist **21**: 215-218.

Webb, D.A. (1985). What are the criteria for presuming native status? Watsonia **15**: 231-236.

J.H. DICKSON, Botany Department, The University, GLASGOW G12 8QQ

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GREGARIUS BIPEDATUS sp. nov.

An erect, decumbent, or occasionally prostrate perennial 150-180 (-200) cm. Lateral and basal branches in opposite pairs, geniculate, digitate at apex. Capitulum pale or dark, spheroid or ovoid, ±dense, long pilose above at first, often becoming glabrescent at maturity, then hispid below. Dioecious. Fl. 1-12. Juvenile specimens glabrous and highly raucous.

Native and introduced. A cosmopolitan weed from sea-level to mountain peak. Locally abundant. Its presence is made obvious by the rapid pollution of the habitat.

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

WILD PLANTS AND THE LAW

The Nature Conservancy Council have submitted to the Government, their recommendations for changes to Schedule 8 of the Wildlife and Countryside Act; this lists the very rare plants which have been given special protection.

No species have been recommended for removal, but 31 have been recommended for addition to the Schedule.

Many of these species occur at only one site, so that loss of that would mean extinction. These are indicated by an asterisk (*) in the table below.

The following categories of species were considered in drawing up the list :

1. Red Data Book species
2. Endangered and Vulnerable species
3. Endemics (**Epipactis youngiana, Rhynchosinapis wrightii**)
4. Rapidly declining species
5. Species in a particularly threatened habitat
6. Species threatened in Europe
7. Single site species
8. Any other suggested species

List of species recommended for addition to the Schedule

Adder's-tongue, Least	Ophioglossum lusitanicum
Cabbage, Lundy	*Rhynchosinapis wrightii
Colt's-foot, Purple	*Homogyne alpina
Cottongrass, Slender	Eriophorum gracile
Crocus, Sand	*Romulea columnae
Cudweed, Red-tipped	Filago lutescens
Fleabane, Alpine	Erigeron borealis
Fleabane, Small	Pulicaria vulgaris
Gentian, Fringed	*Gentianella ciliata
Germander, Cut-leaved	Teucrium botrys
Goosefoot, Stinking	*Chenopodium vulvaria
Grass-poly	Lythrum hyssopifolia
Hawk's-beard, Stinking	Crepis foetida (see below)
Helleborine, Young's	*Epipactis youngiana
Horsetail, Branched	*Equisetum ramosissimum
Hound's-tongue, Green	Cynoglossum germanicum
Marshwort, Creeping	Apium repens
Milk-parsley, Cambridge	Selinum carvifolia
Naiad, Holly-leaved	Najas marina
Pennyroyal	Mentha pulegium
Pigmyweed	*Crassula aquatica
Ragwort, Fen	*Senecio paludosus
Ramping-fumitory, Martin's	*Fumaria martinii
Restharrow, Small	Ononis reclinata
Rock-cress, Alpine	*Arabis alpina
Rock-cress, Bristol	Arabis stricta
Speedwell, Fingered	*Veronica triphyllos
Star-of Bethlehem, Early	*Gagea bohemica
Stonewort, Foxtail	Lamprothamnium papulosum (see below)
Strapwort	*Corrigiola litoralis
Viper's-grass	*Scorzonera humilis

Crepis foetida, Dungeness may be extinct. Despite many searches, Ro Fitzgerald and helpers have been unable to find it. Anyone wanting to spend a pleasant day out on the SE coast, please do so!

Lamprothamnium papulosum - a stonewort found in brackish lagoons. The nearest we've got to scheduling a lower plant; its habitat is threatened!

I would like to thank all BSBI members who provided information.

LYNNE FARRELL, NCC, Northminster House, PETERBOROUGH PE1 1UA

CERASTIUM BIEBERSTEINII AND SAXIFRAGA x GEUM - DO THEY OCCUR IN THE BRITISH ISLES?

The above two have both been frequently recorded as naturalized escapes, but all the material so-named examined by me has turned out to be wrongly determined. However, I have not yet seen enough material to seriously doubt their occurrence, and the purpose of this note is to ask members to send live or pressed material that might verify the records.

Cerastium tomentosum is an extremely variable species, and the specimens labelled as **C. biebersteinii** (and other species) that we have seen have turned out to be the former. My colleague, Mohammed Khalaf, tells me that leaf differences are not very reliable, and for certain determination inflorescences, preferably with ripe capsules, are required.

Saxifraga x geum (**S. hirsuta x S. umbrosa**) has been misidentified both because of its similarity to other related taxa (especially its two parents and **S. x urbium**, London Pride) and because the name **S. geum** was for long misapplied to **S. hirsuta.** The plant recently recorded from Mid Ebudes in Watsonia 16: 444 is in my opinion (and that of my colleague Richard Gornall) **S. hirsuta** (specimen in E seen). David Webb tells me that he has never seen a wild specimen of **S. x geum** from the British Isles, and very rarely one in cultivation. One sterile leaf rosette would be sufficient.

Postage will be gladly refunded, and specimens returned, if requested.

CLIVE STACE, Dept. of Botany, University of Leicester, University Road, LEICESTER LE1 7RH

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"GAREY RODDAGAGH", OR BOG MYRTLE ON A HEDGE!

P.M.C. Kermode was nominally a lawyer but found a better-fitting hole as first curator of the Manx Museum a century ago. We are currently on Mark 5, not for nothing is the national motto 'Traa dy liaooyr', or 'time enough'. He had a countryman's interest in plants and his notes for a possible Manx Flora survive in the archives.

I was checking through these to see if they would suggest any sites of interest that were not currently known and was surprised to find under Bog Myrtle **Myrica gale**, for which he had noted an unusual version of its Manx name in Ruthagagh, instead of the usual Roddagagh, an entry for Belfast curragh in Andreas and a record that it was showing leaf buds on 19th January, 1888, in "Garey meadows, Andreas".

In the Isle of Man the plant is only abundant in the willow carr known as the Ballaugh Curraghs, with a few patches in the central valley wetlands and scattered plants at Berragh and the Guilcagh. There is another 1880's record from a boggy streamside north of Ballasalla, Malew, but the Andreas locality seemed to be unknown. One of the Museum trustees, Mr F.J. Radcliffe, had been working on Manx placenames in the north of the Island and I asked if he knew where it lay.

He did not but shortly before his death he was talking to a member of his Manx class, a Radcliffe of Ballayockey, whose response was that there was nothing left of Belfast curragh but there was a field on Ballayockey called "Garey Roddagagh" and the Bog Myrtle was "there on the hedge yet". Unfortunately F.J. Radcliffe died before we could visit the place. Although the habitat seemed improbable, Miss M. Devereau and I duly went to the farm and were led to the sod hedge and there was the Bog Myrtle. Its site lies between the Garey and Belfast farms and it is presumably a last relic of a once more extensive patch.

This note is offered as an indication that seemingly improbable reports can be correct - Bog Myrtle on a hedge! - that multi-disciplinary research is worthwhile and as thanks to Messers Radcliffe without whose help the 'new' site would never have been refound.

LARCH S. GARRAD, Manx Museum, DOUGLAS, Isle of Man

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THALICTRUM ALPINUM L. IN CRAVEN, YORKSHIRE?

While curating the **Galium** collections in the herbarium of the British Museum (Natural History) in 1979 I discovered a sheet in Herb. Boswell-Syme consisting of two collections filed as **G. sterneri** Ehrend., the lower of which was collected by John Tatham on "Rocks

above Settle" in July 1841. This collection is mixed; it consists of twelve pieces of G. **sterneri**, one piece of G. **cruciata** (L.) Scop. and two plants of **Thalictrum alpinum** L. These I determined thinking nothing of it as I knew the plant well in Teesdale.

Earlier this year (1987) when referring to Lees' The Flora of West Yorkshire (1888), I found the following entry:

> "[**Thalictrum alpinum** L. Error
> [64] Top. Bot. Giggleswick Scar; Gordale, etc.; Winch, add. N.B.G. (1835). Winch surely intended T. montanum; and Watson mis-referred the MS. additions copied from an interlined Flora Britannica lent him by Mr. Winch (vide p. 5 N.B.G.).]".

After reading this I went back to the herbarium and extracted the sheet. The specimens were presumably all mounted by Boswell-Syme or his amanuensis, the **Thalictrum** plants are surrounded by the **Galium** specimens forming a single unit and so presumably collected together.

Winch's copy of Smith's Flora Britannica in the library of the Linnean Society of London contains an annotation for **T. alpinum** in Yorkshire reading "Giggleswick Scar, Richardsons Scar, Goredale Yks.". There are other annotations for the plant, which make it plain that Winch knew **T. alpinum** L. and distinguished it from forms of **T. minus**. From examining these entries it seems probable that Lees' conclusion (see above) is erroneous and that Winch did know the plant in Craven.

Although the evidence is not conclusive, the strong suggestion is that both Winch and Tatham knew **T. alpinum** in the limestone hills above Settle during the early part of the 19th century. Although the species occurs in Snowdonia, this record, if correct, would indicate a considerable southern extension of it's range in England.

The plant should be looked for in flushed areas and by streams on the limestone "above Settle".

J.M. MULLIN, Dept. of Botany, British Museum (Natural History), Cromwell Road, LONDON SW7 5BD

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THE LONDON GROUNDWORT

Senecio x **londinensis** Lousley is a spontaneous cross between the Sticky Groundsel, **S. viscosus** L., and the Oxford Ragwort, **S. squalidus** L., and, like many hybrids involving common urban weeds, tends to turn up as often as we care to look for it. Any warm stony or gravelly habitat known to support the parent species in numbers for at least two years is likely to produce at least one specimen.

The most immediately noticeable hybrid features are its sticky texture, widely spreading rather flexuous branches, and intermediate ray-florets. It is highly sterile (Stace 1975), the mature capitula dying with seedless pappus remaining tightly attached. Like **S. squalidus**, flowering may continue until Christmas if there is no frost, and the plant can overwinter.

Originally described from London (Lousley 1946), it still occurs regularly here on railway ballast, hoggin pathways and rubble; also in sun-baked concrete crevices such as old cracked tennis-courts. Last year, with slight tongue-in-cheek, I coined the vernacular name "London Groundwort", but it seems to have caught on!

References

LOUSLEY, J.E. (1946). A new hybrid **Senecio** from the London area. Rep. botl Soc. & Exch. Club **12**: 869-874. (Fig.)

STACE, C.A. (1975). Hybridization and the Flora of the British Isles, p. 407. Academic Press, London.

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

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MORE ON HYBRID BLUEBELLS

Mr Page's interesting key to Bluebells (Page 1987) could perhaps be supplemented by reference to the attachment of the stamens (see Bond 1976).

Hyacinthoides hispanica	**H. non-scripta**	**H. hispanica x H. non-scripta**
Outer filaments inserted below middle of perianth	Outer filaments inserted just above middle of perianth	All stamens inserted fairly close together near the middle of the perianth in many hybrid plants

The hybrid is common in the wild, presumably as a garden escape, in this area. The colour is normally a paler blue than that of the English Bluebell.

Reference

Bond, T.E.T. (1976). Length and insertion of the filaments in Endymion. Watsonia **11**: 141-142.
Page, K.W. (1987). Hybrid Bluebells. BSBI News **46**: 9.

Miss I.F. GRAVESTOCK, 8 Cranleigh Gardens, Stoke Bishop, BRISTOL BS8 1HD

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CAUTIONARY TALE II

The transplanting of more ordinary plants than **Primula scotica** (see BSBI News **46**: 13-16 (1987)) can cause perhaps worse confusion, as it causes less excitement and is therefore less likely to come to light. **Polystichum aculeatum** is known from only about ten sites in Cardiganshire and is conspicuously absent from the northern part of the county. In 1975 a local botanist, having a plant of it of unknown origin in his garden, transplanted it to the long-overgrown site of a trial copper-mine in a **Fraxinus**-dominated area of woodland, with abundant **Mercurialis perennis**, in the Ynys-hir RSPB Reserve. As County Recorder I have received no less than three separate records of this one plant from observant visitors (it is beside the main path round the Reserve), none of whom doubted its nativeness as it is growing in exactly the right habitat for the species in the only base-rich site on the Reserve. If I had not accidentally learnt that it was an introduction I would have accepted this record as an interesting extension of its range. In so far as it is practicable, such introductions should always be noted by the County Recorder in his files.

ARTHUR O. CHATER, Dept. of Botany, British Museum (Nat. Hist.), Cromwell Road, LONDON SW7 5BD

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CAUTIONARY TALE III

The Editor's 'Cautionary Tale' in BSBI News **46**, concerning native rare species deliberately introduced to new localities, prompts a note about research in which I have participated. It differs from the Editor's examples in being planned research, with recorded numbers of introduced plants/seeds, notified at the outset in BSBI Proceedings (**1**, 562, 1955); the early results were outlined at a BSBI meeting in 1960; and the grid squares of the artificial species-occurrences were reported to the Biological Records Centre. The localities, however, 'near Bristol', were not specified by name. By now this can be done with negligible risk to the investigations. Their objective was to gain possible information relating to the restricted British occurrence of the species.

Seven rare species, listed below, of the Avon Gorge or Mendip limestone were planted and sown in 1955 in two Carboniferous Limestone localities previously lacking all of these species. The sites, c.18 and 13km (11 and 8 miles) S.W. of Bristol, are respectively in Burrington Combe (Mendip) and Goblin Combe (near the village of Cleeve). The latter site

is now in the care of the Avon Wildlife Trust.

The following table shows the numbers of :

Rootings successfully planted in 1955, i.e. excluding initial failures.
Seeds sown in 1955 - pressed lightly onto soil.
Plants found in 1987; '0' means unobserved, not guaranteed absent.

	BURRINGTON COMBE			GOBLIN COMBE		
	Plants rooted 1955	Seeds sown 1955	Plants found 1987	Plants rooted 1955	Seeds sown 1955	Plants found 1987
Arabis stricta	2	24	0	3	70	0
Aster linosyris	4	40	2	5	40	0
Geranium sanguineum	3	40	2	4	45	12
Helianthemum apenninum	3	40	0	2	40	10
Koeleria vallesiana	6	40	0	6	40	2
Trinia glauca	6	40	0	6	40	>2500
Veronica spicata	6	70	0	5	70	6

The 1987 observations might have overlooked a few plants and there will be re-inspection soon. At Goblin Combe **Aster linosyris,** unobserved in 1987, was seen at some time during 1980-82.

A much later supplement to these experiments was added at a considerably higher altitude of c. 253m (830ft) at Ubley Warren, Charterhouse-on-Mendip. Here in 1977 rootings were planted of three of the species; the planted numbers given exclude initial failures: **Aster linosyris,** 8; **Helianthemum apenninum,** 15; **Trinia glauca,** 27. No plants of these species now exist at this site.

Further details and discussion would be too lengthy for inclusion in this note.

J.F. HOPE-SIMPSON, Department of Botany, The University, BRISTOL BS8 1UG

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LITTLE AND LARGE

I have found it a very common occurrence to come across plants way outside the growth ranges given in the 1962 edition of Clapham Tutin and Warburg's Flora of the British Isles. Sometimes there are large areas of countryside which contain few plants of a given species within the maximal or minimal heights, even when bracketed figures are included to show extremes.

A few examples will serve to illustrate this; they are set out below in a standard format.

Species : **Chamaenerion angustifolium** (L.) Scop. Rosebay Willow-herb, Fireweed.

Height limits (according to C.T.W. (1962) and Geography : 30-120cm; throughout the British Isles; Eurasia & North America.

Actual heights of extreme specimens, and date : Two plants, measured from ground level to topmost flower buds, both just over 300cm high by 1/9/87. (See photo p. 24)

Map Reference, Site and Habitat : V.c. 7 (N. Wilts.), SU/151676. Lockeridge, near Marlborough. Gentle north-facing slope, north of West Woods, on chalk. Paddock reverting to scrub and wood, mostly wild with English Elm suckers, Ash and Elder taking over from grass, nettles and hogweed; the tallest Fireweed plants supported by two broom shrubs, grown from seed from previously introduced plants (despite the chalk soil!).

Heights of other members of same population : 500 or more stems, more than half of which were over 240cm (twice the stated maximum in C.T.W.). There are other patches of the sam species in the locality with most plants 150-200cm high by late August.

Comment : Although Fireweed populations in N.E. Wilts. occasionally contain plants within the 30-120cm range, a drive through Savernake Forest in late August or early September

reveals that local races are mostly much bigger. Even when the topmost flowers are in bud, patches with many or even most plants 2 or more metres high are conspicuous, especially between the road verges and woodland edges. Other species of **Epilobium** also grow higher than C.T.W. allows.

Fireweed at over 3 metres high. Photo J. Oliver.

Species : a) **Polycarpon tetraphyllum** (L.) L. Four-leaved All-seed.
b) **Radiola linoides** Roth. All-seed; Flax-seed.

Height limits (according to C.T.W., (1962) and Geography : a) 5-15cm; rare, only in SW Britain (common in Isles of Scilly); Eurasia Africa, Australia, S. America.
b) 1.5-8cm; Britain; Mediterranean, Eurasia, tropical African Mountains, Madeira, Tenerife.

Actual heights of extreme specimens, and date : a) & b) Several plants only 8mm high, from ground to topmost fruiting capsule, with healthy seeds. Some of these plants, of both species, were reduced to one fruiting capsule.

Map Reference, Site and Habitat : V.c. 1 (Isles of Scilly) a) Toll's Island, E. of St Mary's (SV/932119); b) White Island, N. of St Martin's (SV/922177). Windswept thin soil, over granite, with low coastal red fescue and other short-turf flowering plants, lichens & mosses.

Heights of other members of same population : In the exposed areas few specimens of (a reached 3cm, or of b) reached 1.5cm. Towards the shelter of bracken, some plants reached the lower parts of the permitted C.T.W. range.

Comment : In the short turf of Western coastal areas, many flowering plants are so tiny that they are very difficult to identify. The Rosebay Willow-herbs described above were 375 times the height of these 'All-seeds'. Standard Floras are unhelpful, or the keys are actually misleading and wrong when one attempts to identify unfamiliar minute flowering plants growing on wind-exposed Western coasts. In these situations, certain flowering plants, such as these 'All-seeds' are no bigger than small mosses; on such sites, and over large areas, this is the rule, **not** the exceptional stunting of the occasional individual exposed plant.

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

[Perhaps other members can supply further examples not covered by the 3rd edition of C.T.M. Ed.]

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CABBAGE PATCH - III

PARALLELS BETWEEN A PAIR OF CASUAL CABBAGES
OR
DUAL CABBAGE-WAYS

Brassica juncea (L.) Czern. & Coss. (**Sinapis juncea** L.) can hardly be described as an exciting plant. It is a yellow crucifer which looks like every other yellow crucifer. It occurs in second-rate habitats such as docks, waste-ground, tips and in bird-seed. Its common names - brown, Chinese and Indian mustard - aren't particularly inspiring. However, as it is the major constituent of commercial mustard along with **Sinapis alba**, it does raise the occasional eyebrow!

Brassica juncea has put in regular though unpredictable appearances in Britain for many years, but has yet to be seen in Ireland (hint, hint?). I've seen post-1950 records for v.c's 3/4, 5/6, 14, 15/16, 17-22, 25, 27-30, 32-34, 39, 53-57, 60-64, 69, 70, 77, 90, 95 and 96, and there are many more pre-1950 records. It also occurs widely around the world as an escape from cultivation and as a weed. In China and India where it is grown as a vegetable and as an oil crop there are many cultivars, the leaf-shape being particularly polymorphic.

It is believed to be an allotetraploid (2n=4x=36) derived from a **Brassica nigra** (2n=16) x **B. rapa** (2n=20) cross, but you'd never guess because it doesn't look like either. Instead, it is much more similar to facets of the horrifically variable **Sinapis arvensis**, or to another casual cabbage, **Brassica carinata** A. Braun (**B. integrifolia** (West) O.E. Schulz sensu C.T. & W., **B. integrifolia** (West) O.E. Schulz var. **carinata** (A. Braun) O.E. Schulz).

Brassica carinata cannot be described as exciting either, though its common names - Abyssinian mustard and Ethiopian rape - have a tropical flavour. It is grown as a crop in East Africa and is being tested for seed oil potential in America, but has yet to become widely established anywhere. In Britain there are only a few records for v.c.'s 18 and 21, where it occurs in similar places to **B. juncea**. Like that species it is believed to be an allotetraploid (2n=4x=34), this time derived from a **Brassica nigra** (2n=16) x **B. oleracea** (2n=18) hybrid, and once again, looks like neither. There the parallels end, because it isn't used in mustard.

To give you a taste of what to look for, characters separating **Brassica carinata, B. juncea** and **Sinapis arvensis** are given on the table, and drawings in fig. 1 (see p. 26). Be warned, **Sinapis arvensis** is very variable. Fresh material is much easier to get your teeth into than dried.

Eric Clement has pointed out that the photograph No. 941 in R. Phillips' Wild Flowers of Britain (1977) is probably **Brassica juncea** and not **Erysimum cheiranthoides** as labelled.

I look forward to more records with relish! Many thanks to Eric Clement for his help with records and details.

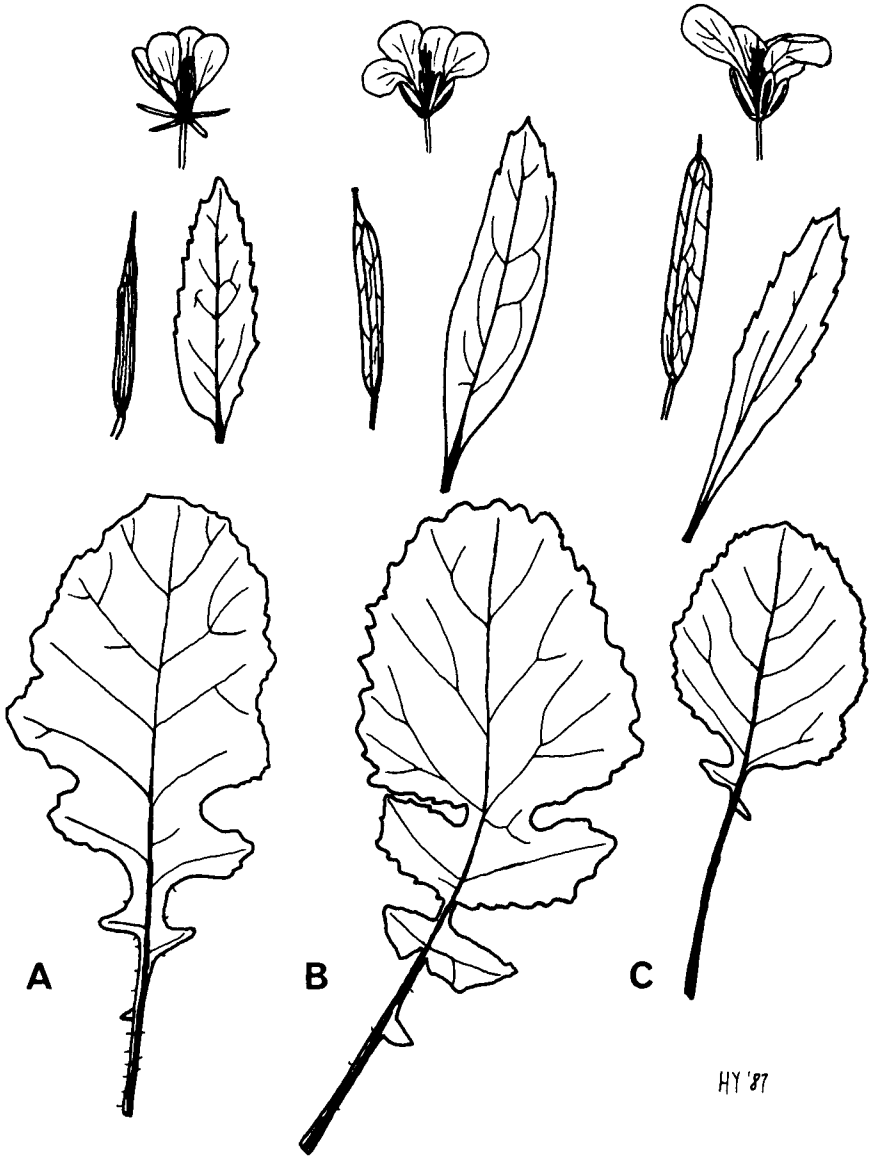

Fig. 1. Lower and upper stem leaves, flowers and fruits of a) **Sinapis arvensis,** b) **Brassica juncea,** c) **Brassica carinata.**

Distinguishing characters based on cultivated material and British specimens

	Sinapis arvensis	Brassica juncea	Brassica carinata
Plant	Coarse with spreading branches, dark green, coarsely hairy to glabrescent	Slender with erect branches, light green (sometimes slightly glaucous), glabrous or sparsely hairy below	Chunky with erect branches, glaucous, often purplish, glabrous
Lateral lobes of lower leaves	0-4 pairs	1-3 pairs	0-1 pair
Inflorescence	Crowded, flowers equalling or overtopping buds	Lax to crowded, flowers equalling or overtopping buds	Lax, buds overtopping flowers
Fresh sepals	(4.5)5-7mm long, held at an angle of (40)60-150 deg.	4.6-7mm long, held at an angle of 20-70 deg.	7-10mm long, held at an angle of 0-30 deg.
Fresh petals	(7.5)8-17mm long, yellow	9-14mm long, yellow	13-17mm long, pale yellow
Valves of dried fruit	3-7 strong veins, the mid-vein only slightly stronger	1 strong central vein + fine weak laterals	1 strong central vein + fine weak laterals
Beak of fruit*	7-16mm long 0-1 seeded	(4)5-9(12)mm long, sterile	2.5-6(7)mm long, sterile

* measured from top of valve to tip of persistent style

TIM RICH, Biological Records Centre, Monks Wood Experimental Station, Abbots Ripton, HUNTINGDON, Cambs PE17 2LS

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NOTES AND ARTICLES

WILDLEAF

"Wildlife!" Oh yeah? And what on earth
Is that, when lurked within its lair?
Some feral beast endowed since birth
With feathers, fins, soft fur, or hair?

Nay, shame, thou half-truth-mongers, blow
Away such biased broadcasts, **please.**
Wild PLANTS are "wildlife", too, you know,
From lowly moss to lofty trees!

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

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THE INTRODUCTION OF EXOTIC TREES INTO BRITAIN

[From an interesting list of dates on which some of our exotic trees were introduced into Britain sent by Victoria Hallett (BSBI Referee for Coniferopsida) and Alan Mitchell, VMH, the following examples have been abstracted; they are listed in chronological order of introduction. Ed.]

CONIFEROPSIDA

Species	Origin	Discovered	Introduction
Cupressus sempervirens	Mediterranean	-	c. 1500
Picea abies	Europe	-	pre 1548
Abies alba	C. Europe	-	c. 1603
Larix decidua	C. Europe	-	pre 1629
Cedrus libani	Lebanon	-	1639, Pocock
Taxodium distichum	Virginia	1610, W. Strachy	1640, J. Tradescant
Juniperus virginiana	E.N. USA	-	c. 1650, Evelyn
Pinus cembra	C. Europe	-	1746, Duke of Argyll
Ginkgo biloba	China	1690, Kaempfer	c. 1754
Pinus nigra var. maritima	Corsica	-	1759
Taxodium ascendens	S. USA	-	1789
Pinus nigra var. carmanica	Crimea	-	1790
Araucaria araucana	Chile	1780, Dendariarena	1795, A. Menzies
Pseudotsuga menziesii	W.N. USA	1792, A. Menzies	1827, D. Douglas
Abies procera	N.W. USA	1825, D. Douglas	1830, D. Douglas
Picea sitchensis	W.N. USA	1792, A. Menzies	1831, D. Douglas
Cedrus deodara	W. Himalayas	-	1831, Hon. Melville
Pinus nigra var. nigra	C. Europe	-	1835, Lawson
Cupressus macrocarpa	California	-	1838, to Lambert
Sequoia sempervirens	W. USA	1795, A. Menzies	1843, Dr Fischer
Cryptomeria japonica	China/Japan	1692, Kaempfer	1845, Fortune
Tsuga heterophylla	W.N. USA	-	1851, J. Jeffrey
Chamaecyparis nootkatensis	N.W. USA	1791, A. Menzies	1851, J. Jeffrey
Chamaecyparis lawsoniana	California	1851, Jeffrey?	1854, A. Murray
Sequoiadendron giganteum	California	1841, Bidwill 1852, Dowd.	1853, J.D. Matthew
Larix kaempferi	Japan	1712, Kaempfer	1861, J.G. Veitch
Thuja plicata	W.N. USA	c. 1790, Née	1853, W. Lobb
Metasequoia glyptostroboides	China	1941, T. Wang	1948, Hsueh via Arnold Arb.

ANGIOSPERMAE

Laburnum anagyroides	-	-	1596, J. Tradescant
Robinia pseudoacacia	-	Intro. to France in 1601 by J.Robin	c. 1605
Aesculus hippocastanum	Constantinople	1576, D. von Ungnad	c. 1615
Liriodendron tulipifera	-	-	1640, J. Tradescant
Prunus laurocerasus	-	1576	1674, Countess of Arundel
Ailanthus altissima	N. China	d'Incarville	1751, P. Collinson
Eucalyptus gunnii (type)	Australia	1840, Sir J. Hooker	c. 1849
Davidia involucrata	C.W. China	1869, Pere David	1899-1902, Wilson to Veitch

Any member who would like a copy of the extended list or further information on any particular species should contact the author, enclosing a large s.a.e.

VICTORIA HALLETT, Green Scene, 18 Burnt Hill Way, Boundstone, FARNHAM, Surrey GU10 4RP

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STACHYS GERMANICA L. IN AN OXFORDSHIRE GARDEN

On 3rd August 1987, an Oxfordshire lady telephoned me to say that a wild plant which had been growing in her garden for several years looked very like the illustration of the Downy Woundwort (**Stachys germanica**) in The Concise British Flora in Colour (W. Keble Martin, 1965), and could I please come and take a look at it.

On arrival at her home that evening, I was shown not **Stachys lanata**, as I had suspected, but, to my great surprise and delight, several very fine stands of **Stachys germanica**, towering above garden flowers in a south-facing border. Two smaller plants were growing, incongruously, in a large ornamental urn among pansies and nasturtiums; and another, over 2ft (61cm) tall, was rooted in the soil of a disused flower-pot in the greenhouse!

In conversation afterwards, I was told that on moving into their newly-built house some years ago, Mr & Mrs X found that the builders had removed all the top-soil from the garden area, leaving a sub-soil composed mainly of clay. In order to make good this loss, many tons of soil and sand were imported. It was exciting to learn that the soil used to create the flower borders had been brought in from land, at that time recently opened up, within what may be termed 'classic **Stachys germanica** country'. Mr & Mrs X always believed that the seeds came in with the soil; and this being undoubtedly the case, the present plants will have originated from wild stock and represent a valuable source of native seed.

Mr & Mrs X are delighted to have this rarity in their garden, and are to be congratulated for responding to its arrival with such awareness and responsibility, in spite of their uncertainty about its true identity. They will continue to care for it, and have kindly given permission for regular visits to be made to the plants for study and recording purposes.

In view of the theft of **Stachys germanica** seeds from Site X elsewhere in the county (see the writer's Short Note in Watsonia **16**(4): 430-431 (1987)), and the necessity to safeguard this garden site, and the family's privacy, the location is being kept strictly confidential.

I wonder if **Stachys germanica** has accidentally found its way into other gardens in this way?

Miss A.J. DUNN, Flat 2, Sandford Mount, Charlbury, OXFORD OX7 3TL

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SESELI VANDASII Hayek

Seseli vandasii Hayek is cited in Flora Europaea Vol II, p.334 as an example of obscure taxa which might be attributable to **Seseli**. I spent some time in early 1987 researching the species, intending to look for it around Prilep, in Jugoslavian Macedonia, in late August or September. As with all the most obscure **Seseli** species, it is not represented in the major British herbaria.

The brief description in Flora Europaea is helpful. In particular, the dimensions of the leaf-lobes suggest that the plant occurs at a modest altitude. There is a fuller description in Hayek's Prodromus Florae Peninsulae Balcanicae but, for information on the whereabouts of **S. vandasii** you have to go to Feddes Repert., XXI, p.256 (1925). This reveals that Hayek made two visits to Mt. Kozjak, above Pletvar village near Prilep, on 2nd and 12th August, 1923. 1923 was presumably a very early season in Macedonia.

On 26th August, 1987, my wife and I, with two friends, travelled to Prilep by car from Ohrid, via Bitola. Much of the route is over recently-improved roads. Prilep itself is in fairly level country but there are mountains just a few miles away in most directions. They are all of dark or reddish rock except to the north-east, where Mt. Kozjak is conspicuously white. Pletvar, by the major road to Skopje, is now largely deserted, quite substantial houses standing empty. The main activity while we were there was the fetching of firewood on strings of donkeys or small mules.

Directly above the village, on its north side, is the first foothill of Mt. Kozjak, about 700 feet high. The first 200 feet has been semi-agricultural at some time but above that level white limestone predominates, with patches of Hornbeam in the larger fissures. I thought we might as well look in a crack in the first limestone clifflet, expecting **S. vandasii** to be several hours climb further on, but there were at least six plants on the little cliff, with a scattering of small groups up to the top of the foothill. The two

non-botanical friends warmed to the task and counted at least one hundred plants in flower.

The plant is without doubt a **Seseli.** As Hayek said in Feddes Repert., XXI, its nearest relative is probably **S. tomentosum** Vis. The height is generally 12-18 inches, and the plant is little branched. The leaves are 1-2-ternate, with filiform lobes of up to 80mm length. The flowers are deep pink, there are no bracts and the bracteoles are free. More than one stem may arise from long-established rhizomes, (I hope that this will never give rise to the naming of a 'subsp. multicaulis'). There were plenty of stocks showing old, dead stems as well as green leaves, indicating that the species is perennial, but none of the old stems that we saw retained any fruits.

Surprisingly, uniquely in my experience, no other umbelliferous plants whatsoever were visible on the foothill occupied by this extremely local **Seseli.** The decline of the village has presumably reduced the threat from grazing or rock-clearance, but there is a modest amount of quarrying about a mile to the west, in connection with nearby road-improvement. My visit confirmed all that Hayek wrote about **S. vandasii** and that it should receive full recognition as a member of the genus **Seseli.**

M. SOUTHAM, 72 Fareham Road, GOSPORT, Hants PO13 0AG

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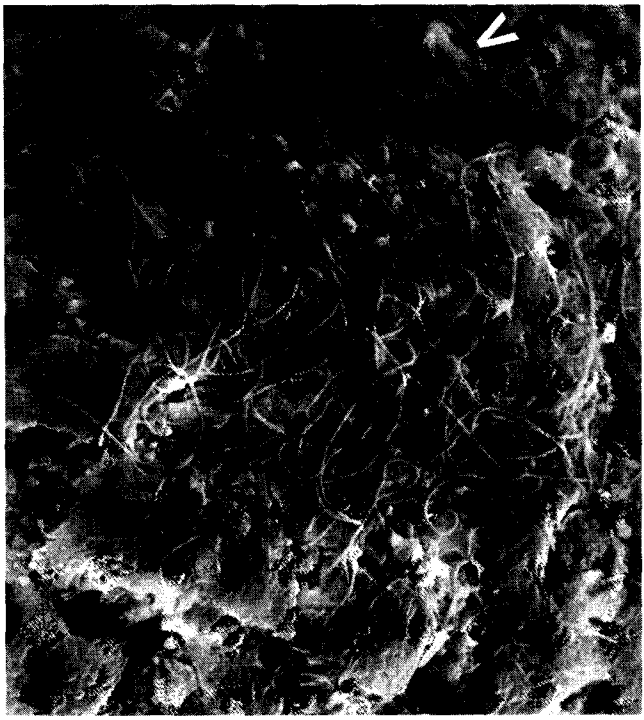
OCCURRENCE OF AZOLLA MEGASPORES IN PEAT-BASED GROWING MEDIUM

The exhibit on **Azolla** in Britain at the 1986 Annual Exhibition Meeting by members of Dr Keith Fowler's team at Portsmouth Polytechnic prompted me to put the following on record. Some years ago, while examining samples of soil and other growing media associated with imported plant material for cysts of plant-parasitic nematodes at the Ministry of Agriculture's Harpenden Laboratory, on at least two occasions I found unidentified objects of comparable size and general shape to **Heterodera** cysts. They were recovered with the latter and other organic debris on the filter paper at the final stage of the Fenwick flotation-extraction process. In both cases the material originated from the Netherlands and the later finding was from peat-based compost accompanying rose rootstocks.

The objects' identity baffled colleagues in several disciplines at the MAFF Laboratory and Rothamsted Experimental Station - we christened them 'mini-acorns' from their appearance under the stereo-microscope! Eventually, however, a Rothamsted colleague (Mr E. Ormerod) sent samples to a contact at the Royal Botanic Gardens, Kew where they were recognised by Dr Frances Davies (not a fern specialist) as megaspores of **Azolla.** The arrow-head shaped glochidium showing on one of the SEM micrographs gave her the clue (see p. 31). Fossil origin seemed possible because of the high peat content of the material in which the structures were found; Godwin (1956) had recorded **Azolla** spore material in Quaternary deposits. However neither A.C. Jermy (British Museum (Natural History)) nor Keith Fowler, whom I consulted, saw reason to rule out recent origin since **Azolla** spp. are common in the Netherlands (Pieterse et al. 1977), but they knew of no easy way to distinguish between recent (dried) and fossil specimens. Presence of recent **Azolla** spores would pre-suppose contamination from living **Azolla** plants of either the original peat, stored growing medium, or plants growing in the latter. Watering container-grown plants from a contaminated source, for example, could be a means of introducing spores and hence trade in such plants, a means of dispersal of **Azolla** spp.

Massulae (microspore clusters) were found adhering to some of the megaspores; microscopic examination showed that the glochidia were non-septate. This feature and the morphology of the megaspore apparatus agreed with descriptions of recent and fossil material of **A. filiculoides** Lam. (Fowler & Stennett-Willson 1978; Pieterse et al. 1977; West 1953), and Dr Fowler confirmed this identification from the SEM micrographs. In my material the float structures are almost invariably covered by the persistent indusium whereas published illustrations (including SEM) frequently show the floats exposed.

Peat (sphagnum and fen) is generally of post-glacial origin (Tansley 1939) whereas reports of fossil **Azolla** in Europe are from interglacial or earlier deposits. **Azolla** was re-introduced into Europe (Netherlands) in 1880. On balance my material seems most likely to be recent, but if anyone considers that they could settle the question I would be happy to send them the remaining six or so megaspore specimens.



Megaspore apparatus of **Azolla filiculoides** from peaty growing medium:
upper, entire (x140); lower, detail (x610), note detached glochidium (arrowed) among the sporoderm filaments. (SEM photos: Rothamsted Experimental Station)

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JOHN F. SOUTHEY, 4 Yeoman's Avenue, HARPENDEN, Herts. AL5 3EQ

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A LOCAL HERBARIUM FOR SALE

Maggs, the leading firm of antiquarian booksellers, were advertising in their Summer 1987 catalogue a small herbarium of specimens mainly from the Cockermouth district of Cumberland, v.c. 70, formed in 1891-1902 by a local draper by the name of W.H. Youdale. Although the collection was stated to run to no more than 175 sheets, the price being asked for it was £130. At almost a pound a sheet, this seems an incredible valuation to place on the handiwork of an obscure local collector which is clearly very far from fully representative of the flora of the area concerned. Unless it is quite remarkable considered purely as a work of art - which is not easy to believe (and which in any case one would have expected to be stressed in the catalogue) - one can only assume that the booksellers were completely at a loss to know how much to ask for an item of this character. For it must be many years now since herbaria, or at any rate British ones of a comparatively recent vintage, were being sold commercially and asking prices tested. At a time when the chief national museums are full to overflowing with British material and refusing any additional bequests, it is remarkable indeed that anyone should suppose that these are still marketable commodities. Let us hope that nobody is foolish enough to succumb - and that the collection is donated, as should surely have happened in the first place, to the local museum in which it rightfully belongs.

DAVID E. ALLEN, Lesney Cottage, Middle Road, WINCHESTER, Hants. SO22 5EJ

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HALIMIONE PEDUNCULATA (L.) Aellen 'SOMEWHERE IN ESSEX'

Members will be pleased to learn that, despite repeated indications to the contrary, **Halimione pedunculata** is not extinct in Britain. At the end of September it was discovered growing on a tiny patch of relict saltmarsh, behind a sea-wall 'somewhere in Essex'.

This is the first record of **H. pedunculata** in Britain for fifty years, and (surprisingly) the first ever for Essex. Details of the find will appear in a future issue of Watsonia.

SIMON LEACH, NCC, Northminster House, PETERBOROUGH, Cambs. PE1 1UA

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CONSERVATION OF MUSCARI ATLANTICUM Boiss. & Reuter IN SUFFOLK

In Perring & Farrell's British Red Data Book : 1, Vascular Plants, 2nd edition (1983), **Muscari atlanticum** is given a threat number of 8 and is considered 'Vulnerable'. Its stronghold in Britain is the Breckland of Suffolk, but here it has suffered from ploughing or conifer planting on its grassland habitats. However it occurs on five of the Suffolk Wildlife Trust's protected roadside verges, four of them in Breckland and one in East Suffolk.

Verges have to be cut once or twice a year to keep them in good condition for the plants being protected. If there are late flowering plants such as **Anacamptis** and **Calamintha**, cutting should be left until October. Verges with hay-meadow floras can be cut

in September when most species will have seeded. Our problem was when to cut a verge containing **Muscari atlanticum**, as we did not know when it sent up its leaves. Some cultivated species of **Muscari** come into leaf as early as August, whilst others produce their leaves with their flowers in spring. None of the Floras or other books I have consulted state when the leaves of **M. atlanticum** appear.

My friends, Mr & Mrs David Leonard, who live in Mildenhall, know the plant well, but did not know the answer to the problem. However, they did know a site where **M. atlanticum** grew, where it would be easy to observe as the plants were not, as is usually the case, growing in a dense sward of grass. They agreed to keep it under observation from June onwards, and discovered that the first leaves appeared during the second week of September and that by mid-October they were three inches long! So we now know that verges containing **Muscari atlanticum** should be cut not earlier than June or later than August.

EDGAR MILNE-REDHEAD, 43 Bear Street, Nayland, COLCHESTER, Essex CO6 4HX

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'THE BOTANISTS' : A POSTSCRIPT

Since The Botanists went to press one or two slips have come to light - none of them pointed out by reviewers yet, I am relieved to say - and one or two additional scraps of information have also come to hand. They seem worth putting on record, lest future readers or historians are misled.

p. 56 Taylors' Calendar of the Meetings of the Scientific Bodies of London for 1854-55, a copy of which survives in the British Library, shows the BSL as due to have meetings all through that winter, as usual, on various specified monthly dates. This seems powerful further evidence that the collapse in 1856 came out of the blue.

p. 69 'Gilbert' (as correctly on p. 204), not 'George', was J.G. Baker's middle name.

p. 74 It was not 'the elder James Backhouse' but William Backhouse whose herbarium was destroyed in the Thirsk fire (see the Naturalist (1864) 42). Dr Sledge has pointed out that the graphic description of the fire must surely be from the practised pen of Gertrude Foggitt, despite its appearance under her husband's name. "It has Gertrude's stamp all over it," he writes.

p. 125 Among the papers left by the late E.C. Wallace there is a cutting of P.M. Hall's obituary in the Estates Gazette of 30/8/1941. It credits him with strong convictions, impish humour, an acute sense of the ridiculous and infectious fun. With it, at last, is a close-up portrait.

p. 178, note 3 An Australian correspondent has established that the former Honorary Secretary, Chatterley, arrived in Australia in December 1854, as a ship's surgeon. He lived in Port Adelaide for four years before his early death.

p. 211 Hedger, George Frederick. I find that the list of subscribers to Gardiner's Flora of Forfarshire (1848) includes a "Mr George Hedger, Stepney'. This must surely be the BSL member. Though probably the identification can be taken no further, this makes it look unlikely that he is the chronometer maker, whose address at that time was in a quite different part of London.

p. 213 Knott, John. An obituary has been located in the South Australia Register in 1850, according to which he died from a fall from a horse while drunk. Portsea should be deleted as his first town of residence, as he proves to have been already on the boat to Australia by the date of his election.

p. 217 Rich, James Moore. The last name should be 'Monroe' (an overlooked typing slip).

p. 224 Through confusion in proof the superscript figure one was omitted after the names of Dr Akeroyd and Mr Wiggins.

Finally, one rather pleasing coincidence : John Akeroyd, appropriately for one of Watsonia's Editors, has realised that he was brought up in the very house, in a hamlet adjoining (Watson's) Thames Ditton, from which the BSL member, John Seeley botanized that neighbourhood in the 1830s - on the evidence of a specimen in Watson's herbarium at Kew. I think this beats my own discovery that one of the Shrewsbury members of the Society, Thomas Bodenham, lived next door to one of my great-great-grandfathers.

DAVID E. ALLEN, Lesney Cottage, Middle Road, WINCHESTER, Hants. SO22 5EJ

ALIENS AND ADVENTIVES

ADVENTIVE NEWS 37

compiled by Adrian L. Grenfell

MYAGRUM PERFOLIATUM L. IN CAMBRIDGESHIRE

Perhaps the most exciting record I have received in years refers to a single plant of the European crucifer **Myagrum perfoliatum** L. on a grain silo waste heap at Great Shelford, Cambs., where it was located by G.M.S. Easy in July 1987: Graham Easy's fine drawing appears on page 35. **Myagrum** retained its place in the second edition of C.T.W. (1962) (as did a number of other crucifers with even less claim to inclusion) although, at the time, it had only been recorded twice in Britain since 1930. Twenty three records were made in Britain up to and including 1928 but after this date, declining grain imports from the Mediterranean and the Middle East led to a substantial reduction in records; so much so that **Myagrum** was not recorded again until 1956 when the late J.E. Lousley had it on the Humberstone 'bird seed' tip. After 1963 it went unrecorded again for a further 24 years. It still occurs as a weed of arable in southern Europe but I suspect it is unknown to most botanists. Of the pre-1930 records, it is interesting to note that no less than six were made in the Bristol area. The post-1930 records are listed below. I am indebted to Messrs E.J. Clement and T.C.G. Rich for their help with this note.

Myagrum perfoliatum L. Post-1930, all records

1956	v.c.54	Rubbish tip, Humberstone, N. Lincs.	J.E. Lousley
1960	v.c.85	Harbour, Kirkaldy, Fife	G.H. Ballantyne
1963	v.c.54	Rubbish tip, Humberstone, N. Lincs.	R.C.L. & B.M. Howitt
1987	v.c.29	Grain silo, Great Shelford, Cambs.	G.M.S. Easy

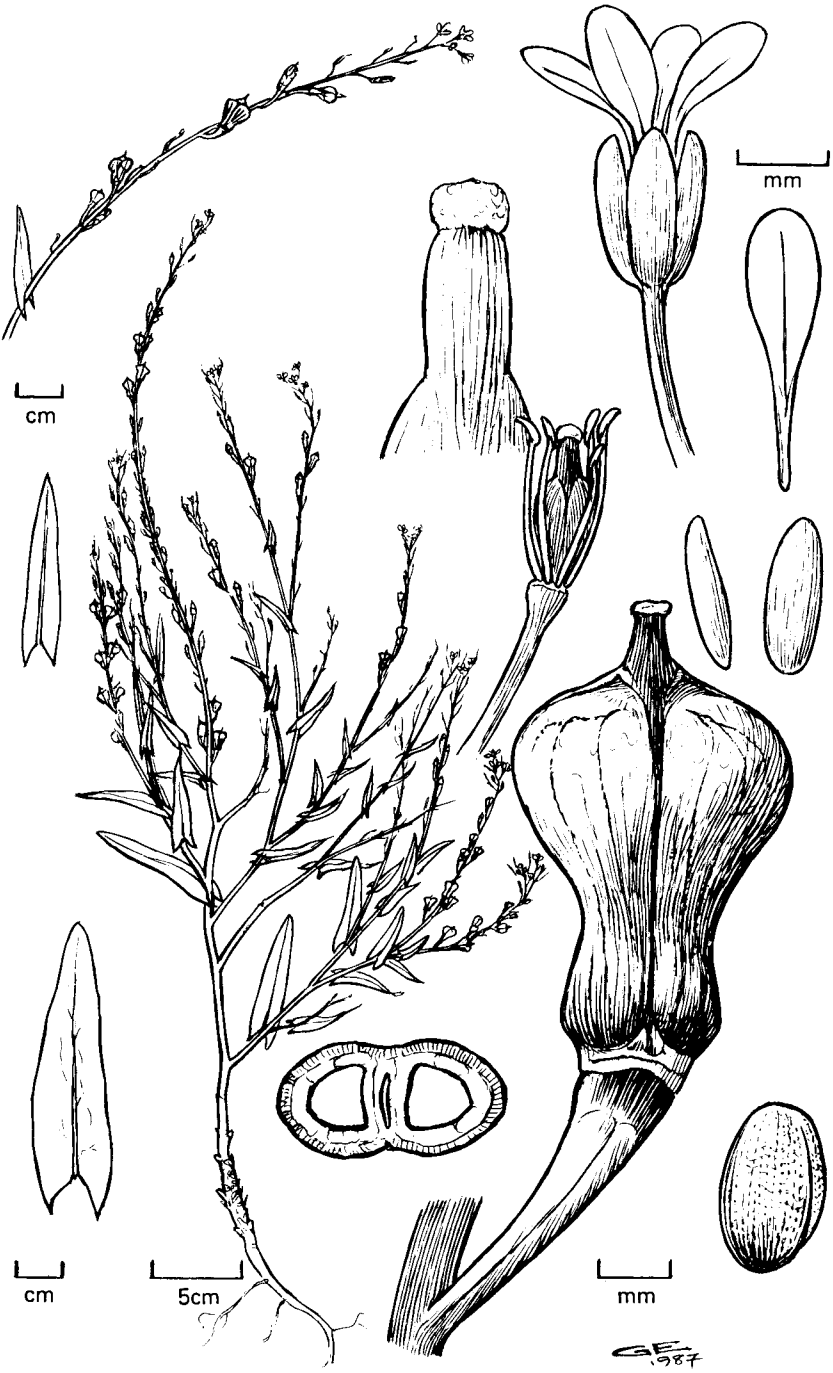
MORE ON WOOL ALIENS

That 1987 was a poor season for wool aliens in Bedfordshire was probably due more to the use of a range of specialist weedkillers than to the poor summer weather. The huge mats of **Xanthium ambrosioides** that have been such a feature of the shoddy field flora in recent years have sadly succumbed to this chemical onslaught and all but the Medicks and the abundant **Datura** is much reduced. Saturday, October 10th., the day of the writer's annual pilgrimage, with C.G. Hanson, to the shoddy fields was preceded by a day's rainfall measuring 34mm and followed by a further 12mm. Small wonder that the sandy fields were inundated and upwards of twenty roads were closed in Bedfordshire and neighbouring Hertfordshire due to flooding. The sole items of note were a few flowering plants of **Trifolium hirtum** and a single **Erodium malacoides**. The miserable and most unsuccessful day is humorously depicted on page 36 by artist Denis Palmer.

Further north in Yorkshire, however, not all was doom and gloom and a few interesting plants were noted in the Rothwell (Leeds) area. The pick of these was the African grass **Tragus berteronianum** Schult. (det. E.J. Clement) sent to me by Mrs F. Houseman together with **Carduus pycnocephalus** (long naturalised on Plymouth Hoe, Devon), **Vulpia bromoides**, **Chenopodium nitrariaceum** F. von Muell., det. A.L.G., a spiny shrub occurring throughout mainland Australia and **Chrysanthemum coronarium** L., very scarce as a wool alien.

BECKMANNIA SYZIGACHNE (Steud.) Fernald

This is the correct identity of the plants reported in Adventive News **32** (December 1985) as **B. eruciformis** (L.) Host from Avonmouth Docks, Bristol and elsewhere. In 1986 the Avonmouth populations, growing for the most part on dry, well-drained ground, were much reduced in size and this year no longer to be seen. However, a further extensive population was located in September 1987, growing in a wet area a 1/4 mile distant, by the writer and T.G. Evans. There can be little doubt that these plants have been present for several years and are more or less naturalised here. Flora Europaea **V** is clearly incorrect in describing **B. syzigachne** as an annual; at the very least it would appear to be a short-lived perennial, a view shared by other workers. It is separated from **B. eruciformis** on the number (one not two) of fertile florets and its very short anthers - c. 0.8mm compared with c. 1.8mm. **B. syzigachne** was illustrated by T.G. Evans in Adventive News **21** (December 1981).



Myagrum perfoliatum L. del. G.M.S. Easy © 1987

" Further outlook ..... continuing widespread and heavy rain"

SOYA WASTE ALIENS AT AVONMOUTH DOCKS

Soya bean waste imported from N. America was mainly responsible for the magnificent crop of aliens in the Avonmouth Docks in 1987. At least 9 **Amaranthus** species were noted viz:

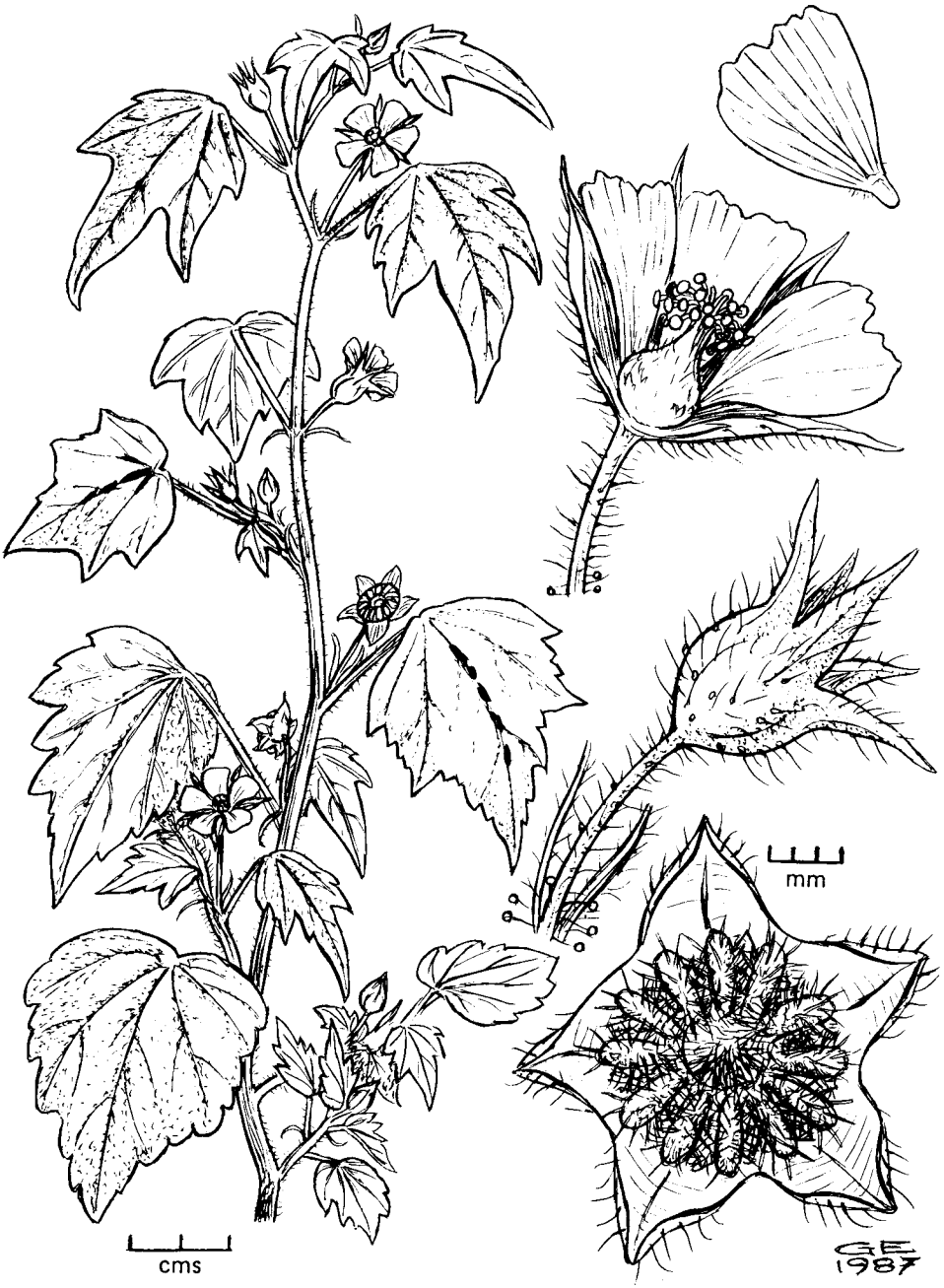
A. retroflexus	A. spinosus	A. tricolor
A. hybridus	A. blitoides	A. viridis
A. albus	A. cruentus	A. palmeri

The latter, one of the N. American dioecious species, was represented by several very fine specimens of the male-flowered form with racemes up to 250mm or more in length. **A. spinosus**, an Oriental species, is widely naturalised in the U.S.A. and apparently increasing as a casual in Britain.

Our front cover is adorned by Graham Easy's fine drawing of **Sida spinosa** L., a tropical malvaceous herb or small shrub (not of N. American origin as stated in Adventive News **26** (December 1983), although widely naturalized there). Many hundreds of plants and seedlings were conspicuous over a wide area of the docks. **S. spinosa** has very small pale orange flowers in dense clusters in the leaf axils: its specific epithet derives from the rudimentary spiny processes beneath each leaf.

Graham Easy also provides the illustration of **Anoda cristata** (L.) Schlectend. (page 37), a polymorphic New World annual (or sometimes perennial) malvaceous herb occasionally cultivated as an annual in Britain. The weedy form has smaller flowers than its garden counterpart and is usually referred to under var. **brachyantha** (Reichb.) Hochr. This rare casual has also lain unidentified in Graham Easy's herbarium since October 1976 when it was collected at the Thriplow tip, S. Cambs. (det. A.L.G.).

Seedlings of a ?**Cassia** species were amongst many collected for growing on by C.G. Hanson who also located a single, poorly seedling of the tropical pea, **Sesbania exaltata** (Raf.) Rydb. ex A.W. Hill. Two Morning Glories were present, namely **Ipomoea purpurea** and **I. lacunosa**, but, as is usual in October, seemed reluctant to flower. The Broadleaf Signalgrass, **Brachiaria platyphylla** (Griseb.) Nash, was present in some quantity but only one solitary inflorescence, partly opened, was found before the first of the autumn frosts. A native of the Americas, it is naturalized in tropical Africa. Of particular interest was the presence of many plants of European **Spergula arvensis**, widely naturalized in the U.S.A. and here re-introduced with the soya waste.



Anoda cristata (L.) Schlectend. var. *brachyantha* (Reichb.) Hochr.
del. G.M.S. Easy © 1987

Thank you all once again for your interesting records and specimens. I hope to present many of these in a delayed bumper Mixed Bag next issue. SAE please for my printed 5" x 3" record slips which are so invaluable for filing purposes.

ADRIAN L. GRENFELL, 19 Station Road, Winterbourne Down, BRISTOL BS17 1EP

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NOTICES (BSBI)

TAXONOMIC WORKSHOP/RECORDERS' MEETING
DEPT. OF BOTANY, UNIVERSITY OF LEICESTER
Friday 2nd September - Sunday 4th September 1988

A workshop will be held on a number (possibly 5 or 6) of difficult groups, probably including **Festuca, Rosa, Mentha** and **Juncus,** each with a specialist as tutor. Most of the work will take place in the laboratories, where the appropriate equipment, especially dissecting microscopes, will be available. It will be based on fresh and herbarium material, and one half-day trip will be held.

The only qualification needed for attendance is a desire to become more accurate at making identifications! Workshops have been held previously by the BSBI, but mostly as part of Recorders' Meetings, which have not been fully open to all members. I think workshops are an excellent way of learning in a friendly and co-operative atmosphere, and am anxious that the Leicester Meeting should be equally open to all, whether recorders or not. The Leicester Meeting will also serve as the biennial Recorders' Meeting. There will be a lecture on a theme to be decided by Records Committee, as well as a discussion period for those interested in BSBI recording.

Accommodation will be in a University Hall of Residence close to the 16-acre Botanic Gardens, where material relevant to some of the workshops will be seen growing.

Accommodation will be arranged for Friday and Saturday evenings. Costs will be £24.44 for full board (B & B, packed lunch, 4-course dinner; tea- and coffee-making facilities in rooms, which are provided with wash-basins, towel and soap), £20.41 B & B plus evening meal (room facilities as above) or £13.57 B & B (room facilities as above). Prices include VAT. There will be a small booking fee.

Please apply for details and booking form as soon as possible. Firm bookings will be required by 27th May 1988.

CLIVE STACE, Dept. of Botany, University of Leicester, University Road, LEICESTER LE1 7RH

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HEATHERS AND HEATHLAND

A Symposium 'Heathers and Heathland', organised jointly with the Linnean Society of London, to celebrate the bicentenary of that Society, will be held in the Meeting Room of the Linnean Society, Burlington House, Piccadilly, London on Thursday October 20th 1988 from 11.00 - 18.00.

A programme and further details will be sent to all members with the April mailing of BSBI News.

MARY BRIGGS, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG

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THE COMMON GROUND OF WILD AND CULTIVATED PLANTS

This Conference, planned for Glasgow, July 15th - 22nd 1988 (see BSBI News **46**: 32 (1987)) has unfortunately had to be cancelled.

EDITOR

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NOTICES (OTHERS)

EUROPEAN FLORISTIC STUDIES

An International Symposium, 12th-15th July, 1988

A conference is being organised under the auspices of The Systematics Association, the Linnean Society of London and the Flora Europaea Organisation, to take place at the University of Reading from July 12th-15th 1988, that may be of interest to BSBI members.

The publication of Flora Europaea (1964-80) provided a synthetic, continental view of Europe's vascular plants. Its publication stimulated and initiated much new research on the flora of Europe and adjacent parts of the Mediterranean region, and a number of floristic projects and major European taxonomic revisions are in progress or have recently been completed. The first volume of Flora Europaea is now being revised, which makes this an appropriate time to review the current state of knowledge of the European flora.

It is hoped that this meeting will bring together workers in different areas of taxonomy, ecology, plant geography and biosystematics.

Topics covered by speakers will include Quaternary history of the European flora, pollen Floras, the flora of temporary pools, the flora of serpentine, adventive species, monographic studies (e.g. **Papaver, Moehringia, Taraxacum** and **Allium**), and progress reports on European floristic projects. There will be field excursions to a number of sites in southern England, including a full-day excursion on 15th July 1988. Posters are invited on any aspect of the European flora.

Further details are available from the convener :

JOHN R. AKEROYD, Dept. of Botany, Plant Science Laboratories, University of Reading, P.O. Box 221, Whiteknights, READING RG6 2AS

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ORCHID CONSERVATION

Barbara Everard, a member well known to many through her botanical paintings and wallcharts, particularly of endangered wild flowers around the world, has founded 'The Barbara Everard Trust for Orchid Conservation'. Although this is not for wild orchids but for greenhouse plants, it aims to protect orchids in the wild by ensuring the conservation of stocks in cultivation so that growers no longer collect from the wild. With the co-operation of Kew and Wisley, some valuable collections of orchids have already been rescued.

Further details of the Trust may be obtained from Mr David Forsberg, 56 Robyns Way , SEVENOAKS, Kent TN13 3EE (please send s.a.e).

Four orchid notelets with Barbara Everard's paintings of **Paphiopedilum barbatum, P. fairiieanum, Dendrobium thyrsiflorum** and **Pleione formosana,** are also available from the above address for £1.25 (incl. p.& p.).

MARY BRIGGS, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG

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A HOLIDAY IN SWEDEN

Thursday 30th June - Wednesday 13th July 1988

The Bicentenary of The Linnean Society of London takes place in 1988 and two holidays to Sweden have been arranged as part of the celebrations. One, "In the Footsteps of Linnaeus in Lappland" led by Dr John Packham was announced in BSBI News **46**: 35 (1987), and the second (the subject of this note) will be to Uppsala, Stockholm and the Island of Gotland. The Linnean Society has pleasure in inviting members of the BSBI to join either or both of them.

The southern holiday will start from Heathrow on 30th June 1988, with three nights in Uppsala to visit Linnaeus's house and garden in the town, the Cathedral where he is buried, the Carolina Rediviva Library, parts of the University and, of course, Hammarby. We then move to Stockholm for four nights and will be shown round the Swedish Royal Academy of Sciences - Linnaeus was the first president - the Bergius Botanic Garden, the

eighteenth century theatre at Drottningholm and the Royal Library, where Queen Louisa Ulrika's personal collection of shells, insects and other biological collections are housed and which were curated for her by Linnaeus (this is not normally open to the public). There will be time for other sight-seeing in Stockholm as well.

From Stockholm we go to the Island of Gotland and will be escorted by Professor Bengt Jonsell, FLS who will guide us to see some of the scenery, geology, treasures from the medieval churches and the botanical extravaganza of this largely limestone island.

Sweden is an expensive country and the overall cost is likely to be in the region of £1,050. This will cover Apex flights, the journey to and from Gotland, travel in our own coach when the whole party is on the move, bed and breakfast in Uppsala (plus dinner on the night of arrival), Stockholm and Visby and full board at the Borgvik Pensionat; twin-bedded rooms will be used (the single room supplement will be at least £165). Appetites and palates are as variable as the restaurants, bars and venues for picnics, so lunches and dinners will not be included in the package unless specified in the detailed itinerary which will be provided for those taking part in the holiday.

I shall be glad to hear soon from BSBI members, accompanied or not by spouses or friends, who think they might like to join the holiday.

MISS ELIZABETH YOUNG, 19 Elm Park Lane, LONDON SW3 6DD

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FRITILLARY MEADOW, FRAMSDEN - OPEN DAYS

The 1988 Open Days at Fox Fritillary Meadow, Framsden will be held on:
Saturday 30th April, 2.00pm - 5.00pm
Sunday 1st May, 11.00am - 5.00pm
This reserve, noted for its huge numbers of Snake's-head fritillary (**Fritillaria meleagris**) is at Boundary Farm, Framsden, alongside the A1120 road from Stowmarket to Yoxford (map ref. TM/186608).

NB. No visiting will be possible other than at the times shown above.

PETER LAWSON. Conservation Assistant, The Suffolk Trust for Conservation Ltd., Park Cottage, SAXMUNDHAM, Suffolk IP17 1DQ

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HIGHLAND FIELD STUDIES - 1988

Brian Brookes has again put together an interesting and varied programme of courses for 1988. Some are specifically botanical and several others, though more general, have a high botanical content. All will be run as small, friendly groups in a relaxed, informal and enjoyable atmosphere.

Specially recommended to BSBI members are the courses on 'Botany in Morvern' led by Franklyn Perring (July 23-30) and 'Ferns and Mosses' led by Clive Jermy & Brian Brookes (August 20-27), both courses based at Ardtornish, Argyll.

The full programme and details of any particular course are available from the address below. All enquiries are welcomed (sae appreciated).

BRIAN BROOKES, Smithy Cottage, Snaigow, Dunkeld, Perthshire PH8 0RD (tel. 073871-374).

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FIELD STUDIES COUNCIL
1988 COURSES

An Information Pack, Courses For All - Information 1988, giving details of all the courses at the nine residential Centers of the Field Studies Council is now available. Members who would like a copy are invited to write to the address below, a first-class stamp towards the cost of return postage would be appreciated.

The Directors Office, Field Studies Council, Preston Montford, SHREWSBURY SY4 1HW

NOTICE FOR TRAVELLERS

Cox & Kings has moved - their new address is :
Cox & Kings Travel Ltd., St James Court, Buckingham Gate, LONDON SW1E 6AF (tel. 01-931-9108)

Their botanical tours in 1988 led by BSBI members will be to :

COUNTRY	DATE	LEADER
Cyprus	9 - 20 March	Mary Briggs
Crete	25 March - 8 April	Mary Briggs
Turkey	18 April - 2 May	Mary Briggs
Gargano, S. Italy	24 April - 3 May	Tony Kemp
Wengen	16 - 30 June	Mary Briggs
Wengen	4 - 18 July	Mary Briggs
Kashmir	9 - 25 July	Peter Jepson
W. Australia	17 Sept. - 6 Oct.	Mary Briggs

MARY BRIGGS, White Cottage, Slinfold, HORSHAM, West Sussex RH13 7RG

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EXPEDITIONS OVERSEAS

Frank Perring will be leading two expeditions overseas in 1988 :
19th-26th April : Crete, a two centre holiday based on Iraklion and Canea.
Contact : Mrs A. Cryer, British Wildlife Appeal, Dudwick House, Buxton, NORWICH NR10 5HX for details.

18th September-4th October : Bhutan, a cultural and botanical visit including a 4-day trek in the mountains.
Contact : Occidor, 10 Broomcroft Road, BOGNOR REGIS, West Sussex, PO22 7NJ for details

FRANK PERRING, 24 Glapthorn Road, OUNDLE, Peterborough PE8 4JQ

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BRITISH BRYOLOGICAL SOCIETY MEETINGS - 1988

April 6-13th. Spring field meeting, Cirencester, Gloucestershire.

Dr M.E. NEWTON, Dept. Botany, The University, MANCHESTER M13 9PL

BSBI members would be most welcome at this meeting.

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PLANTS TODAY

You will all have received by now a leaflet announcing and describing a new bimonthly popular magazine for botanists, called Plants Today. The BSBI is one of three societies who are co-operating on this venture with the publisher Blackwell, and it is important that your views regarding the content of the magazine are brought to the attention of its editors. So if you have any comments on what is published or what you would like to see published (bearing in mind the general policy described in the leaflet), please let either myself or Dr Stephen Jury know.

RICHARD GORNALL, Botany Dept., The University, LEICESTER LE1 7RH

[Stephen Jury's address is Dept. of Botany, Plant Science Laboratories, University of Reading, P.O. Box 221, Whiteknights, READING RG6 2AS. Ed.]

REQUESTS AND OFFERS

AFFORESTATION AND PLANT DISTRIBUTION

In August this year I circulated a letter to Recorders in a number of vice-counties, principally those in upland Britain, asking for information (both formal and anecdotal) on the impacts of afforestation on plant species and community distribution. I should like now to cast the net wider and invite comment from all interested members.

In order to study the effects of afforestation I am seeking information of two types:

1. Existing records - pre-plantation species lists for sites now afforested, or anecdotes about species that have disappeared, declined, increased or have been introduced as a result of afforestation would be particularly useful. Please send any records or information directly to me at the address below. I can copy and return any originals if requested.
2. Monitoring Scheme - it would help if separate records could be made on habitat cards for the afforested parts of JAW tetrads (however tedious they might appear!). Cards should be sent to Tim Rich in the usual way.

I am mainly concerned with areas of formerly open habitats that now carry plantations of exotic species, but any information on the general influences of forestry on plant and community distribution would be most welcome.

May I take this opportunity to thank those Recorders who have replied to my August letter, and to wish you all well for the next Monitoring Scheme season.

ALAN HOUSE, NCC, Northminster House, PETERBOROUGH PE1 1UA

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CULTIVATION OF RARE BRITISH PLANTS

As a horticulturalist and BSBI member I am interested in the cultivation of rare British plants. I understand that some Botanists disapprove of certain species being brought into cultivation even if this is done legally and without obvious threat to the existing population in the wild. May I canvas the opinion of BSBI members on this issue? I would also like to hear from members who know of rarer or more unusual British natives, members of the family **Orobanchaceae** or **Botrychium lunaria**, in cultivation other than in Botanic Gardens.

MARTIN CRAGG-BARBER, 1 Station Cottages, Hullavington, CHIPPENHAM, Wilts SN14 6ET

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BURREN BOTANIC GARDEN, BALLYVAUGHAN

(NB. BSBI members of a nervous disposition should not read this.)

Patrick B. O'Kelly was a big man, well-educated, and the fortunate denizen of a house just outside the hamlet of Ballyvaughan in County Clare on the shores of Galway Bay. The shell of his house still stands and some of his plants thrive there, although neglected.

No, this is not an announcement about future plans for that site but a request for help from fellow BSBI members in tracing manuscripts and nursery catalogues relating to Patrick B. O'Kelly who flourished (as they say) between 1890 and 1910.

O'Kelly was a plant collector; he removed living plants from the Burren and sold them in quantity to English gardeners; for his services to European orchids, George Claridge Druce named **Orchis okellyi** (now **Dactylorhiza fuchsii** subsp. **okellyi**) after him. I have copies of invoices detailing the plants sent to one English garden for the year 1905 alone - several hundred native species were exported while in flower from Ballyvaughan, from O'Kelly's emporium. He advertised as 'Burren Nurseries and Botanic Garden'.

O'Kelly published a series of 'nursery' catalogues, proclaiming that the Burren plants - spring gentian, mountain avens etc. - were 'gems of the first water'. But... I have been able to trace only two of these catalogues; one is a folded 4-page sheet, and the second is a more substantial 32-page booklet. At least two other catalogues were produced and these are the items I seek - O'Kelly's catalogues of British ferns (for sale! 1042 species

and varieties!! I jest not!) and of Burren plants (for sale!). If anyone knows of the whereabouts of copies of these printed ephemera I would be delighted to hear from them, and I would also be pleased to learn of letters from P.B. O'Kelly in botanical or horticultural archives. An account of O'Kelly is in preparation.

E. CHARLES NELSON, National Botanic Gardens, GLASNEVIN, Dublin 9.

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BOOK NOTES

In the January 1988 part of *Watsonia*, **17**(1), reviews of the following books will be included:

The Ancient Woodland of England: the Woods of South-east Essex, by O. Rackham.
Flora of Surrey. Checklist and Supplement, by A. Leslie.
George William Francis, First Director of the Adelaide Botanic Garden, by B.J. Best.
The Royal Botanic Gardens, Sydney. A History 1816-1985, by L. Gilbert.
Systematic and Taxonomic Approaches to Palaeobotany, edited by R.A. Spicer & B.A. Thomas.
The Botanists: a History of the Botanical Society of the British Isles through a Hundred and Fifty Years, by D.E. Allen.
Pollen and Spores: Form and Function, edited by S. Blackmore & I. K. Ferguson.
Britain's Natural Heritage: Reading our Countryside's Past, by P. Colebourn & R. Gibbons.
Guide to the Botanical Gardens of Britain, by M. Young.
Aquatic Plants. A Guide to Recognition, by D. Spencer Jones & M. Wade.
Plants in Danger: What do We Know?, by S.D. Davis *et al.*
Provisional Keys to British Plant Galls, edited by F.B. Stubbs.
Flora of the British Isles, by A.R. Clapham, T.G. Tutin & D.M. Moore.
The Correspondence of Charles Darwin, Vol. 2, 1837-1843, edited by F. Burkhardt & S. Smith.
A New Key to Wild Flowers, by J. Hayward.
Wildflowers in Danger, by J. Fisher.
Chorology of the Flora of Catalan Countries, by O. de Bolos.
Med-Checklist, 3. Dicotyledones (Convolvulaceae-Labiatae), edited by W. Greuter, H.M. Burdet & G. Long.
Modern Aspects of Species, edited by K. Iwatsuki, P. Raven & W.J. Bock.
Seed Identification Handbook, by R.J. Flood & G.C. Gates.
The Englishman's Flora, by G. Grigson with foreword by J. Grigson and introduction by W.T. Stearn.

The following books have been received recently. Those that will NOT be reviewed in *Watsonia* are marked with an asterisk:

The Bird of Time, by N.W. Moore.
Collins New Generation Guide, Wild Flowers, by A. Fitter.
The National Trust Book of Wild Flower Gardening, by J. Stevens.
Pasture Woodlands in Lowland Britain, by P.T. Harding & F. Rose.
Biosystematics in the Nordic Flora, edited by B. & L. Jonsell.
Molecules and Morphology in Evolution, edited by C. Patterson.
The Brightest Jewel. A History of the National Botanic Gardens, Glasnevin, Dublin, by E.C. Nelson & E.M. McCracken.
Coevolution and Systematics, edited by A.R. Stone & D.L. Hawksworth.
A Checklist of Mycorrhiza in the British Flora, by J.L. Harley & E.L. Harley.
Planting a Bible Garden, by F.N. Hepper.
Atlas Florae Europaeae (Caryophyllaceae: Silenoideae), by J. Jalas & J. Suominen.
River Plants in Western Europe, by S.M. Haslam.
The Euphorbiales, edited by S.L. Jury *et al.*
The Natural History of the Chew Valley, edited by R. Janes.
Jupiter Botanicus, by D.J. Mabberley.
The Origins of the Angiosperms and their Biological Consequences, edited by E.M. Friis, W.G. Chaloner & P.R. Crane.
Biogeographical Evolution of the Malay Archipelago, edited by J. Whitmore.
Mordecai Cubitt Cooke, by M.P. English.

The Plant Book, by D.J. Mabberley.

The Flowering Plants and Ferns of North Lancashire, by L. & P.D. Livermore.

The Rowan and its Relatives (*Sorbus *spp.)*, by H.A. McAllister. Pp. 14, with 10 colour photographs, a diagram and a separate key. Ness Series I. Ness Gardens (University of Liverpool Botanic Gardens), Ness, Neston, South Wirral L64 4AY. 1986. Obtainable from Ness Gardens, price £1.30 incl. postage. This useful booklet contains a short treatise on **Sorbus sect. **Aucuparia**, the pinnate-leaved species, both in the wild and in cultivation, and a separate 4-page key to species, hybrids, cultivars, etc. of that section; it also includes data on the other five sections of the genus. The treatment of the British native apomict Sorbi will be particularly interesting to BSBI members.

**Index Kewensis - Supplements XVII (1976-1980 & XVIII (1981-1985)*, both edited by R.A. Davies. Clarendon Press, Oxford. 1987. Price £75.00 each (ISBN 0-19-854532-0 and 0-19-854533-9 respectively). These volumes are in the usual I.K. format, and bring the work almost up to date.

**Kew Index for 1986*, compiled by R.A. Davies & K.M. Lloyd. Pp. 195. Clarendon Press, Oxford. 1987. Price £15.00 (ISBN 0-19-854227-5). This is the first of a series of annual indices of new names. The text follows the *Index Kewensis* format, but it includes names of Pteridophytes and the page size is smaller (23.5x15cm). It is intended that entries will be brought together to form further Supplements of *Index Kewensis* (every five years) and *Index Filicum*.

Encyclopedia of Indian Natural History*, general editor R.E. Hawkins. Pp. xii + 620, with 40 colour or b & w plates and numerous b & w photos and line drawings. Oxford University Press, Oxford. 1987. Price £25.00 (ISBN 0-19-561623-5). This fascinating compilation of information on Indian natural history, which contains data about not only plants and animals, but also geomorphology, physiography and meteorology, provides an almost inexhaustible source of facts. But what readership does it aim to satisfy? The entries are all under common names (e.g. Queen's Crape Myrtle, Rosewood, Poon; not respectively **Lagerstroemia indica, Dalbergia latifolia, Calophyllum inophyllum). Unusually for an encyclopedia, however, there is an index, which gives most of but not all the Latin names (e.g. **Dalbergia latifolia** is missing); and some longer entries (e.g. Forest types) include numerous lists of organisms under their Latin names only.

**High Altitude Tropical Biogeography*, edited by F. Vuilleumier & M. Monasterio. Pp. xii + 649, with numerous diagrams, maps and tables. Oxford University Press, Oxford. 1987. Price £85.00 (ISBN 0-19-503625-5). This major work on the distribution of plants and animals in tropical mountain regions includes important contributions by several authorities on parts of these regions, where many British genera (and even some species) are to be found (e.g. Hedberg on Afroalpine flora, Steyermark on the Venezuelan tepui flora). The comprehensive coverage of the subject can be seen from the main sectional headings:- The Climatic Background, Adaptations, Historical Development of Biota, Diversification and Adaptive Evolution, Origins of Selected Floras and Faunas. Although America perhaps receives more than its fair share of attention, Africa and Asia are well covered too.

**A Concise Guide to the Flowers of Britain and Europe*, by O. Polunin (1972).

**Flowers of Greece and the Balkans*, by O. Polunin (1980). Both these works have been re-issued in paperback by Oxford University Press, 1987. Prices respectively £6.95 (ISBN 0-19-217630-7) and £12.95 (ISBN 0-19-281998-4).

**The Malayan Archipelago*, by A.R. Wallace (1869).

**Wanderings in the Great Forests of Borneo*, by O. Beccari (1904). Both these classic works have been reproduced by Oxford University Press, 1987. Prices respectively £27.50 (ISBN 0-19-582694-9) and £20.00 (ISBN 0-19-582693-0).

**The Gardener's Illustrated Encyclopedia of Trees & Shrubs*, by B. Davis. Pp. 256, with numerous colour photographs and diagrams. Penguin Books Ltd., Harmsworth, Middlesex. 1987. Price £14.95 (ISBN 0-670-81237-4). This encyclopedia gives family, country of origin, horticultural use, description, varieties of horticultural interest and various other horticultural data for each of over 2000 trees and shrubs. A useful feature is an estimate of the average height and spread at five, ten and twenty years.

NORMAN K.B. ROBSON, Dept. of Botany, British Museum (Natural History), Cromwell Road, LONDON SW7 5BD

NEWS FROM OUNDLE BOOKS

I am pleased to report that a stock of that excellent publication Planting Native Trees and Shrubs by Kenneth & Gillian Beckett (1975) has been found, so it is back on my list at the old price of £2.50 including postage (as are all other prices mentioned here).

Also in stock are :

Plants in Danger What do We Know?, by S.D. Davis et al., IUCN, 1986, £16.00

Fragments of Paradise, by Sara Oldfield. A guide for Conservation action in the UK dependent territories, BANK & WWF, 1987, £8.50.

The Ancient Woodland of England: The Woods of South-east Essex, by Oliver Rackham, 1986, £6.75.

The Heritage of Clonmacnoise, ed. Mary Tubridy, 1987. The history, natural history and landuse of part of the Shannan Basin. £6.75.

Seed Identification Handbooks, NIAB, 1986. Colour photographs and brief descriptions of 180 species found as impurities in crops. £7.75.

x10 and x20 lenses at £6.00.

The Vegetative Key to Wild Flowers, by F. Rose, 1983, £1.50.

Supplement to Flora of Wiltshire, by L.F. Stearn, 1975, £5.00

Referring to page 37 of BSBI News **46**, the checklist for Crete is £11.00 and those for Spain £46.00 (3 volumes).

There are some errors in my Autumn 1987 Book List which should not have slipped through.

Shaping of Cambridge Botany, £25 not £15.

Flowers of Europe, in print not reprinting.

Conference Report number 1 is in print.

Conference Report number 19 was not published in 1986.

Changes in Price

The Wild Flowers of Britain and Northern Europe, by R. Fitter et.al., £6.50 not £5.50.

A Lateral Key to Common Grasses, by C.A. Sinker, £2.30 not £1.75.

x8 and x15 lenses, £8.00 not £6.50.

Out of Print

Wild Orchids of Berks, Bucks and Oxon, by David Steel and Peter Creed.

The Names of Plants, by D. Gledhill.

Creating Attractive Grasslands Using Native Plant Species, by Terry Wells et al.

Flora of Staffordshire, by E.S. Edees.

Introduction to British Lichens, by Ursula K. Duncan.

The Wild Flower Key, by F. Rose.

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

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THE LIZARD FLORA - PUBLICATION DELAYED

The publisher regrets delay to The Difficult and Critical Plants of the Lizard District of Cornwall - this book will not now be available until January 1988 - and apologises to all subscribers.

ADRIAN L. GRENFELL, 19 Station Road, Winterbourne Down, Bristol BS17 1EP

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SUPPLEMENT TO 'THE WILD FLOWERS OF GUERNSEY'

The Wild Flowers of Guernsey by David McClintock was published in 1975 and inevitably there have been many changes in the Island's flora since then.

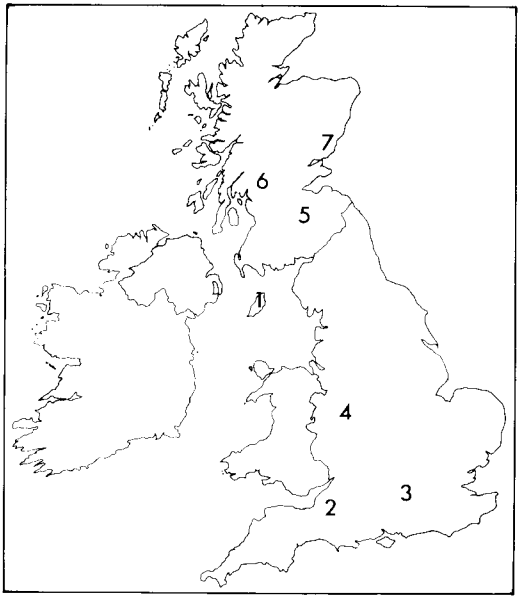
The new Supplement, also by David McClintock, which should preferably be read in conjunction with the original volume, is 54 pages long, and adds about 80 new taxa to the Island's tally, as well as containing fresh historical information, new localities and the updating of nomenclature. It costs £4.25 (incl. p&p) and is available from the address below and also from BSBI Publications.

La Societe Guernesiaise, Candie Gardens, St Peter Port, Guernsey, C.I.

REPORTS OF FIELD MEETINGS, 1987

Reports of Field Meetings are edited by, and should be sent to, Dr B.S. Rushton, Biology Department, The University, COLERAINE, Co. Londonderry, N. Ireland.

The map shows the approximate locality of the field meetings reported below.



ENGLAND

1. ISLE OF MAN. 12th-19th JUNE

To those who believe that botany all points west of Manchester is best carried out sheltering in doorways and running out to make snatch raids between showers, the Isle of Man weather was glorious.

All who know the leader, Larch Garrad, will not be surprised to know that Day One was deemed a rest day! Following a whistle-stop tour of the Cregneish Folk Museum a coastal area known as the Chasms was visited. Plants seen included **Scilla verna, Jasione montana, Ulex gallii** and **Ophioglossum vulgatum.** For many, the highlight here was not to be found on the ground but in the airborne antics of the resident Choughs. A quick stop at Bradda to view **Inula helenium** then on to Fleshwick Bay for **Samolus valerandi** and **Osmunda regalis** on the slate cliffs before making for the limestone of Balladoole and Poyll Vaaish Bay. Plants seen here included **Carex muricata, Cerastium arvense** and **Limonium binervosum.**

The following day was a free day when the less energetic members of the party successfully found **Salix herbacea** on the summit of Snaefell, the island's highest point. The descent proved as effortless as the ascent, thanks to the courtesy of the Isle of Man Mountain Railway.

Day Four was spent in the north. The BSBI crucible expert, Tim Rich was amazed to see **Rhynchosinapis monensis** growing as a hedge bank component near Lhen Bridge. The very rare **Rorippa palustris** proved to be totally elusive at Llaggagh Mooar; **Peucedanum ostruthium** provided a worthy consolation prize. Lunchtime saw us at The Ayres, a vast area of sand-dunes over shingle and wet slacks. Plants seen included **Ornithogalum umbellatum, Dactylorhiza incarnata, Viola canina, Parnassia palustris** (a monitored introduction experiment) and **Eleocharis quinqueflora.**

The last locality of the day was Ramsey which proved to be an unlikely combination of the old and the new. The old because this was Ray's classic site for the Isle of Man Cabbage, **Rhynchosinapis monensis** and the new because the author found **Vulpia fasciculata,** a plant which David Allen had predicted in his recent Flora would eventually turn up on the Manx record books. Owing to a confusion, two separate parties then visited two

different **Mentha pulegium** colonies of Man's four!

Those with a taste for small boats headed for the Calf of Man the following day where some members took to seal watching whilst our intrepid botanists found **Erodium maritimum, Spergularia rupicola** and **Hypericum elodes.** The Manx sheep provoked great interest from the botanists as did the botanists from the sheep.

Nothing could have proved so different from the Calf than the next days outings. The Ballaugh Curroughs is a vast, largely impenetrable area of willow carr. The going was hard and wet but it was most rewarding to see huge stands of **Osmunda regalis** and a large area of **Pyrola media** seemingly a recent arrival to the island.

The final day's botanising saw the team back on the limestone in the south of the island. The threatened Billown Quarry contains the only **Ophrys apifera** and homage was paid to this before continuing to Scarlett on the coast. Notable species here included **Astragalus danicus, Samolus valerandi** and **Juncus gerardi** whilst on the opposite side of Castletown Bay on the Langness peninsula a large quantity of **Astragalus danicus** was found. Margaret Silcocks spotted **Artemisia maritima** (only a second locality for the Isle of Man this century) growing amongst concealing grey lichens, **Crithmum maritimum** and **Asplenium marinum** on an island outcrop.

At the end of the most excellent weeks botany, Larch and her able assistant, Marjorie Devereau, entertained the whole party to a farewell meal in a local hotel.

M. KITCHEN

2. SOMERTON, SOMERSET. 11th-12th JULY

On Saturday morning 31 members assembled to search West Moor, Kingsbury Episcopi for Pondweeds and other interesting aquatics. This is an area of pasture and willow holts not more than 6m above sea level, where field boundaries are marked by fenny ditches and drainage channels (rhines or reenes), with communications along droves (tracks with ditches on both sides). The water surface had a mainly closed cover of Frog-bit (**Hydrocharis morsus-ranae**) and duckweeds (including **Wolffia arrhiza** in small quantity) and under this we found plenty of **Potamogeton trichoides.** A little **P. berchtoldii, P. crispus, P. natans** and **P. pectinatus** was also found. Emergent species included **Sium latifolium, Oenanthe aquatica, Butomus umbellatus** and **Scirpus maritimus** which occurs a long way inland in Somerset. On one drove there was a fine stand of **Thalictrum flavum.** In the afternoon the party moved on to South Moor, Drayton, an area which has been largely drained by pumping into the River Isle which borders it but is confined behind high banks. In the river were **Potamogeton perfoliatus, P. lucens** and **Oenanthe fluviatilis.** The moor ditches had a similar flora to that already seen but a plant fished out of one ditch proved to be **Zannichellia palustris** which had not been reported in the area for many years. On the river bank was an abundance of **Torilis nodosa** and some **Petroselinum segetum.**

On Sunday morning we met by Southlake Moor, Othery, and admired some fine old **Populus nigra** trees before going on to the Moor. This is an area of pasture adjoining the River Parrett which is quite often completely flooded in winter and after heavy rainfall. Some of the ditches have marshy margins so, in addition to the fen plants already seen on the previous day, there were some others such as **Stellaria palustris** and **Triglochin palustris.** This is the area where **Elodea nuttallii** was first identified in Somerset and plenty of that was about in the ditches. **Azolla filiculoides** was in one place and **Wolffia arrhiza** was present in quantity so it was easily seen. **Potamogeton trichoides** was again plentiful. It has spread rapidly on the Levels in the last few years and this may be due to increased eutrophication of the ditches, many of which are clogged with algae.

In the afternoon several groups were formed to do some recording in square ST(31)/33 for the BSBI Monitoring Scheme before returning home.

R.G.B. ROE

3. NORTH HAMPSHIRE. 24th-25th JULY

Arable weeds have become the focus of attention in the past couple of years due partly to the national survey of rare species being undertaken by BSBI members, and to the work being carried out by the Game Conservancy.

The main venue for the Saturday was a farm on the Manydown Estate, near Basingstoke, where monitoring of the weed populations in cereal crops has been carried on in recent

years. The party walked along the headlands of fields which had received no herbicides, and the resulting weed populations of the chalky clay soil was truly amazing, with four species of Poppy flowering together in some sites (**Papaver rhoeas, P. dubium, P. argemone** and **P. hybridum**). Rarities included **Valerianella dentata, Fumaria densiflora, Silene noctiflora, Lithospermum arvense** and **Scandix pecten-veneris** as well as many commoner species.

After lunch, we travelled west to another farm at Longparish, where our arrival coincided with a decision to start the harvest! Fortunately the combine went to another field, leaving us to savour the unusual sight of **Adonis annua, Torilis arvensis** and **Petroselinum segetum** growing along the same headland.

Some of the participants were able to explore a Hampshire and Isle of Wight Trust Reserve at Micheldever on the previous evening. This comprised woodland interspersed with open areas which contained vast mounds of chalk excavated about 150 years ago when the adjacent railway tunnel was built.

The notable plant here was **Teucrium botrys**, but **Potentilla tabernaemontani, Galeopsis angustifolia** and **Botrychium lunaria** were almost as exciting.

This meeting restimulated us all to search our nearby arable headlands in the hope of making new records for the BSBI's rare arable weed survey.

P.G. LAWSON

4. CANNOCK CHASE, STAFFORDSHIRE. 25th JULY

The only fine day of the week welcomed a party of 14 to the 4850ha of heathland on the Bunter Sandstone, overlying the Carboniferous Coal Measures.

Beginning the survey at the 202m high viewing point, the group worked northwards following the gravel path with **Plantago coronopus** and **Sagina apetala** underfoot and with **Carex pilulifera** nearby. At Womere Bog, **Carex curta, C. rostrata, Eriophorum vaginatum** and **E. angustifolium** surrounded the water amid **Molinia caerulea** tussocks. Proceeding down a **Calluna vulgaris** covered valley that eventually joined the Sher Brook, we encountered **Hydrocotyle vulgaris, Viola palustris, Carex echinata, C. paniculata, Myosotis secunda, Epilobium obscurum, E. palustre, Chrysosplenium oppositifolium** and **Montia fontana** with the occasional Small Pearl Bordered Fritillary! In nearby Alder swamp containing **Cornus sanguinea**, a clump of **Carex** x **boenninghausiana** (**C. paniculata** x **remota**) proved new to v.c. 39 (Staffs.). **Athyrium filix-femina, Carex ovalis** and **Blechnum spicant** concluded the pre-lunch session. Further north **Empetrum nigrum, Narthecium ossifragum, Berula erecta, Eleocharis palustris, Equisetum palustre** and **Mentha aquatica** were found and finally what turned out to be **Myriophyllum spicatum** was discovered in the Brook.

Turning westwards through **Quercus petraea** woodland with **Melampyrum pratense** and **Linum catharticum** on dry banks, we came to an abandoned gravel quarry, with abundant **Crassula helmsii** in the shallow water. The margins supported **Veronica scutellata, Salix cinerea** subsp. **oleifolia, Myosotis laxa** subsp. **caespitosa** and **Dactylorhiza fuchsii**; the higher ground had **Cerastium semidecandrum.** Oldacre Valley with high base status in parts, hosted a colony of **Thelypteris thelypteroides, Viburnum opulus, Equisetum fluviatile, Dryopteris carthusiana, Carex nigra, Iris pseudacorus, Vaccinium oxycoccos, Drosera rotundifolia,** putative **Dactylorhiza** x **transiens** (**D. fuchsii** x **maculata**) and its parents. A small pond with **Ranunculus hederaceus** and **Elodea canadensis** formally ended the meeting. A few members were shown **Vaccinium** x **intermedium** (**V. myrtillus** x **vitis-idaea**) and **Crataegus prunifolia** (Crank Thorn) to round off a very full day. Having covered parts of three tetrads, the score totalled 205 species.

B.R. FOWLER

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SCOTLAND

5. EAST LANARKSHIRE. 19th JULY

Although a joint meeting with the Glasgow Natural History Society, the aim of the meeting was to record for the BSBI Monitoring Scheme. Having arrived early at the meeting place, The Cross at Newbigging, the leader spent half an hour recording in and around the

village. The party proceeded to gravel pits south-east of Newbigging. On a steep bank on the way in there was a profusion of **Helianthemum nummularium** (Common Rockrose) growing in juxtaposition with **Pteridium aquilinum** (Bracken)! The occurrence of the Rockrose raised expectations, but no other calcicoles were found. On a flat wet area there were strong stands of **Rumex longifolius** (Northern Dock), **R. obtusifolius** (Broad-leaved Dock) and their hybrid. A few plants of **Dactylorhiza fuchsii** (Common Spotted-orchid) and many of **D. purpurella** (Northern Marsh-orchid), some of which had heads measuring 15x7cm, were noted. Among the more insignificant plants on the bare areas were **Aphanes microcarpa** (Slender Parsley-piert) and **Sagina apetala** subsp. **erecta** (Annual Pearlwort). The party returned to the cars via the right bank of the South Medwyn River.

After lunch ground adjacent to the Shielhill Hotel was surveyed, part of tetrad A of the monitoring square. On a bank of the How Burn at the extremity of the tetrad, a local member guided us to **Petasites japonicus** (Giant Butterbur) and **Pyrola minor** (Common Wintergreen). Further downstream, **Doronicum pardalianches** (Leopard's-bane) and **Stellaria nemorum** (Wood Stitchwort) were seen.

For a change of habitat the party moved north to a heathy part of tetrad A. No noteworthy plants were seen, but where the cars were parked, just outside the monitoring square, **Hieracium brunneocroceum** (Fox-and-Cubs) grew along the roadside fence.

A total of 400 records was made for the Monitoring Scheme.

P. MACPHERSON

6. GLEN LOCHAY. 26th JULY

Despite the forecast for rain all day, which was unfortunately absolutely correct, 13 attended the outing to record in NN/43 tetrads J and W. In view of the difficult terrain and the need to record as much information as speedily as possible, the party divided into three groups. Two groups attempted the more strenuous climb to the northern coires on Meall na Samnha, the other group took the lower ground on the eastern slopes of Ben Heasgarnich. A dedicated Tim Rich had already been recording having camped over-night in the nearby Beinn nan Imirean tetrad.

The weather proved much more of a problem on Ben Heasgarnich with navigation eventually becoming difficult in a low cloud on the open ground, and the group was forced to leave the hill in mid-afternoon. Despite not being able to reach the more interesting cliffs in the tetrad, with most of the ground being blanket mire, a good total of 120 species was rattled up with **Saussurea alpina, Carex capillaris, Tofieldia pusilla, Potentilla crantzii** and **Cornus suecica.** The presence of John Trist almost certainly contributed to the records of **Avena alpina** and **Deschampsia flexuosa** var. **alpina,** and this party even had the temerity to pick out **Euphrasia scottica** and **E. micrantha**!

On Meall na Samnha the comparatively more sheltered conditions allowed more time to be spent recording. One party went up the renowned Allt Innishoarach and the other the less well-known Coire Dhubhchlair.

The mica schist crags in both proved to be the main centre of interest and between them the following more local species additional to the above were recorded: **Saxifraga nivalis, Dryas octopetala, Draba incana, Salix reticulata, S. arbuscula, S. lapponum, Botrychium lunaria, Carex atrata, C. vaginata, Epilobium anagallidifolium, Galium sterneri, Luzula spicata, Poa alpina, Pyrola minor, Sibbaldia procumbens, Cerastium alpinum, Vaccinium uliginosum, Deschampsia alpina** and **Gnaphalium supinum;** these provided a good selection of typical Breadalbane species - an immature Golden Eagle was also seen for good measure. However the undoubted highlights were a patch of **Cystopteris montana** and several groups of **Bartsia alpina.**

The day was well spent, and enjoyed, despite the dismal weather, although much of the potentially highly productive ground, particularly at higher altitude, was not visited on either mountain. But then there is always next year!

I would like to thank John Trist who led the party to Ben Heasgarnich.

N. TAYLOR

7. ANGUS COAST. 15th AUGUST

The purpose of this meeting was to record for the Arable Weed Survey and to visit one of the Monitoring Scheme squares.

15 participants (many from the Dundee Naturalists' Society) started the day at West Haven near Carnoustie to look for **Fumaria densiflora,** which had been found there a number of years previously. Several small populations were soon found round the edge of a sandy oat-field. **Papaver argemone** (another species included in the Arable Weed Survey) was also present in the field and **Allium oleraceum** was seen on nearby dunes.

The second port of call was East Haven where the fine population of **Rhinanthus angustifolius** subsp. **grandiflorus** was admired and a second colony of **Fumaria densiflora** found.

The afternoon was spent recording for the Monitoring Scheme in square 37/63, which included the very rich Elliot Links. Highlights included thriving populations of **Lathyrus japonicus** var. **acutiformis** on fixed sand dunes, **Rumex hydrolapathum** in dune slacks, characteristic northern species such as **Ligusticum scoticum, Juncus balticus** and **Scabiosa columbaria,** the latter reaching its northern limit at this locality. The climax of the visit came with the discovery of a single plant of **Polygonum oxyspermum** subsp. **raii** which was last recorded from Elliot in 1888 and last seen in Angus in 1932.

H.J. NOLTIE

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INFORMATION REQUIRED

Most collectors of local floras accumulate interesting bits of botanical ephemera. They are often 'thrown in' by a friendly bookseller with other purchases, as was the above drawing , a botanical encampment at the foot of Ben Voirlich. June 1821'. I have been unable to trace the source of this illustration and would welcome any information as to the title of the book in which it first appeared.

MICHAEL WALPOLE, 68 Outwoods Road, LOUGHBOROUGH, Leics. LE11 3LY

Contents (continued from back cover)

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

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