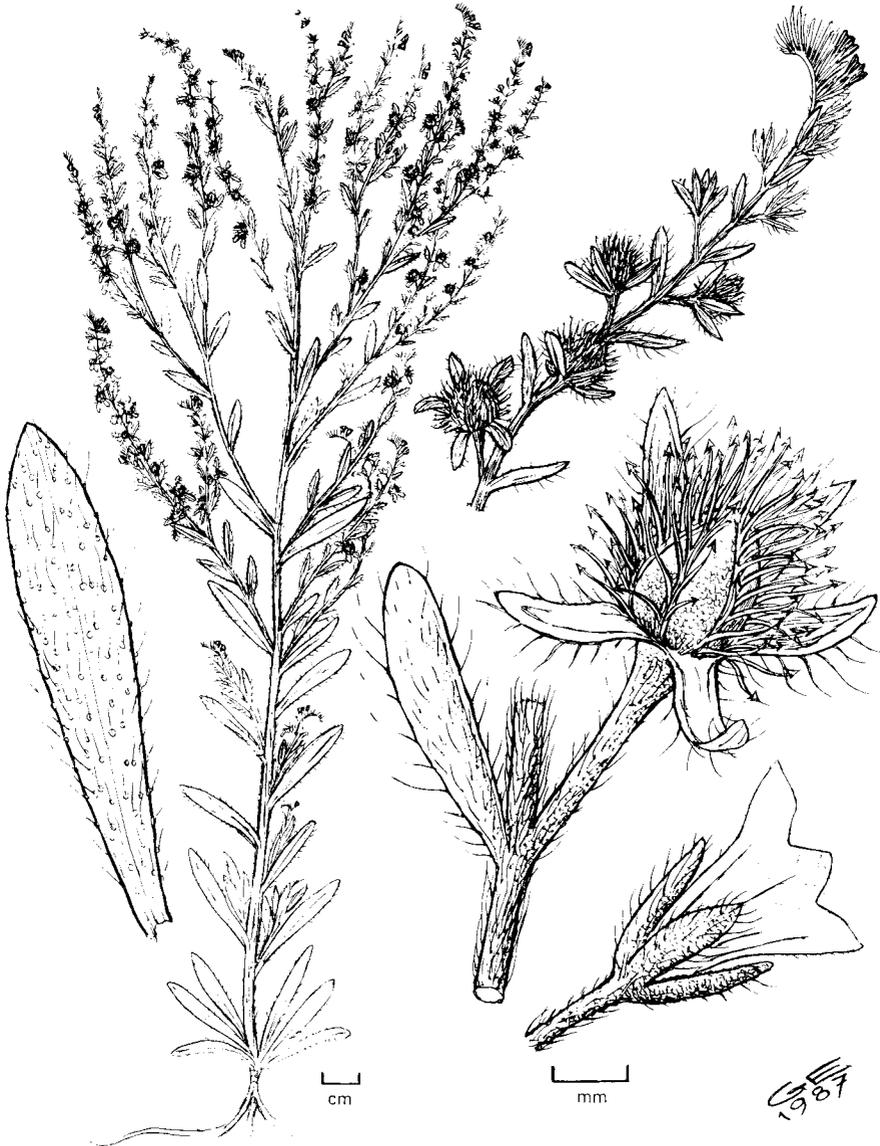


Edited by R.Gwynn Ellis

No.48

Dept. of Botany, National Museum of Wales

Cardiff CF1 3NP



*Lappula squarrosa* (Retz.) Dumort. del. G.M.S. Easy © 1987

ADMINISTRATION

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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,  
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SECRETARIES OF PERMANENT WORKING COMMITTEES

CONSERVATION: Dr A.J. Byfield,  
21 Fishers Road, Totton, SOUTHAMPTON, Hampshire SO4 4HW

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

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Mr R.G. Woods, Mr G. Wynne, Representative on Council: Mrs J.A. Green.

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CONTRIBUTIONS INTENDED FOR

BSBI NEWS 49

should reach the Editor before

23rd JULY 1988

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**IMPORTANT NOTICES**

**1988 LIST OF MEMBERS**

The Treasurer is preparing a current List of Members to be printed this summer.

If your address on this April mailing was in any way incorrect, could you please send **corrections** or alterations to:

Mr M. Walpole  
68 Outwoods Road  
LOUGHBOROUGH  
Leics. LE11 3LY  
**before May 14th 1988**

(preferably return your address label with corrections clearly marked)

It is particularly useful for administration to have your **postcode**, so please send this, if not already on your label.

It is often helpful to other members for your **title and qualifications** to be listed, so please send these, if you do not dislike them included.

**Members wishing to receive the new list** when printed, please send £1.00 (with corrections or additions as above if appropriate) to Mr M. Walpole at the above address **before May 14th 1988**

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

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**PRE-PUBLICATION NOTICES**

The Society is always anxious to promote the sales of local Floras, and it is often possible to advertise forthcoming Floras through a pre-publication offer to our members.

Guidelines have been drawn up for those wishing to send a pre-publication notice in a BSBI mailing. It is essential for authors of forthcoming Floras, Check-lists and local plant lists, who wish to make use of this service to contact the Hon. General Secretary well in advance, requesting the Guidelines and to arrange an insert in an appropriate mailing.

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

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**DIARY**

**NB.** These dates are supplementary to those in the 1988 Calendar.

April 1988

30th : Fritillary Meadow Open Day, Framsdén, see p. 40 last issue

May 1988

1st : Fritillary Meadow Open Day, Framsdén, see p. 40 last issue

7th : BSBI AGM, Jodrell Laboratory, Kew, see p. 7

8th : BSBI AGM Excursion, Perivale Woods Nature Reserve, see p. 7

14th : Deadline for List of Members, corrections and orders, see p. 3

20th : Deadline for Taxonomic Workshop bookings, see p. 37

July 1988

12th-15th : European Floristic Studies Conference, Reading, see p. 39 last issue

25th : Lapland Journey - In the Footsteps of Linnaeus (to August 8th), see p. 35 BSBI News 46

September

2nd-4th : Taxonomic Workshop/Recorders' Meeting, Leicester, see p. 37

October

20th : Heathers and Heathland Symposium, London, see p. 38 last issue

April, 1989

7th-9th : Exeter Conference: 'Species Mapping and the Biology of Plant Distribution', see p. 37

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## PRESIDENT'S MESSAGE

It was a great honour to be asked to serve as President of the BSBI, and additionally I saw it as an opportunity to try to repay a small part of the huge debt I owe the Society for all it has provided me over the past 30 years. When I joined in 1958 as a University undergraduate, Tom Tutin was President, E.F. Warburg was editor of Watsonia, Duggie Kent was editor of Proceedings, John Dony was General Secretary, Jack Gardiner was just starting as Treasurer, and Peter Hall was about to take over as Field Secretary. Other leading members of that time whom I particularly remember were Ted Lousley, Ted Bangerter and Joan Hall. Letters to any one of them received prompt, helpful and detailed attention, however lowly the status of the writer, and many a young field botanist must have benefitted as much as I from the encouragement that a letter from such well-known names as those (among others) generated.

From what I know of the present Officers, the image of the Society in the eyes of its young or otherwise inexperienced members can scarcely have changed. Until recently I had a knowledge of the workings of the BSBI only through my editorship of Watsonia, and consequential ex officio membership of Publications Committee and Council. Over the past year, however, I have attended meetings of all the five BSBI Committees, and have been enormously impressed by the huge amount of work that these do on our behalf. I think one knows that the General Secretary, the Treasurer and the various Editors work very hard to fulfil their vital roles, but perhaps tend to forget the debt we equally owe to the members (particularly the Secretaries) of all the Committees, without whom the Society could not function properly. In addition there are the recorders, referees, compilers, indexers, excursion leaders, authors and many un-named helpers. Added together, it amounts to a sizeable proportion of the BSBI that plays an active role in furthering our aims.

Probably the most important service that the Society provides is its publications, particularly Watsonia, BSBI News and BSBI Abstracts. In my opinion these three together (totalling six issues per year) are better today than they have ever been, and alone are worth far more than the annual subscription. The Handbook series is justly also very popular. Other BSBI publications, such as British and Irish Herbaria and most Conference Reports (20 to date), do not sell as well, yet are mines of information invaluable to those needing the specialist information they contain.

It has to be admitted that there are three other sorts of publication that the Society surely ought to produce, yet has not done so for twenty or more years. There is every hope that these gaps will be filled in the not too distant future.

1. Checklist of British and Irish Plants

Dandy's List of British Vascular Plants is now thirty years old, and woefully inadequate for present purposes. The BSBI uses its sequence and to some extent its nomenclature simply through lack of anything better. After several abortive plans to produce a new list, I am very happy to say that D.H. Kent will complete the new BSBI list next year, with a view to publication in 1990.

2. Vice-comital Flora of the British Isles

Ireland (1987) and Wales (1983) already have updated vice-county lists, but the latest for Scotland and England is Druce's Comital Flora of 1932. Despite some suggestions that vice-counties should be abandoned, the recording structure of the BSBI (and of several other important societies) is firmly based upon them and I believe that the majority of members see them as the basic recording unit (alongside 10-kilometre squares, which perform a somewhat different function). As mentioned in the note on the Barbara Welch Bequest (see p. 5), a working party is being set up to consider the feasibility of producing an updated list as a basis for future recording.

### 3. Bibliographical Index

Anyone wanting information on a particular taxon, area or botanist faces a daunting search through many publications. Most useful of these are N.D. Simpson's A Bibliographic Index of the British Flora (1960), BSBI Abstracts and its forerunners, and Watsonia and other BSBI publications. The possibility of producing an up-to-date Bibliographic Index is being investigated by another working party, as detailed in the same note (see 2. above).

One aspect that both of these working parties will be considering is the desirability of or even need for the data-bases to be computerised. Computerised records mean not only that data can be updated regularly, and checked easily, but that new combinations of data can be extracted from them and, if different sets of data are stored by the same system, can be integrated in various ways. Moreover, copies of the data can be produced and sold in book and/or disc form. Even though most members are still not computer-users, and many shy away from the prospect of becoming one, the BSBI cannot afford to neglect this line of approach, which is fast revolutionising recording and publication. Already BSBI News and BSBI Abstracts are printed from camera-ready copy produced on a word-processor (at greatly reduced costs), and in the very near future we expect to see the first BSBI keys (to Carex) produced for sale to members in disc form.

The BSBI Monitoring Scheme, now in its second year, represents the major activity of the Society at present, but already we are considering not only how to process and publish the data, but also where to go from there. Ideally we should produce a new Atlas (the present is 26 years old!), but is this possible? The Monitoring Scheme Operational Sub-Committee and the Steering Committee are actively assessing the various options; as usual it is a case of weighing desirability against feasibility.

One activity that I am particularly keen to promote is the provision of Workshops, where members can meet the experts to improve their identification skills in difficult groups. Several have been held already, but most were part of the biennial Recorders' Meetings and not easily accessible to everyone. The next, at Leicester in September (see p. 37), is open to all, and next year one is planned in Reading. I hope these prove popular; similar meetings of the BBS have in recent years been very successful.

A rather different kind of BSBI service is its service to plants themselves and to future generations of botanists, i.e. to conservation. The Conservation Committee has gone through a rather uncertain time recently, as its priorities needed re-thinking in the light of the formation of CABS. BSBI is not primarily a conservation society, but of course has a moral obligation to contribute in the best way possible. The Committee has now drawn up a revised Terms of Reference, recently accepted by Council, which is reproduced on page 54 of this issue of News, and I think this shows us the right way forward.

I hope the above has shown that the BSBI is actively moving ahead in several directions, and that its Officers are trying to keep the Society ahead of the changing world. I am anxious that we remain one of the leading biological societies, and I will do my best to help and encourage its aims in every way I can.

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

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### BARBARA WELCH BEQUEST FUND

Proposals from the Co-ordinating Committee, accepted with minor amendment by Council on 1st march, 1988

#### General Principles

1. The money should be used for the benefit of the BSBI directly, in the pursuance of its stated aims.
2. As far as possible the Society should retain the Capital and use only the income, with the proviso that we might wish to relax this ideal to some degree should some particularly important or urgent situation arise.
3. The Society should maintain its present practice of not purchasing land or buildings, or renting accommodation, and of not employing persons directly.

- 4. Schemes that would demand an open-ended annual financial commitment in the form of upkeep or updating, such as would be required under 3 above, should be avoided.
- 5. Two general headings under which expenditure might be approved are:
  - (a) To make awards to amateur or professional botanists for research into the systematics and distribution of British and Irish vascular plants, especially in relation to BSBI - sponsored projects.
  - (b) Aiding the publication of botanical works of particular relevance to the interests of the BSBI.

**Specific Projects**

It is proposed that the following two projects are deserving of further study and that a working party be set up in each case to consider the desirability of the project and the ways and means of achieving it, and to estimate the likely cost and time scale.

- (a) The preparation of a new Bibliographical Index of the Flora of the British Isles (convenor of working party: A.O. Chater).
- (b) The preparation of a new Vice-comital Checklist (convenor of working party: C.A. Stace).

Further details concerning the awards under 5(a) above will be given in the autumn.

MARY BRIGGS, Hon. General Secretary

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**CORRIGENDA CORNER**

Dave Batty of Lochgilphead writes that he found it "... very flattering to receive the credit for the discovery of *Carex buxbaumii* [in Argyll] but the plant was actually discovered by my wife P.M. Batty as reported in Watsonia..." (see BSBI News 47: 17 (1987)). Dave also mentions that North and South Aberdeen appear to have been confused "... in the same article, *Carex bigelowii* is quite common in the latter vice-county."

EDITOR

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**EDITORIAL**

That there has been an encouraging response to the request in the last issue for contributions from the 'ordinary' members of the Society is reflected in part by the size of the current issue. Although this is the largest News published so far, several interesting notes have had to be held over until the September issue, as has the report of the 1987 Annual Exhibition Meeting; I apologise to those authors concerned.

Please don't let this put you off sending in your contributions, all suitable ones will be published; and I have not yet had to refuse any!

EDITOR

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**HON. GENERAL SECRETARY'S NOTES**

**Administration Notices in BSBI News**

When BSBI News was inaugurated the aim was twofold: one to replace at least some of the notices to members which before News were sent loose in the mailings - the second, the very important one of providing a forum for members' exchange of views on botanical subjects, and to give information on the Society's activities, including field recording, notes on books etc. BSBI News still has this double function, but now that it has become more substantial in size with added reports, members may not have time to read it through immediately on arrival, but please remember that it may contain important notices on administration or meetings. The Editor ensures that these appear in the first few pages, and we do hope that you will look for them there; any changes in v.c. Recorders and

Referees appear in the Recorders and Recording Section of BSBI News, pages 10-11 in this number). Also we hope that the recent addition of the Botanical Diary will help to ensure that you do not miss important notices, requests or offers which are dated.

Examples in this number are:

the supplementary notes on the AGM arrangements on page 7

and the notice about a new List of Members on page 3

the equivalent notice for the last List of Members, offered in 1985, was MISSED BY MANY MEMBERS (who later wrote enquiring for a list). I hope that you are **READING THIS** - and that you have therefore seen the notice on page 3.

#### **A.G.M. 1988 Saturday May 7th. and Excursion Sunday May 8th.**

For those who have booked a packed lunch at Kew on Sat. May 7th on the A.G.M. Booking Form (mailed to members in January with BSBI News 47), at "approx. £2.00", we now have the available menus and have selected the lunch at £2.75 on your behalf. This includes a soft drink, but we hope to have beer and/or coffee as optional extras. (Additional lunch bookings can be accepted until April 29th if speedy contact is made with Mrs Ailsa Lee).

Those members joining the Field Meeting at Perivale Wood Nature Reserve on Sun. May 8th should meet at entrance to Reserve at 10.45, as instructed on the A.G.M. Notice; but any members who are doubtful of finding the way (or have lost the Notice with instructions) can meet at entrance to Perivale Underground Station (Central Line) at 10.30, where Elizabeth Rich and Duggie Kent will be available as escorts to the Reserve.

For advance reading on the Reserve see:

Roberts, K.A. & Edwards, P.J. The flora of Perivale Wood nature reserve. London Nat. 53: 34-51 (1974).

**Congratulations** to Frank Perring, who was awarded the O.B.E. in the New Year Honours. Frank, who is currently a Vice-President, is now in retirement giving much of his time to the BSBI Monitoring Scheme and to plans for future recording. Now to be known as 'F.H.P.,O.B.E', we send him our congratulations.

#### **Conservation Committee**

As announced in BSBI News 47: 7 (1987), this committee has reviewed its structure and function. Andy Byfield has been appointed as Secretary to the Committee and you will find his address - with the Committee Secretaries - on page 2.

We sincerely thank Lynne Farrell for all the hard work that she has put into the Committee in past years; we shall be keeping in touch and calling on her for advice I am sure, and you will have more news of Lynne in the next BSBI News. We also thank Helen Stace for holding the fort as acting Secretary in the interim. The rejuvenated Committee members now are: Dr A.J. Byfield, D.R. Donald, Lady R. FitzGerald, Miss I.F. Gravestock, Dr N.T.H. Holmes, A.C. Jermy, M.A.R. Kitchen, Dr H.A. McAllister, Dr F.H. Perring, T.S. Sands, Miss H.E. Stace, Mrs E.G. Wood.

News from the Conservation Committee may be found on pages 53-58.

#### **Anglers discover Grapnels**

Following 'A Grab of Grapnels' in BSBI News 47: 15 (1987), I am indebted to Chris Preston who found with Coarse Tackle advertisements in the Angling Times, a GRAB-A-WEED at £19.99. It is described as "a totally new concept in angling", and is designed to clear your peg or swim from weeds debris etc. - also to agitate the river bed to expose grubs. With strong robust construction, it is plated for resistance to corrosion with rotproof rope, and "can also be used as a boat anchor".

The reference to a boat anchor reminds me that when we were comparing assorted Grapnels at the Glasgow Recorders' Conference, Peter Macpherson remarked that had he been on the **Potamogeton** meeting, he would have brought his grapnel which was also the folding anchor from his sailing dinghy.

#### **Tail-pieces**

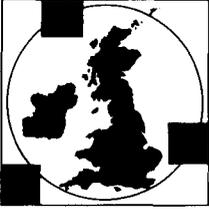
Overheard at meeting of Recorders:

"I rushed to the Atlas, but found that there was a dot there already".

Overheard in Cromwell Road, London:

"I hate **Agrostis**".

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



# 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 grand total of 1987 cards received to date is 4,760. Phew!

I estimate that about 60% of the work necessary to obtain our assessment of the current status of the flora has been completed. If we can keep up the recording in 1988 and obtain a fuller coverage, we will have done well. This is your last chance then to record **Ranunculus ficaria**, **Veronica hederifolia** and other spring ephemerals. The first records of 1988 have already arrived from Northern Ireland ...

## TACTICS FOR 1988

Please concentrate on areas and/or species not recorded in 1987. Do not re-record sites/plants adequately covered last year (the survey is cumulative over the 2 years).

If you have adequately covered your squares and your neighbours do not need help, concentrate on site recording at the most important sites.

## COVERAGE IN 1987

The map (p. 9) shows 10km squares or tetrads for which NO cards have been received from 1987 to date. This slightly underestimates coverage as it does not include records for some vice-counties where I know there are records (v.c. 18, 19, H19, H31). In addition to this map, the following vice-counties were relatively under-recorded in 1987: 1, 3, 8, 12, 28, 32, 40, 41, 47, 48, 49, 56, 61, 62, 65, 74, 75, 77, 83, 85, 86, 91, 92, 95, 102, 105, 106, 107, 108, 109, 110, 111, 112, H9, H12, H13, H15, H17, H25, H34, H35.

These areas and squares are thus the priority for 1988. There is particular scope for work in Scotland and Ireland. If you can help please contact the appropriate National Co-ordinator and v.c. recorder. Our President wishes me to stress that the Scheme is open to all members (see Instruction Booklet and BSBI News 44).

## FILLING IN CARDS (updating BSBI News 47)

When giving your name, it would help us to sort out who is who if you would please include full initials and preferably titles. I like Christian names though, much less formal!

Two other names on the record cards are unclear:

1994 Spira agg refers to **Spiraea** aggregate

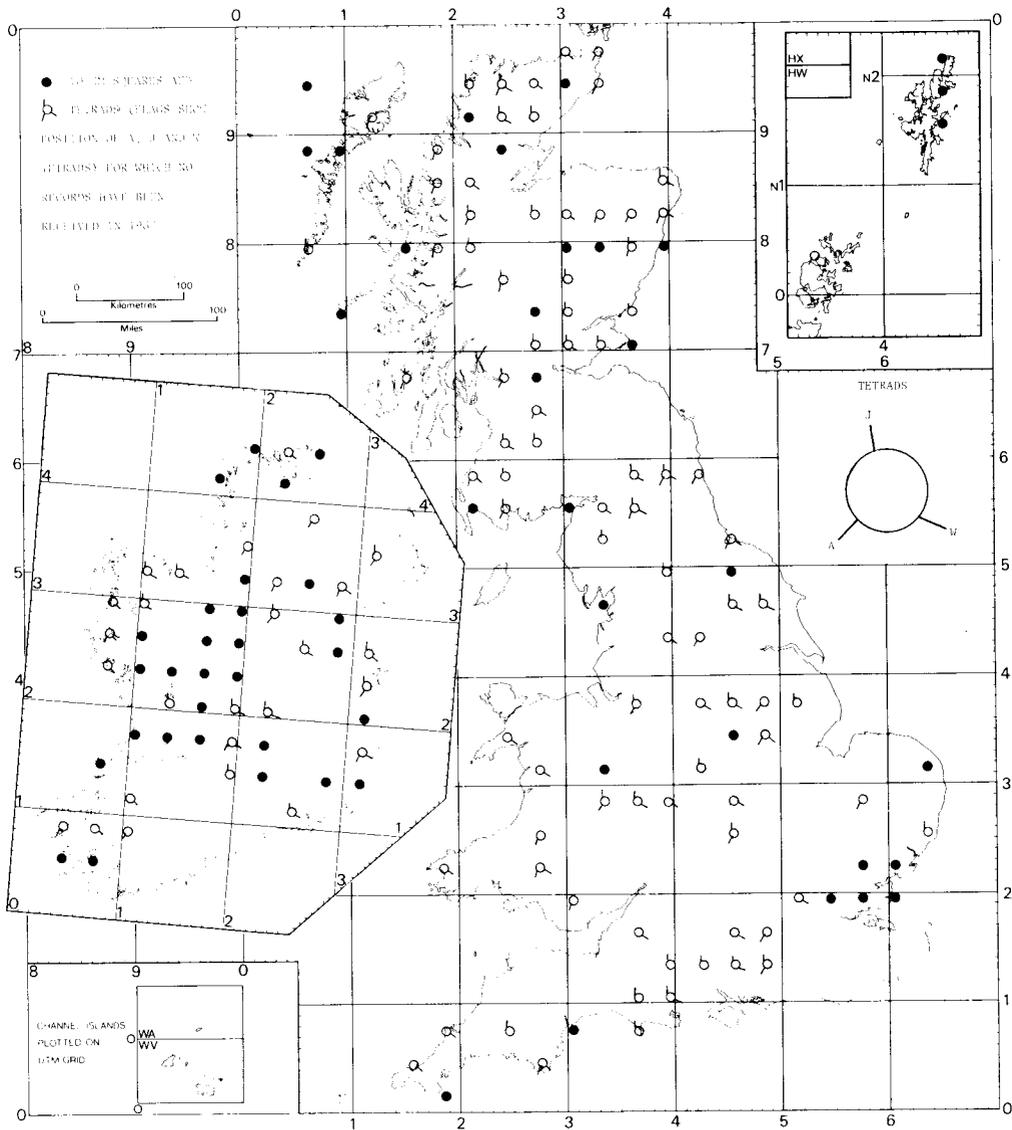
1997 Spira spi refers to **Spiranthes spiralis** (this has an asterisk on some cards by mistake, which doesn't help!)

And at least 8 people have rediscovered **Polygonum convolvulus**, it's disguised under **Fallopia** (Fallo con on the cards).

## IDENTIFICATION AIDS

There are plenty of copies of The BM Fern Crib available from the British Museum Fern Section (see BSBI News 47: 12 for details), very well worth the £1.00. The SAE required, incidentally, is BSBI News sized. There are two corrections, one dealing with **Diphasiastrum** and the other with **Isoetes** and a correction slip is available from the British Museum Fern Section. This slip is included in all copies of the crib purchased recently.

# Monitoring Scheme



The Monitoring Scheme Plant Crib (separate order form enclosed with this issue of News) is, naturally enough (!), **HIGHLY RECOMMENDED FOR PURCHASE**. It covers genera such as **Fumaria, Glyceria, Potamogeton, Carex, Orobanche** and many others (but not ferns!). We hope it will clarify many of the taxonomic, identification and recording problems and become a valuable source of reference to one and all.

#### OTHER NEWS

The British Trust for Ornithology are also taking another look at their Atlas of Breeding Birds, and are using our selected 10km squares for part of their survey. This is part of a wider effort to involve other biological recording groups in a combined survey which together would form a very powerful tool for both monitoring and understanding changes in the countryside. Details of the BTO survey are available from Dr D. Gibbons, BTO, Beech Grove, TRING, Herts HP23 5NR, but don't let me catch anyone deserting us before October!

TIM RICH, BSBI Monitoring Scheme Organizer

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#### WILDFLOWER SEED INTRODUCTION

During the first year of recording in 1987 for the BSBI Monitoring Scheme, we have met several examples of wildflower seed introduction. The seed mixtures were sown in otherwise natural habitats and the effect will be to distort the vice-county distribution of native species.

We would be pleased to hear from other members who share our concern, or otherwise, about the increase of this practice.

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

JOHN DONY, 9 Stanton Road, LUTON, Bedfordshire LU4 0BH

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#### RECORDERS AND RECORDING

##### **Amendment No. 7 to Vice-county Recorders, December 1985**

With regret we report the death of Dr C. Petch, Recorder for v.c. 28 W. Norfolk.

Morris Morris has retired from v.c. 49 Caerns - we thank him for his services as Recorder for over 20 years.

Keira Ward, announced in BSBI News 47, as taking over v.c. 109 Caithness has unfortunately moved and is unable to continue. V.c. 109 is temporarily vacant.

We are pleased to welcome new Recorders to:

V.c. 28 W. Norfolk: Mr & Mrs Ken and Gillian Beckett,

Bramley Cottage, Stanhoe, KING'S LYNN, Norfolk PE31 8QF

V.c. 49 Caerns: Mr Nigel H. Brown,

Treborth Botanic Garden, University College of North Wales, BANGOR, Gwynedd.

##### **Supplement No. 4 to Panel of Referees and Specialists, September 1986**

Resignations and appointments:

#### PTERIDOPHYTA

General: Ferns and fern allies, now, Ms J.M. Camus jointly with Miss Alison M Paul - also at Dept. of Botany, British Museum (Natural History), Cromwell Road, LONDON SW7 5BD.

Dr Barbara Parris (née Croxhall) has resigned.

#### RANUNCULACEAE

**Ranunculus flammula** Mrs Pat Evans has resigned.

Dr Richard J. Gornall, Dept. of Botany, University of Leicester, University Road, LEICESTER LE1 7RH, has been appointed.

PORTULACACEAE

**Montia:** Dr S.M. Walters has resigned (but continues as Referee for **Silene**, **Alchemilla**, **Aphanes** and **Betula**).

To help members with **Montia** we are hoping to publish Scanning Electron Microscope photographs of the seeds of the species in a future Watsonia.

OXALIDACEAE New appointment for

**Oxalis:** Mr Mark F. Watson, Plant Science Laboratories, University of Reading, Whiteknights, READING RG6 2AS

Additional General CRUCIFERAE Referee:

Dr T.C.G. Rich, BRC, Monks Wood Experimental Station, Abbots Ripton, HUNTINGDON PE17 2LS (excluding **Erophila:** Dr T.T. Elkington, and **Cochlearia:** Dr D.H. Dalby and Dr P.S. Wyse Jackson - as listed, but Peter Wyse Jackson's present address is : The Herbarium, Royal Botanic Garden, Kew, RICHMOND, Surrey TW9 3AB)

Tim Rich says "Fresh material preferred, but please contact before by phone (04873-381, office or 0733-49398 home) and send 1st class (material soon rots and goes smelly if not dealt with quickly). Dried material at any time.

If not sending complete specimens, send basal leaves, lower and upper leaves, flowers and fruits from the MAIN STEM."

We warmly thank retiring Referees for the help given to members through past years, and we thank in advance the new Referees for their agreement to take on the above genera.

**Additional Telephone Number:** (see BSBI News 47: 14)  
V.c. 89 E. Perth, Rosalind Smith 073883-374

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

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RECENT DISCOVERIES IN THE IRISH FLORA

In Ireland the system for reporting of first and second records for vice-counties is less formalised than in Great Britain. The recommended procedure is for records to be sent to the Ulster Museum in Belfast for the North of Ireland and to An Foras Forbartha in Dublin for the Republic of Ireland. The records should then be passed on from Belfast or Dublin to the Biological Records Centre at Monks Wood.

There is no formal system for publishing these records (as in Watsonia for Great Britain) but many are eventually published in some form in the Irish Naturalists Journal. It has been brought to my attention that some members in Great Britain are interested in the Irish flora but do not see the Irish Naturalists Journal and so would not be aware of new records published. This article is an attempt to meet this problem.

The period covered is Jan. 1986 to Oct. 1987 (Irish Naturalists Journal, 22 (1-8), pp. 1-372). In the following notes only the author and page reference are given.

In any review of this nature pride of place must be given to first records of species new to Ireland and in this category are records of **Lysimachia thyrsiflora** from Co. Donegal (Northridge p. 206) and of the hybrid orchid **Dactylorhiza fuchsii** x **Coeloglossum viride** found by Wilde in Co. Down (p.110). Newton (p. 62) reports records for many brambles found during a survey of the Republic of Ireland in 1984. No doubt his list includes many new county records and possibly some new to Ireland.

Even well-known areas continue to produce new records and from the Burren area Doyle (p.74) reports finding **Lychnis flos-cuculi** and **Carex disticha**. It may come as a surprise to some readers that these species have not been recorded before in the area but in the Burren dry rocky ground is prevalent and wet areas, as required by these species, are rare. Also from Co. Clare are reports of **Limosella aquatica** (Curtis et al. p. 248 and Wilde p. 365). This plant has probably been overlooked until recently and similar comments apply to **Carex muricata** subsp. **lamprocarpa** found in several sites in Co. Cork (O'Mahony p. 23), **Glyceria declinata** from several sites in N.E. Ireland (Leach et al. p. 262) and **Eleocharis uniglumis** in Co. Down (Leach et al. p. 121).

*Rhynchospora fusca* has only been recorded from one site in N. Ireland and it is pleasing that it has been re-found in its Co. Fermanagh site by Leach et al. (p. 262). Other species which have been recorded after many years absence include *Oenanthe pimpinelloides* (Scott and Sheehy-Skeffington p. 351) and *Acinos arvensis* in Co. Laois (Foss p. 25) for which the previous last recording was by Praeger in 1896.

*Spiranthes romanzoffiana* has long been known as a member of the Irish flora but a new record for Co. Fermanagh (Warnock p. 207) fills the distribution gap between the long-known Lough Neagh basin sites and the Galway/Mayo lakes. Another plant with strong Irish connections is Killarney Fern (*Trichomanes speciosum*) and a new site, appropriately in Co. Killarney, is reported by Doyle (p. 353).

*Elodea nuttallii* has been found to be well-established in a Co. Dublin stream (Reynolds & O'Reilly p. 119) and on p. 362 I report that in N.E. Ireland there are several known sites for *Campanula latifolia*. This species does not appear to have been recorded before and Flora of the British Isles (2nd Ed.) and Excursion Flora of the British Isles (3rd Ed.) both state that the plant is absent from Ireland.

*Vaccinium oxycoccos* is not common on the extensive blanket bogs of the W. of Ireland but new sites are reported by Doyle and Foss (p. 101). Curtis and Harrington (p. 204) report a second station for *Ranunculus tripartitus* in Co. Kerry and speculate that the paucity of records for this species may be due to the early flowering season, before most botanists have come out of hibernation! New records for this century for *Senecio viscosus* (Smiddy p. 39) from Co. Cork show that this species is continuing to extend its range. All the new sites were in or near railway stations. *Saxifraga cymbalaria* was recorded for the first time from Co. Antrim (Beesley & Wilde p. 262) but the origin of the plant is not clear. The *Rosa* flora of the North-East of Ireland needs further study and a record of a *Rosa pimpinellifolia* x *R. canina* agg. hybrid from Co. Antrim by Hackney (p. 363) should act as a spur.

STAN BEESLEY, 12 Downview Park, Greenisland, CARRICKFERGUS, Co. Antrim BT38 8RY

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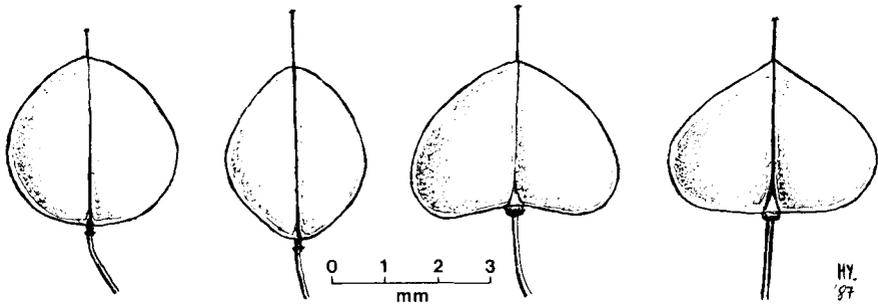
#### CABBAGE PATCH - IV

##### CARDARIA CHALEPENSIS (L.) Handel-Mazzetti IN THE BRITISH ISLES

The first plant found as we (TR, Mark & Clare Kitchen) jumped out of the car on a mid-December 1986 trip to Sharpness Docks, Glos., GR 32/67.02, has turned out to be *Cardaria chalepensis* (L.) Handel-Mazzetti, a new record for v.c. 34 (confirmed G.A. Mulligan; voucher specimen herb. T.C.G. Rich). It occurred on waste ground in the docks and was also well-established at the top of the saltmarsh, probably previously overlooked as *C. draba* (L.) Desv. which also grew commonly with it.

*Cardaria chalepensis* is similar to *C. draba*, and has often been treated as an infraspecific taxon of it. I prefer to follow the *Cardaria* monograph (Mulligan & Frankton 1962) and give it specific rank as it is morphologically distinct and has a different chromosome number (*C. draba* is octoploid  $2n=64$  and *C. chalepensis* is decaploid  $2n=80$ ). Synonyms include *Lepidium chalepense* L., *Cardaria draba* subsp. *chalepensis* (L.) O.E. Schulz var. *repens* (Schrenk) O.E. Schulz, *C. draba* subsp. *chalepensis* Clapham (comb. illeg.) and *C. draba* var. *repens* (Schrenk) Rollins. A. Thellung determined material from v.c.s 39 and 63 as *Lepidium chalepense* L. var. *auriculatum* (Boiss), which Mulligan & Frankton (1962) consider to be a synonym of *Cardaria propinquum* (Fischer & Meyer) Mulligan & Frankton var. *auriculatum* Mulligan & Frankton; specimens in OXF from v.c. 63 however seem referable to *C. chalepensis*.

To distinguish the species reliably, it is essential to have FULLY DEVELOPED, RIPE fruits. *C. draba* has a cordate to broadly triangular fruit with a truncate to emarginate base, whilst *C. chalepensis* has ovate fruits with a cuneate to broadly rounded base; typical fruits are illustrated on p. 13. Unfortunately, fruit set is very variable (probably due to varying degree of self-incompatibility) and some plants may not set any ripe fruit at all: immature or undeveloped fruits of both species are cuneate, potentially leading to mis-identifications of *C. draba*. Hybrids, determined by chromosome counts, have been reported for N. America (Mulligan & Frankton 1962) but not from Britain (yet!).



Sharpness

Burton-on-Trent

Chichester

Walthamstow

CARDARIA CHALEPENSIS

CARDARIA DRABA

Drawings of *Cardaria* fruits. Del H.A.D. Yagoin

The other records I have are as follows:

- v.c. 2 Par Sands. F. Rilstone 1916 (OXF), J.E. Lousley 1951 (K, NMW), D. McClintock 1951 (CGE), Mrs B.H.S. Russell 1956 (BM), Mrs F. Houseman 1960 (BM), T.B. Ryves 1967 (**herb. T.C.G. Rich**), Miss B.M. Sturdy 1967, G.G. Graham 1971 (SUN), R.J. Pankhurst, J.M. Mullin & B.E.M. Garratt 1976 (BM), J.M. Mullin 1980 (pers. comm.). No plants were found in 1984 or 1985 and the plant is probably extinct (Miss R. Murphy pers. comm.).
- v.c. 25 Felixstowe. A.H. Maude 1919 (BM).
- v.c. 39 Burton-on-Trent, Staffs. G.C. Druce 1927 (K, BM, OXF), 1928 (OXF) (see also Bot. Exch. Club Report for 1927, 387; 1928, 726 and 1929, 104), J.F.G. Chapple 1938 (OXF), J.E. Woodhead 1947 (LANC).
- v.c. 54 Holton Le Moor 1930 (specimen in BM is dated 1956), New Holland 1953 and Grimsby Docks 1956 (Flora of Lincolnshire 1975), and Withcall Station 1959 (Supplement to Flora of Lincolnshire) all E.J. Gibbons. Grimsby Docks, D. McClintock 1956.
- v.c. 61 Banks of River Humber, Hessle. E. Chicken 1980 (**herb. E. Chicken**, and The Naturalist 1981, 15). This site is now a car park.
- v.c. 63 Tingley railway bank, and Elland, Yorks. E.C. Horrell 1915 (both OXF and Bot. Exch. Club Report for 1916, 402-3).
- v.c. 70 Railway bank between Durrannahill and Scotby. R. Martindale 1952 (OXF, K, BM, & J.E. Lousley 1955 Proc. BSBI 1, 577).

There is a record for Cherry Hinton v.c. 29 (Perring et al. 1964) but specimens at K and CGE are *C. draba* with immature fruit.

Despite most of the records being associated with ports and railways, the species has shown little tendency to spread in a similar manner to *C. draba* (e.g. Scurfield 1962). However, like *C. draba*, it has been introduced independently a number of times and this is reflected in fruit shape differing between populations (Mulligan & Frankton 1962 found elsewhere continuous ranges in fruit size and shape). The exact modes of introduction are not known for sure, but the Burton-on-Trent material is associated with the famous Brewery aliens, and the Grimsby Dock material occurred in the so-called 'Winnipeg' area (D. McClintock pers. comm.) suggesting it may have originated via N. America (where it is widespread) and not direct from the native range in western and central Asia. Perhaps we only have to wait for the introduction of a suitable genotype before it becomes as common as *C. draba* (heaven forbid!)

Details of other records would be welcome (is this the only extant site?), and I will determine material (with ripe fruit!) sent with full site details etc. If anyone finds a hairy-fruited version of *C. chalepensis*, I would be very interested.

Thanks to Mr E. Chicken, Mr E.J. Clement, Mr E.S. Eedes, Mr B.R. Fowler, Mrs S.C. Holland, Mr D. McClintock, Mr J.M. Mullin, Miss R. Murphy, Mr C.D. Preston, Dr W.A.

Sledge, Mrs I.P. Weston and Professor A.J. Willis for their help tracing records, and to the Keepers for access to **BM, CGE, K, OXF** and **NMW**, and Dr G.A. Mulligan (Biosystematics Research Centre, Ottawa) for confirming the Sharpness material.

**References**

Mulligan, G.A. & Frankton, C. 1962. Taxonomy of the genus *Cardaria* with particular reference to species introduced into North America. *Can. J. Bot.*, **40**, 1411-1425.  
Perring, F.H., Sell, P.D., Walters, S.M. & Whitehouse, H.L.K. 1964. *A Flora of Cambridgeshire*. Cambridge.  
Scurfield, G. 1962. Biological Flora: *Cardaria draba* (L.) Desv. *J. Ecol.*, **50**, 489-499.

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

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**SPECIMENS AND DATA SHEETS FROM THE BRITISH ROSE SURVEY**

941 herbarium specimens and two boxes of completed data-sheets relating to the British Rose Survey of 1953 have recently re-surfaced after nearly 35 years. Some of them had been stored in the basement of the herbarium at Kew and others in the garage of Mrs J. Sylvester-Bradley in Leicester. The Survey was organized by her late husband, Prof. P.C. Sylvester-Bradley, in collaboration with Dr R. Melville, under the auspices of the Systematics Association. Sadly it only lasted for about one season; a more detailed account will be prepared for *Watsonia*. About half the specimens were too poorly preserved or immature for identification and have been thrown out, but Rev. A. Primavera has managed to identify the other half. This includes a great many duplicates; a top set will be kept at **LTR** but if anyone would like a subsidiary set, I would be delighted to pass one on. All specimens are localized as well as identified. I should warn you, however, that owing to the collecting strategy adopted, most of the specimens are of *Rosa canina*.

The data-sheets, an example of which is shown in Fig. 1 (p. 15), were never analyzed and have been donated to the National Museum of Wales.

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**FLORA OF HERTS PROJECT**

I should like to draw the attention of members to a new project, especially those members who either live in, drive through, or can not avoid Hertfordshire (v.c. 20). Despite the publication of a *Flora* for the County as recently as 1967, and by no less a person than John Dony, the ravages of agriculture, local authorities and industry have combined to make his splendid effort increasingly an attractive museum piece.

We have, therefore, decided to launch a new 'Flora of Herts Project'. This will aim to re-map the entire flora, including common species, to produce a new account of the county's plant-life, and a set of new tetrad maps which will, hopefully, be directly comparable with the 1967 versions. The Survey also aims to produce detailed accounts of the more important sites within each tetrad, and to document these both with species lists/abundance information and also with a photographic record. Participants are being supplied with specially designed field record cards including a species list of direct relevance to Herts, together with instruction sheets and guidance notes on identification.

It is expected that the Survey will be completed in 10 years (sooner, if we get a lot of expert help), and publication is aimed at 2000 AD, hopefully not coinciding with Apocalypse! With 504 tetrads to cover, and a minimum of three visits per square, we reckon ten people could do the work with 15 days in the field each year. No problem. So, if more than ten people get cracking we might beat the millennium. Anybody interested should contact the author.

TREVOR J. JAMES, North Hertfordshire District Council, Museums Service, Natural History Department, Old Fire Station, High Street, BALDOCK, Herts SG7 6AR



TARAXACUM MISCELLANY

The latest Taraxacum Newsletter (No. 6 - February 1988) contains much of interest to the more general botanist and I am grateful to Chris Haworth for allowing me to abstract some details.

Chris and John Richards will soon be getting down to writing a new Taraxacum Flora which they hope will be in the BSBI Handbook series. In it they "expect to describe about 100 'core' species with illustrations and distribution maps. The other 150 will be mentioned more briefly, usually as associated relations of the main 100."

While the new Flora is being written there will be need for much revision and the authors will need to inspect herbaria, both private and institutional for certain species. To begin with they would like to look at any specimens of the following species that they may have identified in the past:

**T. laetum, T. laetiforme, T. fulvum, T. gotlandicum, T. pseudolacistophyllum, T. drucei, T. fulvicarpum, T. naevosum, T. naevosiforme, T. hibernicum, T. laetifrons, T. praestans, T. fusciflorum, T. hamatum, T. polyhamatum, T. atactum, T. caudatum, T. crispifolium, T. lacinulatum, T. linguicuspis, T. ordinatum, T. privum, T. subcyanolepis, T. tenebricans, T. laciniosum, T. sublaciniosum, T. obscuratum, T. parvuliceps, T. porrectidens, T. uncosum, T. reflexilobum** and any others suspected to need re-examination, also any pre-1980 determinations of Sect. Hamata.

In the meantime Adrian Rundle is incorporating all recent changes in a new list. "This will include revised ideas on the Sectional status of some species as well as the newest of new Sectional nomenclature."

Copies of the new list will be available from Chris Howarth, 5 Standings Rise, WHITEHAVEN Cumbria CA28 6SX at a cost of approx. 80p incl. p.&p.

EDITOR

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A NEW WEST YORKSHIRE PLANT ATLAS

Work is progressing well on the production of a new Plant Atlas of West Yorkshire. One hundred years ago, F.A. Lees produced his Flora of West Yorkshire, relating to an area covering the modern administrative counties of West and South Yorkshire, a large part of what is now North Yorkshire and a small area of Humberside.

Staff at the West Yorkshire Ecological Advisory and Information Service, a Local Government Unit based in Keighley, are coordinating the collection of vascular plant species information from botanists throughout the county to supplement the extensive data already held on the Unit's computer files.

The Plant Atlas Project has been running for two years. Originally, it was hoped to mark the centenary of Lees' Flora with the appearance of the new work. The wonderful response from botanists across the county and the vast amount of new information gathered means that the publication date will be delayed, probably until 1990.

The new Atlas covers the modern administrative county of West Yorkshire, a smaller area than that encompassed by Lees. Following the recent trend of computer-mapped Floras, however, this publication will depict detailed graph-plotted distribution maps, using a 1km square module, of the 1000+ plant species found in the county, together with short captions on each species, giving its major habitat preferences, associated vegetation, soil type etc. The two authorities for species inclusion within the main body of the Atlas will be the Flora of the British Isles, 3rd Edition, by Clapham, Tutin and Moore (1987) and the List of British Vascular Plants by J.E. Dandy (1958). Casuals, adventives and aliens not listed in these works but recorded in the county will be shown in an appendix.

To date, more than 200,000 plant records are held on computer file and more are awaiting processing; but it is not too late to help. If you would like to be involved in the project or want more information please contact:

GEOFFREY WILMORE, West Yorkshire Ecological Advisory & Information Service, Cliffe Castle Museum, KEIGHLEY, West Yorkshire BD20 6LH

**PLANT IMPORT REGULATIONS  
for botanical travellers**

The MAFF information leaflets: Travellers guide to bringing plants back from abroad, About importation of plants taken from the wild, Plant Health Import Licensing Charges, and the D.O.E. leaflet Endangered plants, do contain much of the necessary information, but they are confusingly drafted with ambiguities and contradictions, so that it is difficult to ascertain the current regulations.

The leaflets are at present being redrafted, but meanwhile I am indebted to Dick David who has helped to clarify by obtaining firm statements on the following two vital aspects; and to Miss J. Wrenn of Plant Health, MAFF and to A. Grant at D.O.E., who have checked and amended these for publication here.

"(1) The £25 licence may (as stated) cover twelve months and collections from several countries but can only be used for a single trip, i.e. one passage through Customs; if you go on several trips in the twelvemonth you will need a £25 licence for each.

(2) There is, however, currently a concession for private passengers - i.e. bringing in the plants for "personal use" - returning from any country within the European-Mediterranean area. They may import, without licence:

up to 2 kilograms (together in total) of tubers, bulbs and corms, which must be free of soil

up to 5 plants or parts of plants - but not **Beta L.**, Gramineae, **Cydonia**, **Malus**, **Prunus**, **Pyrus**, **Vitis**, **Solanum**, **Chrysanthemum** or Forest trees (including Bonsai)

a small bunch of cut flowers, but not gladiolus or chrysanthemum, and up to 2 kilograms (together in total) of fruit and vegetables (but not potatoes).

Such importations do NOT have to be declared to Customs, but of course if one were caught bringing in either more than the allowed quantities or any of the species prohibited either on health or conservation grounds one would be in serious trouble."

I am sure that I do not need to remind members that the above concessions EXCLUDE those threatened plants for which export and import is controlled by CITES (NB these include all orchids, cyclamen and cactus plants) and any species for which export is prohibited by the country visited. Our aim must surely be to leave no country visited in any way less rich in plant species.

The address for enquiries on conservation controls is: Department of the Environment, Room 1105, Tollgate House, Houlton Street, BRISTOL BS2 9DJ (0272-218202).

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

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**REFEREE'S REPORT**

In 1986, Rev. A.L. Primavesi was appointed as an additional Rosa Referee - "for beginners" (see BSBI News 42: 9).

Tony has sent in reports on his first two seasons, with the following interesting comments:

In 1986, 35 specimens in all were sent to him for determination; three of these he sent on to Gordon Graham before replying to the senders, "...for one my tentative det. was wrong, another right and needed confirmation only, and the third required Gordon's greater experience to decide between two alternatives."

In 1987, 63 specimens were sent. Again Tony dealt with most himself, but sent anything doubtful to Gordon for confirmation.

All the specimens came from obvious beginners, "the majority of the humdrum common stuff which is apt to puzzle those unfamiliar with roses." Possibly some recorders would have hesitated to send the specimens without the encouragement of the note in BSBI News 42, which was proved to be very worthwhile.

The specimen senders fall into 3 main categories:

- (1) 'One-off' senders, merely curious about what seemed to them an odd rose.
- (2) People making a detailed list of plants of an area for some survey (including the BSBI Monitoring Scheme).
- (3) Those who genuinely want to learn something about *Rosa*. These are the most rewarding as they are appreciative of advice and often get "bitten by the 'Rose-bug' themselves - and want to go further".

The specimens came from Caithness to Surrey, and from Wales to Lincolnshire.

My thanks to Tony, for sending the reports and for his permission for them to be quoted here.

Finally I am horrified to have to include - yet again - a reminder that postage for the reply is appreciated. Tony says, "on behalf of all BSBI Referees not just me" adding "it is surprising how this adds up when people don't include it". This surely must be obvious to all specimen senders, so please once again

### REMEMBER POSTAGE FOR REFEREES TO REPLY

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### PITFALLS OF TETRAD RECORDING

Recording the distribution of plants (and animals), using the squares of the National Grid on our O.S. maps has been a major development of the last 35-40 years. It has, to a large extent, replaced the old vice-county system of recording, being so much more informative, though of course the vice-county system is still valid at County level and is still in use.

This grid recording approach was scarcely feasible before universally gridded O.S. maps were available. At first, only 10x10km grid squares were used, as in the BSBI Atlas (1962), and this continues to be invaluable at a national (and often also a local) level. In more recent years, the use of the 2x2 km squares of the National Grid ('tetrads') has been developed very widely by those producing county or local floras; E.S. Edees was one of the first botanists to use it (in his *Flora of Staffordshire*); J.G. Dony also used it early on, followed by many others. The scale is fine enough, in many cases, to enable plant distribution patterns to be related to the geological, soil, or habitat patterns present; even riverside plants usually show up as clear patterns on the maps produced. A 1x1km grid would, in many cases, show even clearer patterns of habitat correlation, but the quadrupling of the field work that is then required has, not unnaturally, deterred many flora compilers from using this scale.

It is, I think, now generally accepted that 'tetrad' mapping has proved an invaluable tool in showing detailed plant distributions. However, if used without sufficient thought, prior planning, and organization, it can be counter-productive in several ways as enumerated below.

1. Sometimes one is left with the impression that tetrad mapping is viewed as an 'art-form', an end in itself; there is often no adequate attempt at any effective interpretation of the patterns produced. It is, I think, essential that either the base-map itself, or a movable transparent overlay, contains enough information on such things as river systems, geology, soils, heath and woodland distribution, built-up areas, etc. to enable constructive interpretations to be made of the distribution patterns. Maps providing such information in the introduction are better than nothing, but if these are fixed in the book, they are less easy to use.
2. I find that there is a strong tendency among some field recorders (not of course the better ones!) to try to achieve a 'magic number' of species for the tetrad they have been allocated; if this is reached, then the task is regarded as complete. It is well-known that often the easiest and most 'painless' way to reach a high total in a tetrad is to walk along several roadsides or paths, taking in hedge banks, any small woods, the odd pond or stream, and such bits of waste ground, as may present themselves. If this is done, the high number attained may not represent the real potential of the tetrad for interesting plants. It is necessary to cover systematically a representative sample of all the habitat types present in the tetrad, for proper recording. Re-examination of tetrad

scores in some areas in certain local floras has convinced me that such systematic sampling has not been carried out.

3. If tetrad recording is to have any practical use in conservation work, it is essential that the precise locations of rarer species and (still more) of important habitats, is precisely recorded (with 6-figure grid references). This information of course need not appear in the resulting published Flora or Atlas; indeed sometimes it should not. However, it should be available for storage in the data bank of the local museum or natural history society, so that bodies such as local conservation trusts and the NCC can have (confidential) access to it. The essence of objective field research must be that the results are replicable by others working in the area later. Without the type of information that I have described, it may be impossible for later workers to check if particular interesting species are still present or not; and, much worse, the recording will be utterly useless for conservation purposes. To my personal knowledge, this lack of precise location information as an input to the data bank has happened on many occasions over the last twenty years or so, with the result that the precise location of a rare species, or even an interesting habitat, worthy of conservation action, is sometimes quite unknown! The County Trust or the NCC may then be faced with a wearisome, time-consuming search of the tetrad concerned. One way of overcoming this problem is for all field recorders to make detailed field notes of any major habitats observed, perhaps with separate record cards for each such habitat, rather than merely crossing off all the species recorded in a tetrad directly on the tetrad master card. This has the added advantage for accuracy that there is then an opportunity to check whether he or she has made any slips in marking the species on the card. We all make slips of this kind in the field. Personally I always prefer to make my initial lists in my own field notebook, to be checked over later.

4. Workers on a local flora usually include people of varied botanical knowledge. It is important that those who are unsure of certain groups, e.g. grasses or sedges, should indicate this fact in a footnote on the card they send in. Otherwise the editor may not know that coverage of some groups is inadequate and may need special attention by someone more expert later on.

One final plea. May I urge all BSBI field recorders to adopt the method of marking the record cards that has been used now for some years by most members of the British Lichen Society in similar work. The species name is underlined clearly, and the line is turned up vertically at the right-hand side, so that there is no ambiguity as to which species is meant. Many people unfortunately still cross through the name in such a way that is quite illegible, or else do so carelessly with an oblique line that there is often doubt over which species is meant!

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## NOTES AND ARTICLES

### ANIMALS TRAPPED BY PLANTS

It seems that insects are not the only animals trapped inadvertently by plants. (BSBI News 43: 13-14 (1986) & 44: 14-15 (1986)). Tim Rich has drawn my attention to notes in British Birds and Bat News which show that small birds and mammals are also at risk, often with fatal consequences.

In 1957 there was the case of a migrant Goldcrest which became fatally entangled by its breast feathers in the hooked hairs of a burdock plant (British Birds 51: 276 (1958)), and in 1960 a juvenile Sand Martin was found similarly ensnared (British Birds 55: 89 (1962)). In 1961, Holy Island, Northumberland, was the setting for an unusual instance involving the prickly seed-heads of the alien Acaena anserinifolia which grows abundantly on the dunes; a Song Thrush was found with its wings 'glued' to its body by the seed-heads; a juvenile Wheatear had been reported in a similar predicament in 1950 and the dead bodies of Redwings and duckling Shelduck, covered with varying amounts of these seed-heads, have also been reported from the same area (British Birds 55: 89-90 (1962)).



A dead Natterer's bat trapped on burdock. Photo F.R. Greenaway

Bats too have been found trapped by plants. In 1961 a Pipistrelle bat was found "with its left 'wing' firmly held by the bristles of some rough bristle grass (*Setaria verticillata*)" (*British Birds* 55: 96 (1962)).

In 1985, *Bat News* published a photograph of a dead Natterer's bat trapped by the hooked bracts of burdock (*Bat News* 5 (1985)) and this is reproduced here by kind permission of the Editor, Mr A.M. Hudson and the photographer Mr F.R. Greenaway. In the same year in a bizarre incident, six Pipistrelles were found caught on the barbed spines of a cushion cactus on the sill of an open window; three were freed apparently unharmed but the others died of their injuries (*Bat News* 6 (1986)).

The editor of *Bat News*, Mr A.M. Hutson, kindly informed me of two further instances. One involved a "bat which had become caught on a teasel or similar prickly component of a 'dried flower arrangement'" in 1986, and the other a Long-eared bat caught in a bramble bush in 1987.

EDITOR

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## THALICTRUM ALPINUM L. IN CRAVEN YORKSHIRE

Shortly after the note in BSBI News 47 I received a letter from John Edmondson, Keeper of Botany at LIV. He enclosed a xerox of 2 fine specimens of *Thalictrum alpinum* collected on Ingleborough, Yorks, by Joseph Dickinson in 1816, thus providing unequivocal evidence of the plants occurrence in Craven.

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## THALICTRUM ALPINUM L. IN CRAVEN, YORKSHIRE? - II

I can add slightly to J.M. Mullin's interesting note under this title in BSBI News 47 - but I fear only to inject an extra layer of doubt.

July 1841, the date on the herbarium sheet in question, was long before the period of Syme's first English collecting. Before his appointment as Curator of the Botanical Society of London in 1851 he seems to have operated in Scotland exclusively. His herbarium is full of specimens which, despite their lack of the usual printed BSL labels, can only have come to him through that body and presumably were obtained from its large stock of duplicates, to which he was perhaps allowed to help himself (as Watson certainly was) or else acquired following the Society's dissolution in 1856.

John Tatham was a particularly prolific contributor to the Society's exchange activities from 1839 onwards. He would appear to have been a capable and careful worker (Watson was happy to take his records on trust) and not a very likely person to have mixed material of two quite unrelated species without noticing this - or to have failed to recognise *Thalictrum alpinum*, for that matter. A more probable explanation is that the gathering in question was one of the allegedly numerous casualties of the very slipshod methods that were used in the early years in processing the material sent in to the BSL prior to its allocation to the members (Watson 1847). According to Watson, "mingling specimens and loose labels from different and even distant localities" had been a not infrequent occurrence before he arrived on the scene at the end of 1840 and introduced much more rigorous procedures. Even then Denness was liable to slip back into the bad old ways if Watson was not constantly at his elbow (which was far from always possible). There is evidence that, in some cases at least, Syme took over the data on the labels of those early BSL specimens quite uncritically, merely perpetuating previous confusions (Allen 1981).

Many further Tatham specimens distributed through the BSL are in Watson's herbarium at Kew. In so far as they duplicate particular gatherings of his in other collections, these may provide a means of checking in instances where a mixture is suspected.

**References**

- Allen, D.E. (1981). Sources of error in local lists. Watsonia 13: 215-220.  
 Watson, H.C. (1847). On the credit-worthiness of the labels distributed from the Botanical Society of London. Phytologist 2: 1005-1015.

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LITTLE AND LARGE II  
SANGUISORBA OFFICINALIS L., GREAT BURNET

Further to the observations of J. Oliver in BSBI News 47: 23-25 (1987), concerning plants growing outside the growth ranges given in Clapham, Tutin and Moore (1987), I have noted large plants of *Sanguisorba officinalis* L. Great Burnet. CTM (1987) describe this plant as 30-100cm in height, with leaflets growing to 4cm in length and flowering from June to September.

At Gillfield Wood, Totley, Sheffield, on 30/8/1987, I found several Great Burnet plants with leaflets between 4-5cm. A pressed leaflet taken on 10/8/1985 at Fryent Country Park, Middlesex v.c. 21, on London clay, had a width of 36mm and a length of 60mm. The plant in my garden (Wembley), transplanted from Fryent Country Park in a rescue operation on

10/9/1984, attained a height of 115cm during the 1987 growing season (27/7/1987). Heights of plants measured at Fryent include 132cm (21/7/1984), 150cm (14/8/1984), 154cm (25/8/1984) and 171cm (25/8/1984).

In general, most leaflets are just within the range given by CTM (1987), but a high proportion of the plants exceed one metre in height. At Fryent, I have seen a flower head with fresh pollen as late as 22/11/1987.

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### BEQUESTS AND THE NATIONAL MUSEUMS

In his interesting note 'A Local Herbarium for Sale' in BSBI News 47: 20 (1987), David Allen makes the following sweeping statement, "At a time when the chief national museums are full to overflowing with British material and refusing any additional bequests. . ." (my emphasis). This demands some clarification, at least in so far as one national museum - the British Museum (Natural History) - is concerned. Naturally, at a time when government funding for science is increasingly constrained, we have to have a rigorous accessions policy that assesses the national significance of new acquisitions against the curatorial resources, space and furnishings needed for their reception and maintenance in perpetuity. Equally obviously, when we already have the largest and most comprehensive collection of our native flora, it is very unlikely that we should want to acquire run-of-the-mill collections of no more than average interest. As David himself recommends, when natural history pursuits are increasingly enjoyed as leisure activities, it is not only expedient, but also highly appropriate that good local collections should find their final resting places in relevant local museums, where they should be both used and valued as essential archival records of the local environment. However, there are also the very different circumstances of, for instance, specialist collections of various difficult groups, representative sets from genuinely under-collected areas, vouchers for records of unusual interest and old collections of real historical importance. For all these the **BM**, and presumably the other national museums, retains a very definite interest.

Finally, a more general point. Are not we botanists now moving rapidly towards the circumstances that for many past decades have been enjoyed by our ornithological colleagues? Quite apart from the legal aspects, it would be considered very odd today, to fill one's study with drawers of sad little feathered corpses and empty egg shells. Similarly, I believe that the need for individual general herbarium collections is a thing of the past. We in the British Isles have the best known flora in the world. We are amply supplied with national and local floras, field guides, atlases, etc., and the compulsive collectors amongst us can satisfy their impulses through the camera rather than the vasculum or polythene bag. This is in no way to deny the importance of vouchers for records of unusual interest, or the need for individuals with special needs to bring together limited collections in support of their studies. But I do believe that the justification for making miscellaneous collections of British vascular plants, just because 'they are there and people like collecting things, is now long past. I recognise that what I am advocating is already a commonly, perhaps even generally, accepted viewpoint. However, an unambiguous statement of policy from the BSBI would do no harm, and would endorse our commitment to conservation. It would support our association with CABS (the Conservation Association of Botanical Societies), the county trusts and other environmental organisations throughout the UK and the Irish Republic.

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### HERBARIA FOR SALE - II

In BSBI News 47: 32 (1987) David Allen reported that £130 (1.35 sheets per £) was being asked for a small Cumberland herbarium formed in about 1900. It may be of interest to

readers to have before them some historical and recent prices with which to compare the "incredible valuation" referred to above.

In 1849, G.H.K. Thwaites, a Bristol accountant and the Local Secretary of the Botanical Society of London was appointed Curator of the Ceylon Botanic Gardens at three months notice. Anxious to dispose of his "somewhat large collection of dried British Phanerogamic plants" he divided them into "one best lot of 550 specimens for which I want £40, although I would not refuse £35, and nine lots of 90 specimens for which I ask 90 shillings each". The asking price (£80.50) would have paid for Thwaites' passage to Ceylon (£70) and is equivalent to 17 sheets per £, well over £1 per sheet in modern terms. One small lot was sold to Cambridge (though I cannot distinguish it there from the BSL distributions found elsewhere) and much of the rest must have remained unsold in Bristol and do not seem to have survived.

In 1901 J.W. White sold to his fellow Bristolian H.S. Thompson a thousand Continental duplicates for £5 (200 sheets per £), saying "I should prefer their room to their company [having now] several thousand waiting to be mounted".

In 1910, perhaps for the same reason, Thompson offered White's specimens to Nottingham University at 30 shillings per hundred, three times their cost to himself. J.W. Carr, Professor of Botany there, wrote, "We have a fair number of Mr White's plants and - as you say - they are always good" adding, "I will of course say nothing to him of the transaction".

The Royal Botanic Garden of Edinburgh did, however, hear that "you have been selling to various botanical institutions" and in 1911 bought from Thompson two parcels of brambles at 20 shillings per hundred. These were probably Exchange Club duplicates, hence the lesser value, about 7 per £ in current terms.

In 1980 I purchased from an antique market in Bristol two bound volumes (numbered 29 and 30) of the herbarium of BSBI member Sir Eric Leadbitter. At £9 this represented about 16 sheets per £. The somewhat untidy specimens are part of a general collection of the 1950s and include regional specialities from well-known sites such as the now-protected **Damasonium alisma** from an extant Surrey locality.

From a second-hand bookshop in Innsbrück in 1983 I brought a collection made in 1941 by an Austrian pharmacist, W. Seidl, evidently as part of his training. At a cost of £15 there were about 10 sheets per £.

From the examples presented above, it is agreed that the amount asked for the Cumberland collection is, by 20th Century standards, considerably over-priced. Alternatively, it assumes a market with Victorian levels of demand which no longer exist.

It must be acknowledged, however, that herbarium specimens may have value in excess of their cost of collection or acquisition, or their scientific value. J.W. White, in a pamphlet entitled The Preservation and Mounting of Flowering Plants (1905) remarked, "...in the herbarium one may find [plants flowering] at all seasons ... as well as a thousand agreeable remembrances of places and events". Having recently reviewed my own Greek collections, I can only concur.

### Sources

Thwaites, G.H.K. Letters to Sir W.J. Hooker in 1849. Kew Gardens, Library Archives  
Thompson, H.S. Letters received. Special Collections. Bristol University Library

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### NATURE HAS THE LAST LAUGH?

**Catabrosa aquatica** is a somewhat lowly grass with few devotees which has apparently always had a limited distribution in the north-east of England and eastern Scotland where the records are mainly but not exclusively near the coast and where, if the 'Atlas' is to be believed, many former localities are now lost.

In my county, Berwickshire, George Johnston does not list the species in his Flora of 1829 but in his later work in 1853 describes it as "not uncommon in ditches and watery places, a very pretty grass with a sweet herbage". No specific localities are given, which probably means a couple of colonies had come to his attention in not very interesting places, and it was not until 1880 that his protege James Hardy found it with special excitement "at Gordon Moss in a ditch running north from the left-hand bog". The species

was soon forgotten and although many naturalists recorded at Gordon Moss, only A. Anderson noted the species again in 1915 until I worked the ditches of what is now a SWT Reserve in 1980 and refound **Catabrosa** just outwith the Reserve in just the habitat Hardy had described, where it seemed to benefit from cattle plodging and a high water table.

My satisfaction was short lived, for a drainage order was passed that all ditches near Gordon Moss were to be deepened. It seemed inevitable that **Catabrosa** should be lost from its last remaining site in the county, though it had meanwhile been found in a ditch at 200m in Roxburghshire. In the spring of 1987 I visited Gordon Moss with the NCC ARO and was delighted to find that the area of wet grassland with the **Catabrosa** had not yet been drained. I immediately canvassed an extension to the SSSI and was warming to my task when we rounded a corner and viewed the full horror of the newly widened main stank. Imagine my feelings when I found this ditch clogged with familiar vegetation - rafts and rafts of **Catabrosa** thriving on the disturbance. Investigation revealed several hundred metres of other ditches similarly colonized.

Now Gordon lies in a BSBI monitoring square and, as you will now be expecting, **Catabrosa** turned up four more times in the square in 1987. Three sites are in ditches through fen peat in sites of substantial post-glacial lakes and the fourth is in a cattle drinking pool at the edge of a mire, all the subject of recent disturbance and all coincidentally at about 140m.

I am convinced that much of the **Catabrosa** seen in 1987 had grown from long-buried seed that had germinated on being brought out of its wet peat into a drier and lighter environment and that it had quickly colonized a bare habitat in new ditches, and I wonder if any other members have had similar experiences?

Although nature has had the last laugh this time I am less happy about the future and have my doubts about whether **Catabrosa** will hold its own in mechanically cleared ditches in an environment of intensive agriculture.

MICHAEL BRAITHWAITE, Clarilaw, HAWICK TD9 8PT

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ITALICS?

I was recently asked by a friend to quote chapter and verse for the convention that scientific names should be written in italics. The standard work of reference for style in New Zealand is the 'Style Book' published by the Government Printing Office. This states in Section 2.8:

"Scientific names of genera, species, subspecies, and varieties of animals and plants should normally be set in italics, but the abbreviations sp. and spp. (meaning "species", singular and plural respectively) are set in roman type... When scientific names appear in long lists they may be set in roman type."

I have not yet located the origin of this convention and would be grateful if any member of the BSBI could enlighten me.

Incidentally, whilst considering this problem I received my copy of BSBI News 46 and noted that in it species names are not given in italics. Does this mean that the BSBI is flouting convention, or cannot its printers manage italics, or is there, in fact, no botanical-legal requirements for italics?

F.J. TAYLOR, Ainola, Goat Island Road, LEIGH, New Zealand

[Italics are not now used for scientific names in BSBI News because it is not typeset; camera-ready copy is produced by a daisy-wheel printer and it is impracticable to change daisy-wheels every time a Latin name occurs. Ed.]

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ANOTHER CAUTIONARY TALE

The recent notes on introduced species (BSBI News 46, 47 (1987)) brings to mind a similar discovery this year. My wife and I were looking at the plants of the south facing slope of a railway cutting at Ludgershall, Bucks. There is a good chalk flora, including **Tetragonolobus maritimus** and on seeing this one wonders just how it got there. The bank is

perhaps better known to lepidopterists because it is the home of the marsh fritillary (*Euphydryas aurinia*) and the wood white (*Leptidea sinapis*) and so it was that we met, and started chatting with, a group of photographic butterfly-hunters (who, because of the poor summer, were not having the greatest of days). One of them, in the course of conversation revealed that *Tetragonolobus maritimus* had been planted by someone he knew as a food-plant for the wood whites. No need to wonder any more!

Richard Mabey (The Flowering of Britain, p. 158) also throws light on another introduction, *Erinus alpinus* (fairly foxglove), the spread of which he attributes to "the married couple who carry a stock of its seeds with them on their travels round Britain, planting them out on any suitable limestone site".

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

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### MULTI-SEEDED SYCAMORE FRUITS

In September 1987 specimens were brought to me of multi-seeded fruits found on a number of Sycamore trees scattered in and around the Wigan area (S. Lancs.; v.c. 59). The number of winged seeds in a fruit varied, with 4 or 5 being frequent, but sometimes more. One particular raceme had 2,3,4,6,8 & 10.

I had no opportunity of examining any of the trees from which the specimens had been obtained, and my own limited searches produced only racemes with most fruits 2-seeded, one or two terminal fruits being 3-seeded. Was this normal? Clapham Tutin & Warburg (1981) state unequivocally for Aceraceae "fruit separating into 2 indehiscent 1-seeded winged halves"; Davis & Cullen (1979) "fruit a schizocarp of 2(-3) samaras" and Grindon (1859) describes quaintly "sometimes there are 3 carpels when the fruit resembles the arms of the Isle of Man". So my own findings would appear to be normal but the specimens decidedly not.

The tree which bore an abundance of unusual fruits is situated at the edge of very neglected fields, unlikely to have been sprayed; several others are street trees in the town. Since it seemed possible that the abnormality might be a gall, specimens were sent to an officer of the British Plant Gall Society, but the verdict was negative - no causer could be found, nor was there any reference in gall literature.

I am probably not alone in regarding Sycamore as an uninspiring tree, not usually worth a second look, so the phenomenon may have been overlooked, but if others have noticed unusual fruits in 1987 or earlier I would be interested to receive observations and will gladly forward these and my remaining specimens to anyone who could investigate further.

#### References:

- Clapham, Tutin & Warburg (1981) Excursion Flora of the British Isles.  
 Davis P.H. & Cullen, J. (1979) The Identification of Flowering Plant Families.  
 Grindon L.H. (1859) The Manchester Flora.

EDNA STEPHENSON, 94 Winstanley Road, Billinge, WIGAN, Lancs. WN5 7XA

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### CHENOPODIUM HYBRIDUM L. : A PURPLE-PIGMENTED FORM

In the course of studying herbarium specimens of this distinctive species of *Chenopodium* in the herbaria of the Universities of Cambridge and Reading, I have come across a number of plants whose leaves and axils were suffused with a purple pigmentation. The specimens I have looked at also have a markedly different testa sculpturing when compared with those that lack the pigmentation, and the pericarp of the purple-pigmented form seemed less persistent.

I would therefore be very interested to hear of any occurrences of purple-pigmented individuals or populations, and would refund postage on any specimens sent to me. The specimens I have seen were from typical ruderal habitats, and thus there may have been opportunities for crossing with alien species in these sites.

PAUL WILKIN, Department of Botany, Plant Science Laboratories, University of Reading, Whiteknights, P.O. Box 221, READING RG6 2AS

FRUITING IN CORALROOT, *CARDAMINE BULBIFERA* (L.) Crantz.

*Cardamine bulbifera* is a plant mainly restricted in Britain to a small area of the Kent-Sussex border, two other small areas of Sussex, and the Chilterns, where it is found in suitable habitats in a broad band stretching roughly from West Wycombe north-eastwards to Watford. It is also known from a number of other localities but in most its status is suspect. It is a plant of damp woodlands, often but by no means always on chalk, where it is able to tolerate considerable shading. In such situations it can appear in great numbers when a patch of this woodland is cleared, flourish for a few years and then as ground and shrub cover increases it once again diminishes in numbers.

The flowering period is normally little more than a week, commencing in late April or early May depending on the season (Table 1, p. 27, gives dates for the Chilterns). According to most authors it rarely sets fertile seed in Britain and *Flora Europaea* states that siliquae are "found occasionally and only in the southern part of its range" which includes "Europe, except the SW and extreme N; it is rare in the Mediterranean region". Reproduction is thus almost invariably vegetative, by means of the black shiny bulbils which are borne in the axils of most of the leaves, even on non-flowering plants. These fall when mature in late June and soon after this the aerial part of the parent plant dies back and disappears until the following season.

Each fallen bulbil overwinters and produces a small 1- or 2-leaved plant the following spring; a year later a plant bearing bulbils is produced and if conditions are favourable there may be flowers as well but more usually it will be another season before flowers are seen. As already stated, in a normal year seeds are not set, though searching after the flowers are dead generally reveals ovaries which are enlarging; however, when one returns optimistically a little later these are found to have withered and fallen. These observations have been confirmed over a number of years by the examination of local populations of the plant and a patch, grown from bulbils, in my garden. Until 1986, fruiting had been noted only once and this was on one plant only in my garden and never in the wild. Similar observations have been made by a considerable number of botanists who have kindly responded to my enquiries and who will be more fully acknowledged in a later paper.

The spring of 1986 was a poor one with cold weather persisting for so long that the first *Cardamine bulbifera* flowers did not open until May 15, an extremely late date (see Table 1, p. 27). In June it was clear that a number of plants in the garden had set seed; the ovaries which normally shrivel had done so and disappeared but many others were still on the plants and looking very healthy. This led me to examine three local colonies and it could be seen that a significant proportion, though not as high as in the garden, were bearing fruits. In the garden the first of these siliquae dehisced on July 14 and the others, including those in the wild, soon after. The seeds were ellipsoidal, pale brown and measured approximately 1.5 x 1.5 x 2mm with 4 to 6 in each siliqua. These varied in length from 15 to 36mm; most were about 25mm with a width of 2mm (see fig 1. p. 27).

The garden plants and samples of the three wild populations were measured and it was evident that (a) only the larger plants in each group bore fruits; (b) the garden plants were larger overall than those in the wild, with one monster reaching a height of 92cm, presumably due to lack of competition; and (c) the larger the plants the greater the number of siliquae. In 1987 none of the wild plants produced fruits but those in the garden did. The same measurements were made and all the results summarised in Table 2 (p. 28), though this does not illustrate feature (c).

Why did the plants bear fruits in 1986? Whilst it seems that the large plants are potential fruit bearers it is difficult to identify what triggered fruiting. The possibilities include:

1. The late flowering resulted in higher mean temperatures at the time of fertilisation.
2. The late flowering resulted in longer day length at the time of fertilisation.
3. The late flowering resulted in an insect pollinator being on the wing which would not be found in late April.
4. Since individual colonies or populations normally reproduce vegetatively (by bulbils) they are of a uniform strain and perhaps, therefore, sterile within the colony. For some reason cross-pollination was possible in 1986 and this resulted in fruits.

Now 4. seems unlikely since the colonies are often 2 to 3km apart and few insects travel these distances for pollen or nectar; similarly a late season would probably delay the emergence of pollinators just as it delays the flowering of the plants, so 3. is unlikely. This leaves 1. and 2. and of these the former seems more likely, supported by

the statement in *Flora Europaea* about fruiting only in the southern part of its range, i.e. where it is warmer. What about the garden plants in 1987? These originate from bulbils from at least 2 different sites and if these have now all reached maturity, 4. could be an explanation for this. If so, they should fruit again in 1988.

Tim Rich and I hope to investigate this feature and to this end would welcome suggestions, observations on colonies (fruiting or otherwise) and information on localities in which *Cardamine bulbifera* occurs. We are especially interested in looking at the leaves, and so would welcome specimens of a basal and an upper leaf to see if the pattern varies from place to place and to attempt to identify introductions and their place of origin; there is evidence to show that this may be possible, and continental specimens would be of interest in this study. Please send any records or specimens to me as Tim is rather busy with coloured cards and things at the moment.

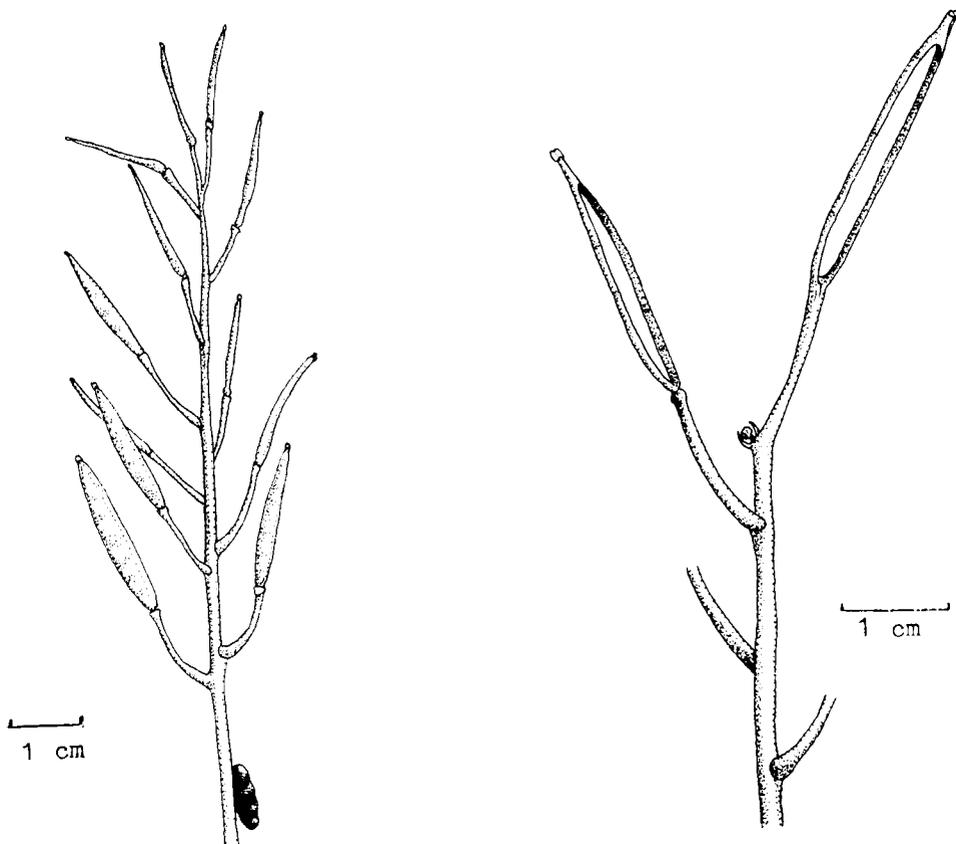


Fig. 1. Fruits and dehisced fruits of *Cardamine bulbifera* Del. D.A. Showler

April 24 1980	May 10 1985
April 26 1982	May 15 1986
May 9 1983	April 27 1987
May 2 1984	

Table 1. Dates for Appearance of First Flowers

Table 2. Observations on Populations of *Cardamine bulbifera* in the Chilterns in 1986-7

Location	No. of plants			Mean height		Extremes of height			
	Total	F	NF	F	NF	F		NF	
						Max.	Min.	Max.	Min.
1. Garden (1986) 41/862968	16	7	9	61.6	49.6	92	50	53	45
2. Booker Common 41/834918	32	4	28	25.3	20.9	27	23	26	17
3. Park Wood 41/833975	50	13	37	22.2	19.1	26	19	24	13
4. Millfield Wood 41/871953	43	11	32	22.4	19.1	24	20.5	22	14
1. Garden (1987)	50	20	30	60.5	49.5	75	52	61	28

All heights are in cm. F - Fruiting NF = Non-Fruiting

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### SURPRISING FINDS ON MICKLEHAM DOWNS

I have recently made some interesting records on Mickleham Downs, despite the time of year.

On January 15th I found 44 plants of *Iberis amara* in flower (typical flowering period June - August), about 6 months out of season. This locality was known to Salmon who regarded it as a native and who cited a record from 1844 which was probably from this site.

A visit to the same area on February 20th produced a few *Iberis* still in flower, and also *Euphorbia amygdaloides* cv. *Purpurea* (det. Radcliffe-Smith), of which there were about 8 stems in 2 clumps. It appeared very well established and presumably originated there as seed.

Besides these there is also *Helleborus foetidus*, *H. viridis*, *Philadelphus* and other alien shrubs. The presence of these obvious aliens puts the origin of the apparently native plants in doubt. Could this area have been a garden at some time in the distant past?

RICHARD MILNE, 41 East Sheen Avenue, Sheen, LONDON SW14 8AR

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### SHAKESPEARE'S BOTANY

I am an actress at the National Theatre in London, a novice botanist, and an enthusiastic member of the BSBI.

I am also well-known in the Company for being 'the flower freak', and often find myself being accosted in rehearsals, and asked to identify something, either from a vague but colourful description, or - a practice I am at great pains to discourage - a handful of wilting greenery. My nightmare is that one day, one of these matted bunches will turn out to a Red Data Book special, but fortunately it is usually some kind of common umbellifer or knotweed. Once it was *Cannabis sativa*, and I think I was being tested!

At the moment, we are rehearsing, simultaneously, Shakespeare's last three plays - *Cymbeline*, *A Winter's Tale* and *The Tempest*. Directed by Sir Peter Hall, they open at the Cottesloe Theatre in April, and then we take them on a World Tour.

I very quickly realised how full of botanical references and wild flower descriptions these three plays in particular are, when actors, knowing that I was the tame expert, started coming to me to ask what such-and-such was, or what so-and-so looked like. So I have now done a series of large wall-charts, complete with pictures, photographs, descriptions and lists of alternative names in current usage in Shakespeare's day (thank you, Geoffrey Grigson!)

In all the three Late plays, as they are called, there are references to thirty or forty plants, each one perfectly observed and impeccably described, from a botanical as well as a poetic point-of-view. The Warwickshire country boy was never far from the surface, even after all those years with the fleshpots on Bankside. For instance, in Cymbeline, Iachimo describes the sleeping Imogen as having "on her left breast / is a mole cinque-spotted like the crimson drops / i' th' bottom of a cowslip"; and in a later section describes her veins as being "like the veins i' the azur'd harebell". Pretty good stuff, as I think you would agree.

So - botanical knowledge at the N.T. is much improved, and BSBI members who have a fancy to visit the South Bank this year to see any of the plays, can rest assured that, for once, the actors DO know what they are talking about - florally, if nothing else!

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### ROBERT LLOYD PRAEGER MEMORIAL PLAQUE

On Saturday 7th November 1987 a commemorative plaque to honour Robert Lloyd Praeger was unveiled at 19 Fitzwilliam Square, his principal Dublin address.

The event was prompted by the Dublin Naturalists' Field Club as Praeger was twice elected President and for many years served on the Committee. The unveiling was performed by our current most famous botanist, Professor David Webb of Trinity College. In his speech Professor Webb said that in addition to being a great naturalist, Praeger was one of the first organised conservationists. He was a founder member and first President of AN Taisce, Ireland's premier conservation body. As this is the European Year of the Environment it is appropriate that Praeger should have public and official recognition for his services to science and the nation. The ceremony was a happy one followed by an equally happy reception where our guests met and mingled.



Prof. D.A. Webb unveiling the Robert Lloyd Praeger Memorial Plaque

The attendance included eleven past Presidents of the D.N.F.C. The Royal Irish Academy was represented by two members of the Praeger Committee, Galway University by Tim Collinc who is Praeger's biographer, and the National Botanic Gardens Glasnevin by Maura Scannell. We were particularly pleased that the Belfast Naturalists' Field Club sent two delegates, Trevor and Helen Boyd, because, after all, Praeger joined our partner Club at the age of eleven and remained with them as an active member until he took up residence in Dublin and joined the D.N.F.C.

PADDY REILLY, President, The Dublin Naturalists' Field Club, 26 Nephin Road, DUBLIN 7, Republic of Ireland

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### WILDFLOWER PUZZLE

The following crossword-like clues stand for English plant names familiar to us all. Seventeen are native and three are alien. How many can you deduce?

Answers in the next issue. Good luck!

- |                                      |                                       |
|--------------------------------------|---------------------------------------|
| 1. Third time our doctor's got acne! | 11. Step and jump afterwards          |
| 2. Even more insane                  | 12. Part of a larger bird of prey?    |
| 3. Amphibian in a hurry              | 13. Rise and shine!                   |
| 4. Could just be topical in Russia   | 14. Adult or child                    |
| 5. I can't see now!                  | 15. Bob's remedy                      |
| 6. Soft-centred, my sweet            | 16. Sounds burnt                      |
| 7. Short-lived Eyebrights?           | 17. A cowardly and sloppy combat!     |
| 8. Weapon in pristine condition      | 18. Quite lethal after dark           |
| 9. Back deer                         | 19. Canine ascent                     |
| 10. They say it's the best policy    | 20. Sorry, folks, we're out of it now |

BRIAN WURZELL, 47 Rostrevor Avenue, Tottenham, LONDON N15

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### PLANTS AND 'WILDLIFE' FILMS ON TELEVISION

I wonder if the BSBI is as concerned as I am that in nearly all wildlife films shown on television, plants are very seldom named but we are given all sorts of details about animals and especially birds.

It would be quite easy for the film people to put the name of the plant in the bottom of the shot: not only would it be informative but it might also encourage viewers to realize plants matter just as much as fauna.

KENNETH MARSH, Old Schoolhouse, 104 Lyndhurst Grove, LONDON SE15 5AH

[A copy of the above letter was sent by Mrs Mary Briggs to the Natural History Unit of the BBC; their reply is printed below. Ed.]

Dr Marsh's letter raises two issues; the first that "plants are very seldom named" in TV wildlife programmes, and the second that "it would be quite easy... to put the name of the plant in the bottom of the shot".

The criticism that "plants are very seldom named" is, I feel, largely justified, but given the circumstances under which films are shot and the context in which plants are usually portrayed in the transmitted programme, it is a situation difficult to remedy.

I think that producers in the Natural History Unit would agree that there is a bias towards birds and mammals in their programmes. The reasons for this are complex, but to a large extent this bias reflects their own interests, experience and, perhaps, prejudices!

When on location filming for a programme concerned primarily with bird or mammalian species, background material - scenery, plants and the like - will be shot to provide a visual 'punctuation' for the film that will be broadcast. This 'punctuation' helps to control both its visual and verbal pace. In a well edited and scripted film this use of

such material will not be apparent to the viewer; the introduction of additional commentary would certainly reduce or destroy the value of the visual 'punctuation' and overburden the script to the detriment of the programme.

There are, of course, other difficulties - practical rather than aesthetic. The problems likely to be encountered in naming plants in the field in the remote corners of the world favoured by wildlife film-makers may be insurmountable; consider that there are only some 9,000 species of birds and 4,150 species of mammals known to science, yet there are of the order of 18,000 species of orchids alone. It is perhaps not surprising that producers tend to tread the ground with which they are most familiar and that, in Dr Marsh's words, "we are given all sorts of details about animals and especially birds".

There have, of course, been many beautifully filmed and well-received programmes on botanical subjects. Those that come immediately to mind are 'Sexual Encounters of the Floral Kind' and 'Flowers from the flames' which appeared in 'The Natural World' and 'Wildlife on One' series respectively. The Natural History Unit does not have a monopoly on wildlife film-making within the BBC, and the Further Education Department's 'Geoffrey Smith's World of Flowers' and 'Bellamy's New World' are examples in point.

The inclusion of captions, Dr Marsh's second point, is technically possible (although at additional expense) but would be undesirable. It is used in 'Gardeners' World', a programme with a more specialist appeal than much of the Unit's output, and an audience which will almost certainly wish to note the names of plants to seek-out in their local nursery gardens. There is however, little doubt that captions do draw the viewer's eye away from the picture and distract attention from the commentary. It seems unlikely that they would appeal to the large, general audience.

ROSI CRANE, Film Librarian, Natural History Unit, Broadcasting House, Whiteladies Road, BRISTOL BS8 2LR

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## COMPUTERS

### WHY DON'T WE HAVE STANDARDIZED COMPUTER SYSTEMS?

Computers are fast becoming an integral part of the BSBI. They are already widely used to handle records at a county level. Soon, thanks to programs developed by Richard Pankhurst, they may be particularly helpful with identification of critical groups. Rightly then, there is a growing interest.

However, the bewildering array of computers and programs available make it difficult to know which to choose. Many fulfil the basic requirements of the computer-botanist, e.g. abstracting records for a particular species or grid reference, or plotting maps, but some do not. Almost every user currently has a different system.

If one suitable system could be selected and adopted as standard, it could be recommended to all new users. It would need to be simple to operate, flexible for input/output of data, compatible with a recognized established system and preferably BRC (hence IBM) compatible, and good value for money.

There would be valuable advantages: records of information could be swapped on disc with other users and with BRC, there would be a pool of experience to help sort out problems and improve the system, bulk purchase of computers and software would be cheaper. The initial problem for a beginner, that of deciding which system to use, would be solved. The penalty for not having a standard system would be the highly inefficient state of each user having to re-input and check data each time it is passed on. Anyone who does this knows already the effort involved.

Perhaps selection of a suitable system could be the first job of a BSBI Computer Users Group. Are there any volunteers to set up and run such a group? We personally do not have sufficient experience of computers!

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

Mrs I.P. WESTON, Lindhris, Riseholme Lane, Riseholme, LINCOLN LN2 2LD

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## A COMPUTER MAPPING PROGRAM FOR THE AMSTRAD PCW 8256/8512.

The 'Glamfloramap' system is a BASIC program originally written to produce distribution maps for the Glamorgan Flora project on the Amstrad PCW 8256 and 8512 computers. It has two parts, one for storing and retrieving records for the 5km recording squares ('Mapfile') and the other for drawing distribution maps using 'Exbasic' graphics (available from Nabitchi Computing, 131 Mount Pleasant, Liverpool L3 5TF). An earlier version, 'Logmap', used the Logo graphics supplied with the PCW, but was complex and slow; the 'Exbasic' system is rapid and convenient.

'Mapfile' is a database which stores and accesses records for up to 1000 species in each of the 117 recording squares in Glamorgan, using one side of a single-density disk formatted to give 160 instead of the normal 64 files; entry, consultation or modification of records is more or less instantaneous. The Exbasic graphics work directly from the main program, and will draw and print distribution maps automatically, compiling the data from the grid-square records in the 'Mapfile' database. The computer takes about 3 minutes to compile and print each map. If desired, it is capable of drawing, labelling and printing maps of all 1000 species in a continuous series, working on its own. Four categories of record are plotted; more can be added if required. The complete system, including the database, fits on one self-contained single-density disk. It is limited to a maximum of about 320 recording squares in its present form, but could (for example) deal with 720 squares if the 'Mapfile' database was divided into two 500-species units.

The base-map of Glamorgan is permanently saved as a picture-file, and different versions (with or without grids, reference numbers, etc.) can be used (see fig. A, p. 32). The system can also be adapted for other areas with different recording units, for example 1km squares in Gower (see fig. B, p. 32). The original base-maps have to be drawn by coordinates and must be carefully fitted to the screen, leaving room for the text which is limited by the 31 rows x 90 columns screen of the PCW.

QUENTIN KAY, School of Biological Sciences, University College of Swansea, Singleton Park, SWANSEA SA2 8PP

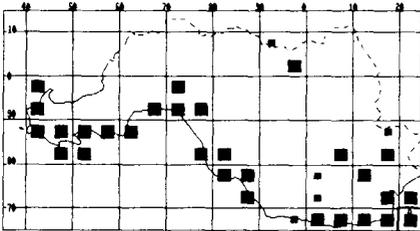


Fig. A. *Blackstonia perfoliata* in Glamorgan (see above)

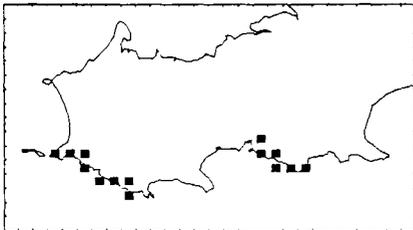


Fig. B. *Draba aizoides* in Gower (see above)

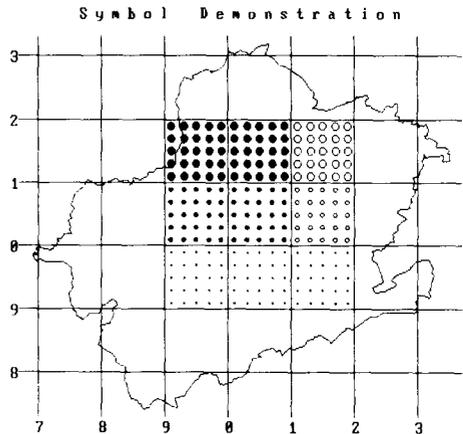


Fig. C. An example of DMAP output showing a range of symbol types available for plotting, square symbols can alternatively be selected (see p. 33)

## DISTRIBUTION MAPPING WITH IBM-COMPATIBLE MICROCOMPUTERS

DMAP is a computer program for distribution map and coincidence map plotting which will run on a wide range of IBM-compatible PCs (e.g. the Amstrad PC1512 and PC1640, Opus, and Wyse PCs), and will operate with all commonly fitted graphics displays (e.g. CGA, EGA, Hercules). The program reads data files supplied by the user, giving control and flexibility in the boundary outline, extent of the gridded area, and plotting symbol size and type. Square or rounded symbols can be selected, and a range of different sizes and types of symbol can be set for individual records in the distribution data file (see fig. C, p. 32). All data files are based on National Grid references, and the program can be used for plotting records on any sampling scale (1km, 2km, 5km, 10km etc.). An additional utility program is supplied which converts a file of records coded as BRC tetrad letters into a file of grid references. The coincidence mapping facility can be used for plotting the joint frequencies of groups of species chosen for 'habitat' mapping, or for all species as a useful guide to recording coverage during the course of a biological recording project.

The program is not very demanding on disk space and can be run on computers without a hard disk, reading data files supplied by the user on floppy disk. Alternatively, DMAP can be linked to an existing database on floppy or hard disk. The quality of the screen display depends on the resolution of the graphics hardware fitted to the computer, but a hard copy facility is also provided which is independent of this and gives a high resolution (720x432) plot directly onto a dot-matrix printer.

For further information about DMAP and its availability, write to the author.

ALAN MORTON, Imperial College, Silwood Park, ASCOT, Berks. SL5 7PY

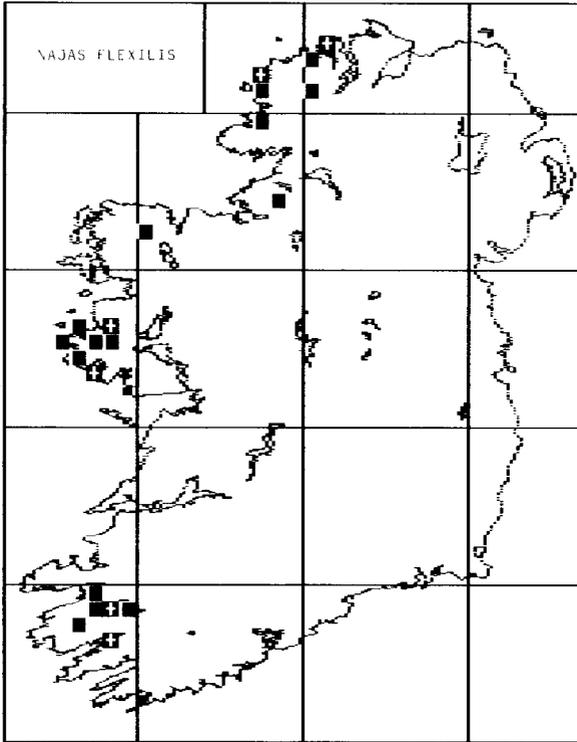
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#### A DISTRIBUTION MAP PLOTTING PROGRAM FOR IRELAND FOR IBM-COMPATIBLE MICROCOMPUTERS

In BSBI News 46 I read with interest Stuart Ball's account of the mapping program that has been developed at NCC for plotting distributions. At the Wildlife Service of the Office of Public Works, which is the organization responsible for nature conservation in Ireland, a mapping program, suitable for plotting distributions on a 10km square basis on IBM microcomputers or compatible machines, has been developed. The program was written in BASICA by Des Higgins and Edwin Wymer on contract to the service, and machine compiled to allow the rapid depiction on a screen of an outline of Ireland on which the 100km square mesh of the National grid is superimposed. It is possible, using the program, to select a cut-off date before or after which the distribution of the particular species can be depicted using different symbols. There are four symbol types available for plotting purposes. Output is to a dot matrix printer using the "Prt Sc" facility. An example of the output is provided by a distribution map of *Najas flexilis* in which the solid squares indicate post-1970 records and cross squares pre-1970 records (see map p. 34).

The program was developed in conjunction with the setting-up of dBase III Plus files of the protected and threatened flora of the Republic of Ireland so that distribution maps of those species could be prepared. The compilation of the data for the databases has made possible the production of The Irish Red Data Book: 1 Vascular Plants by T.G.F. Curtis and H.N. McGough which is to be published in March 1988 by the Stationery Office, Dublin. The book contains 28 species maps generated by the computer along with accounts of the status of Ireland's (including Northern Ireland's) 159 rare and threatened species.

The outline map was originally prepared by a digitiser. Input to the program consists of a DOS text file containing grid references of 2, 4 or 6 figures and 1 letter. These are stored in dBase III Plus database files of protected and threatened species and are extracted for mapping purposes using an extraction program. This program reads only the letter, first and fourth figures of any grid reference so that distributions are mapped on a 10km basis only. The mapping program then poses a series of inter-active questions for the user regarding the species map required, whether the pre- or post-date facility is required and if so what types of mapping symbols are required. The map outline and the distribution of the appropriate species is now depicted very rapidly on the screen. High quality output, such as is produced below, is achieved by using the IBM-5201-2 high quality printer.



*Najas flexilis* in Ireland (see p. 33)

TOM CURTIS, Wildlife Service, Research Branch, Sidmonton Place, BRAY, Co. Wicklow, Ireland.

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#### REFLEX DATABASE FOR COUNTY FLORAS

I have recently started to use the Borland Reflex Database to record the Cheshire flora. This is a simple, versatile and highly flexible, IBM-compatible system which, as a novice computer-user, I have found very easy to utilise. It has pull-down menus so that all current options are easily seen.

'List View', which displays all the data in table form, is the most useful. The various fields can be widened at will to display all the entry or compressed for economical printing. Fields, e.g. species, location, etc., can be created, rearranged, or deleted, permanently or temporarily. Searching by one or more parameters is easily done. Data are entered individually or in blocks, as when a number of records from one site are entered. 'Form View' displays the data for a single record as on a record card, the arrangement of the fields being completely variable. Data from other sources e.g. BRC Plant Dictionary, can be incorporated. I have split map references into two fields (eastings and northings) and can then search mixtures of map references (4, 6 or 8 figs) to produce 10km or tetrad lists etc. I have even managed to produce a simple distribution map using the scatter graph facility, and a so-far hand-drawn county outline.

To me, the attraction of the system is its simplicity, combined with a flexibility that allows one to change one's mind without affecting data already entered. I hope to demonstrate the database at the Leicester Recorder's Conference.

GRAEME M. KAY, 4 Geneva Road, Bramhall, STOCKPORT, Cheshire SK7 3HT

## ALIENS AND ADVENTIVES

## ADVENTIVE NEWS 38

compiled by Adrian L. Grenfell

## LAPPULA SQUARROSA (Retz.) Dumort.

We are again indebted to Graham Easy for our cover illustration, on this occasion of **Lappula squarrosa** (**L. echinata** Fritsch, **L. myosotis** Moench, **Echinosperrum lappula** (L.) Lehm.) a boraginaceous weed of cultivation and disturbed habitats which occurs throughout much of Europe and is widely naturalised in N. America. Earlier this century **L. squarrosa** was frequently introduced into Britain with European grain imports but is probably now almost exclusively of N. American origin, arriving in both grain and grass seed imports. Grain was undoubtedly the source of the cover plant, a fine specimen collected by the writer on mill sweepings in Avonmouth Docks in 1987 where it was accompanied by much **Amaranthus retroflexus** and also **Brassica juncea**. The genus **Lappula** is very closely related to **Myosotis** (Forget-me-not) from which it differs only in its glochidiate nutlets and bracteate inflorescences.

## UNUSUAL CROPS

Information received from John Hughes (Farming & Wildlife Advisory Group, Gloucester) indicates that **Phacelia tanacetifolia** (see cover illustration - BSBI News 43) is being cultivated for bees in Britain and has been noted thus in Hereford & Worcester, Cornwall and Devon, where a 45 acre sowing was noted in 1987 at South Huish, between Thurlestone and Hope Cove.

My note in BSBI News 39, p.9, regarding lupin seed imports for evaluation as soya bean substitutes may be misleading certainly as far as the Gloucester imports, **Lupinus albus**, are concerned: Mr Hughes tells me that these may have been used in the search for allergen-free polyunsaturated cooking oils.

I should be most grateful for further news of sightings of the above and of sowings of Evening Primrose (specimens please!) which has assumed considerable commercial importance in recent years. News of any other unusual crop that members stumble across would also be gratefully received.

## MIXED BAG

**Amsinckia intermedia** Fisch. & C.A. Meyer : South of Burton Common, Bransgore, Hants, July 1985. R.P. Bowman. Single plant inside gate of weedy pasture. The sender writes "... my first experience of any species of this genus in v.c. 11" and suggests introduction as an impurity in animal foodstuffs.

cf. **Astilbe x arendsii** Arends. (Saxifragaceae) : Sebergham Gorge, nr Caldbeck, Cumberland (v.c. 70), July 1985. R.W.M. Corner. Det. E.J. Clement. "One naturalised plant by river's gorge" as "**Spiraea** sp.", comm. G. Halliday as "**Astilbe** sp.". **Astilbe x arendsii** is a collective name for hybrids of complex origin in this genus possibly involving **A. japonica**, **A. chinensis**, **A. thunbergii** and "**A. astilboides**".

**Berberis** cf. **manipurana** Arhendt : Buckler's Hard, Hants, Feb 1985. R.P. Bowman. Det. E.J. Clement. Large (c. 8-10ft) clump of this evergreen species from Assam at edge of wood near estuary bank.

**Campanula garganica** Ten.: Liverpool, Lancs, Aug 1987. Leg. & det. P.F. Whitehead. In pavement crack, Pitville Road, Liverpool 15. A profusely flowering, mat-forming endemic of S.E. Italy and W. Greece, of which many varieties and hortals forms are listed.

**Chenopodium pratericola** Rydb.: Avonmouth Docks, Bristol, Sept 1987. A.L. Grenfell. A number of plants on disused railway sidings and roadsides. Although this narrow-leaved Goosefoot is a N. American species it is difficult to link its appearance in Avonmouth Docks with the huge crop of soya bean waste aliens referred to in BSBI News 47 (p.36). Disturbance of long-dormant seed during lifting of redundant railway tracks is a more

likely explanation: prior to 1930, *C. pratericola* was fairly frequently recorded in Britain under *C. leptophyllum* auct. but there have been few, if any, records in recent years.

**Cotoneaster affinis** Lindl.: Hawkerland Valley, nr Newton Poppleford, S. Devon, Oct 1987. L.J. Margetts. Det. A.L.G. At edge of heathland by lane. (First seen in fruit in 1986). An attractive, erect, deciduous species to 16ft, pubescent at first but later glabrous, *C. affinis* is notable for its (almost) black berries and obovate leaves to 3.5" in length which are strongly revolute with a prominent, often reddish, midrib. Nearby, in a similar habitat, was *C. simonsii* Bak. (A.L.G. Feb 1988). *C. affinis* also in a conifer plantation nr St Leonard's Hospital, Hurn Forest, Hants, Sept 1985. R.P. Bowman. Det. A.L.G.

**Helianthus x laetiflorus** Pers.: Waterhall, Brighton, E. Sussex, 1987. P. Harmes. Det. A.C. Leslie. On rubbish tip. The commonest sunflower escape - *H. rigidus* x *tuberosus*.

**Hydrocotyle sibthorpioides** Lam.: Wolverhampton, Staffs, 1987. C.B. Westall. "*H. sibthorpioides* has grown as a weed between paving at Highfields School, Wolverhampton for at least 15 years. Brian (Fowler) and I both thought it was *Sibthorpia europaea*. The plant was not knowingly introduced ...". A native of Asia, *H. sibthorpioides* is widely naturalised in the Tropics and also near Milan (Italy). An extremely rare introduction in Britain.

**Hypericum hircinum** L.: Burton Common, Bransgore, Hants, Sept 1985. R.P. Bowman. Det. A.L.G. On refuse tip.

**Limnanthes douglasii** R. Br.: Uphill, Somerset, June 1987. A. Coles. The well-known 'Poached Egg Plant', on bare soil at the bottom of an eroded area overlying a fault in the Carboniferous Limestone (far from human habitation).

**Linanthus grandiflorus** (Benth.) Greene (*Gilia densiflora*): Cleveland, N. Yorks, July 1987. I. Lawrence. Det. & herb. A.L.G. Comm. Mrs F. Houseman. Roadside casual. A Californian native grown as a garden annual with dense showy heads of large, *infundibuliform*, white to lilac flowers and leaves palmately 5-11 cleft into linear segments.

**Malva nicaeensis** All.: Silloth, Cumberland (v.c. 70), Oct 1985. M. Milne et al. Comm. G. Halliday.

**Myagrum perfoliatum** L.: Boulton-le-Fylde, Lancs (v.c. 60), July 1963. A.E. Ratcliffe 143 in herb. LIV. Comm. J. Edmondson. A further post-1930 record made by Alice Ratcliffe who "was a redoubtable alien-hunter in the Preston and Blackpool areas; her herbarium, which is kept here, is rich in oddities". In 1987, K.L. Spurgin located *Myagrum* in arable south of the Dordogne in France together with many other exciting arable weeds including our own much-lamented *Bupleurum rotundifolium*. (Keith leads a field meeting in this area in 1989).

**Nemophila menziesii** Hook. & Arnott (Hydrophyllaceae): Cleveland, N. Yorks, July 1987. I. Lawrence. Det. E.J. Clement. Comm. Mrs F. Houseman. A roadside casual here, this delicate Californian annual is widely offered as a garden bedding plant.

**Nepeta x faassenii** Bergmans ex Stearn (*N. pseudomussinii* Floto): Roadside, Stoke Bishop, Bristol, Aug 1987. Miss I.F. Gravestock. Det A.L.G. A sterile hybrid of garden origin between *N. mussinii* (Caucasus, Iran) and the polymorphic S.W. European and N. African *N. nepetella* L. which is often confused with the first-named parent, which it much resembles. Frequently introduced with garden rubbish and persisting.

**Silene armeria** L.: Knutsford, Cheshire, Aug 1987. J.W. Rayner. Det. A.L.G. "About 20-30 plants have appeared on disturbed/waste/bare ground behind a newly constructed 'Little Chef'". A most attractive, freely seeding, annual with glaucous, amplexicaul leaves and large dense corymbs of pink/magenta flowers, endemic to C., S., and parts of E. Europe; sometimes naturalised elsewhere but only persisting in very open conditions.

**Spiraea x billiardii** Herincq.: Handcross, Brighton, E. Sussex, 1987. P. Harmes. Det. A.C. Leslie. The apparently highly fertile hybrid **S. douglasii** x **salicifolia** - one (or two?) bushes on bank of a slip road of this common garden outcast. Believed bird sown here. Tomentum on undersides of leaves intermediate between **S. douglasii** and **S. salicifolia** (glabrous): in my experience the great majority of records of the latter plant are incorrect and should be referred to the hybrid.

**Trifolium cherleri** L.: Croggon's Tannery, Grampound, Cornwall (v.c. 2), May 1987. K.L. Spurgin. Det. A.L.G. New to the tan bark list and to Cornwall.

**Trifolium pilulare** Boiss.: Croggon's Tannery, Grampound, Cornwall, Sept 1986. K.L. Spurgin. Det. J.M. Mullin (BM). Also **T. grandiflorum** Schreb. det. J.M. Mullin. Single plants of both species. The former is new to the tan bark list and to Cornwall but the latter has been previously recorded under **T. speciosum** Willd.

My thanks, once again, to my correspondents for their letters and specimens and my apologies for the occasional tardy reply. I try to mention as many of your finds as possible in 'Adventive News', but obviously cannot devote valuable space to the commonest alien species. Nonetheless all records are invaluable as they continue to add to our understanding of the British flora: hopefully many will be included in major works now in an advanced state of preparation. Good hunting in 1988!

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

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#### NOTICES (BSBI)

#### ADVANCE NOTICE

A Conference organised jointly with the British Ecological Society **Species-mapping and the Biology of Plant Distribution** will be held at the Hatherly Laboratories, Dept. of Biological Sciences, **University of Exeter** on 7-9 April 1989.

Papers will be on plant atlas distribution patterns with possible causes and interpretation, for both 10km and finer-scale mapping, with specific examples. These causes will be discussed further, with special emphasis on the relations between species and community distribution in historical context; limiting factors in species distribution; and with reference to soil factors, minerals and drought specialised habitats, and also microclimates.

A Programme, with booking form, will be sent to all BSBI members in the September mailing.

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

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#### TAXONOMIC WORKSHOP / RECORDERS' MEETING University of Leicester, Friday 2nd - Sunday 4th September, 1988

See BSBI News 47: 38 for basic details. Booking forms should have been sent out by now to all those who have already requested them. I hope that numbers will not have to be limited, but early signs are that there will be a good attendance and if limits do have to be imposed it will be on a 'first come first served' basis. **SO PLEASE BOOK EARLY. Friday 20th May** (please note REVISED DATE) will have to be the ABSOLUTE deadline. **Booking forms will be sent ONLY to those who have requested one and even those non-resident MUST book and register.**

Experts definitely taking part are Dr Mike Wilkinson (**Festuca ovina** group), Christopher Fraser-Jenkins (**Dryopteris filix-mas** group), Father Tony Primavesi (**Rosa**), and Dr Hugh McAllister (**Hedera**). One or two more will be added should numbers attending make it advisable. As far as possible the emphasis will be on live plants and audience participation. There will be some exhibits as well and it is hoped that a range of relatively inexpensive microscopes and lenses will be demonstrated.

On the Sunday, there will be a trip out into Leicestershire to look at *Dryopteris* (all 3 subspp. of *D. affinis*, plus *D. filix-mas* and hybrids between the two) and *Rosa* (species and hybrids).

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

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#### NOTICES (OTHERS)

#### ROYAL BOTANIC GARDEN EDINBURGH RECEIVES UNIQUE STAMP COLLECTION

William (Jack) Wallace spent a lifetime creating one of the finest contemporary collections of botanical stamps ever assembled. When he died in August 1987, aged 72, he left 21 volumes of flower stamps, the result of a single-minded dedication to his hobby. Mr Wallace was keen to identify correctly the flowers depicted on the stamps and was a regular visitor to the Royal Botanic Garden Edinburgh. Many patient hours were spent in the Botanic Garden library arranging the stamps in their botanical families and writing detailed notes on the plants included in the collection.

Mr Wallace's widow has recently presented this unique stamp collection to the Royal Botanic Garden Edinburgh, where it will be available for reference by appointment with the library staff. Parts of the collection will also be exhibited from time to time.

When Mrs Wallace made her generous offer, the Botanic Garden asked philatelist and retired Kew botanist David Philcox to appraise the collection. "It is undoubtedly the best of its subject compiled by a non-professional botanist I have ever seen" said Mr Philcox "I was astounded by the size and completeness of the Wallace collection and was very impressed by his knowledge of the subject.

Mr Wallace lived in Kirkcaldy and although he exhibited stamps all over Britain he remained an active member of his local stamp club.

A selection of flower stamps belonging to families associated with the work of the Royal Botanic Garden, will be on display in Inverleith House from time to time. The collection can be consulted in the Library of the Royal Botanic Garden Edinburgh.

IAN EDWARDS Public Relations Officer, Royal Botanic Garden, EDINBURGH EH3 5LR

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#### ECOLOGY IN THE CURRICULUM: 5-19

To mark its 75 years Jubilee, the British Ecological Society has recently launched a significant policy statement, "Ecology in the Curriculum 5-19". The aim of the document is to establish the role ecology should play in the school curriculum and to positively contribute to current discussions on both the content and objectives of education at all levels.

As ecology focuses on the interactions between plants, animals and mankind with their environment, ecology should be regarded as a central component of education in both science and humanities.

The document appraises current provision of ecology teaching and establishes the role of ecology in the curriculum of both integrated and specialist courses. Through encouraging practical field-based projects the promotion of a higher level of ecological awareness and understanding may be achieved for all.

Importance is placed on the integration of subject areas across the curriculum through ecological projects. The promotion of locally based field experience is also emphasised whether this is in an urban or rural setting.

The Society has taken into consideration the recent curriculum recommendations and firmly advocates the value of ecological study in encouraging an interest in, and caring attitude for the environment whilst being relevant to the objectives and needs of the curriculum.

Copies of this key document may be obtained free of charge from the address below.

THE ADMINISTRATOR, The British Ecological Society, c/o Burlington House, Piccadilly, LONDON W1V 0LQ

### GLASGOW GARDEN FESTIVAL

1988 is the year of the Glasgow Garden Festival. To coincide with this, the Department of Adult & Continuing Education at Glasgow University is offering one-week residential courses in the summer, from Saturday 25th June until Saturday 2nd July.

One of these is Scotland's Botanical Heritage which offers an opportunity to visit some of the interesting botanical sites in the region, as well as a day at the Glasgow Garden Festival. Excursions are planned to Ben Lawers, with its rich alpine flora, the wild expanses of Rannoch Moor, the Clyde Valley, and various urban sites in the Glasgow locality. Lectures, talks and identification workshops will complement the fieldwork.

Further details are available from the address below.

The Enrolment Secretary, Dept. of Adult & Continuing Education, 59 Oakfield Avenue, GLASGOW G12 8LW (Tel. 041-330-4394)

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### FORTHCOMING MEETINGS OF THE BRITISH BRYOLOGICAL SOCIETY 1988

July 19-23rd International Symposium on Bryophyte Ecology, University of Edinburgh.  
July 23-30th Summer Field Meeting, Aigas Field Centre, Beauly, Inverness-shire  
September 17-18th AGM and Paper-reading Meeting, Liverpool

As always, BSBI members would be most welcome at these meetings.

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

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### CALEDONIAN WILDLIFE BOTANICAL HOLIDAYS 1988

April 1-4th Easter Weekend, Blair Atholl, Perthshire  
June 4-11th Moray Firth/Sutherland  
June 18-25th Inverness/Skye  
June 25th-July 2nd Moray Firth/Sutherland  
Further details from the address below.

SINCLAIR C. DUNNETT, Caledonian Wildlife, 30 Culduthel Road, INVERNESS IV2 4AP

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### CORRIB CONSERVATION CENTRE, CO. GALWAY

At the Corrib Conservation Centre we promote wildlife conservation through environmental education and field studies. Our aim is to foster an understanding of the natural environment and to help our visitors develop a 'sense of nature' in a relaxed, family atmosphere. We welcome 'beginners' and 'professionals' and endeavour to cater for the needs of both.

Our facilities include: comfortable accommodation and good food for up to 12, a lecture room with some basic laboratory equipment, a small but growing natural history library, a 12-passenger mini-bus for field-trips, and a lake boat and dinghy for research purposes.

Courses are provided on a variety of natural history topics both general and specific, from 1 day to 2 weeks duration.

I notice in a recent issue of BSBI News that Clare is a region which will require special attention for the monitoring scheme in 1988. We run field trips to Clare throughout the year and could organise facilities, transport, accommodation and guidance for groups of 10-12 BSBI members. We also spend quite a lot of time in Connemara and around Lough Corrib and we would be pleased to accommodate BSBI members who wish to visit these areas either privately or as members of our courses.

For further information please write to the address below.

MARIANNE TEN CATE, Corrib Conservation Centre, Ardnasillagh, OUGHTERARD, Co. Galway, Ireland

## REQUESTS

## EARLY BOTANICAL RESERVES

The Journal of Botany obituary in 1905 of the Rev T.A. Preston, author of The Flowering Plants of Wiltshire, carries a quotation from a Marlborough College magazine in which there occurs the mention of his having obtained the lease of a certain marsh at Oxford for the purpose of safeguarding its flora. The date at which this took place could well have been before the Breydon Wild Birds Protection Society purchased the Norfolk Broad of that name in 1888 and, if so, would be the earliest-known instance in Britain of the acquiring of a habitat expressly as a reserve. It would be particularly pleasing to be able to say that botanists were ahead of bird-watchers in taking this enlightened step, and I am very anxious to establish fuller details. Can anyone identify the marsh in question and, more important, put a date to the lease?

In one of Canon Vaughan's very readable volumes of essays (The Music of Wild Flowers (1920)) he records on page 78 that "a few years since an Oxford scholar, whose classical attainments are only equalled by his love of botany, actually purchased a stretch of moorland because it possessed a colony of the marsh gentian." This cannot be a reference to Preston, as he was a Cambridge man - and in any case "a few years since" sounds more recent than the likely date of his Oxford initiative. Equally, the reference to "classical attainments" hardly suggests Druce. Perhaps someone can shed light on this further mystery too?

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

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## MARGARET PLUES (c. 1840-1903) AND HER PLANT-RECORDS

I possess a beautifully-bound book by Margaret Plues, entitled Rambles in Search of Wild Flowers, and how to distinguish them 2nd. ed. London: Journal of Horticulture and Cottage Gardener Office, 171 Fleet Street, London E.C. 1864.

It is a characteristically Victorian 'improving' book, but is full of plant-records which seem to have escaped notice. As it contained a number of Cheshire records I consulted de Tabley's Flora of Cheshire to find, to my surprise, that she is not mentioned. According to Desmond (Dictionary of British and Irish Botanists and Horticulturists, (1977)) she was of Ripon, Yorks, and there are lots of Swaledale records scattered through the book as well as others from many countries.

I then turned to the Catalogue of the Library of the British Museum (Nat. Hist.) to find the book unlisted, although three more books by the same author are listed. These are on British Ferns (1866), Eatable Funguses (also 1866) and British Grasses (1867). On the title-page of my flower-book she is stated to be also the author of "Rambles in Search of Ferns, Rambles in Search of Mosses, etc. etc."

Mr Allen tells me that her herbarium (according to the wildflower book she had one) has not been traced.

I would be glad of any information about Margaret Plues additional to that in Desmond's Dictionary.

NORA MCMILLAN, Department of Invertebrate Zoology, Liverpool Museum, LIVERPOOL

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## THE BRITISH FLORA BY DAVID MARTIN

In Arboretum Leaves, Fall 1987 p.6, Dr Stanley H. Johnston provides short notes on the "...least known assets of the Holden Arboretum... the Corning Collection of Horticultural Classics and the other rare books, manuscripts, and paintings ..." In his article entitled, "The Cleveland Herbals Project Progress Report", he mentions some of the rare works ranging from the herbal of Apuleius published in 1483, Flora Graeca, Redoute's Les Liliacees, to The British Flora, described as "...the only known copy of part of a projected work entitled The British Flora by David Martin, an engraver of Sheffield."

Who was David Martin? When did he flourish? The name is not indexed in Desmond (1977) Dictionary of British and Irish Botanists and Horticulturists, nor was it located in

## Requests

Blanche Henery (1975) British Botanical and Horticultural Literature before 1800, or that encyclopaedic compilation, A Bibliographical Index of the British Flora including Floras, Herbals ... and published privately by N.D. Simpson in 1960.

Perhaps members can supply the answer.

M.J.P. SCANNELL, Herbarium, National Botanic Gardens, Glasnevin, DUBLIN

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### ALLIUM URSINUM L. - REQUEST FOR INFORMATION

We are presently carrying out research on the autecology of ramsons, *Allium ursinum* L. Part of the study concerns the occurrence and significance of mature plants that possess only one leaf. *A. ursinum* commonly forms large monospecific populations carpeting woodland floors from March to July and normally possesses at least two, and often three or even four leaves from its third year. The first and second year seedlings have only one leaf but these are quite small (only a few cms in length) and are unlikely to be mistaken for the mature plants which have considerably larger leaves, up to 40cm.

Information concerning the occurrence and distribution of one-leaved plants on the U.K. mainland or elsewhere would be much appreciated. We would be very grateful to receive the location and brief site description of any populations seen to contain these one-leaved plants.

JAMES NAPIER & BRIAN S. RUSHTON, 1 Portmore Ave., Upper Ballinderry, LISBURN, Northern Ireland BT28 2EW

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### COMMON LAND SURVEY OF ENGLAND AND WALES

We have just commenced a two and a half year Survey of Common Land In England and Wales. The project is being funded by the NCC and contracted to the Rural Surveys Research Unit at University College of Wales, Aberystwyth.

The aim of the project is to collect and summarize all available biological information on commons over 1 hectare in size, on a county by county basis, and assess the level and impact of present management. The resulting information will be available to conservation bodies concerned with commons and their management, and will be of special relevance when new legislation on common land is brought in.

Owing to the strict time limit on this project, and also to reduce duplication of effort, we will be making use of existing records as far as possible, and we would be grateful to hear from any BSBI members about commons important locally for their flora.

Any information should be sent to:

IAN FRANCIS, Project Organiser, University College of Wales, Department of Geography, Llandinam Building, ABERYSTWYTH, Dyfed SY23 3DB

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### WILLIAM HENRY EDWARDS fl. 1793-1850

I have recently been researching my family history and in particular, my great-grandfather William Henry Edwards, a watercolour artist who specialized in botanical subjects. He exhibited at the Royal Academy and at the Society of British Artists from 1793 to 1850 and some of the titles of his paintings were: "A moss rose, from nature", "Cactus Speciocissima, composed from nature", "Magnolia grandiflora" and "a vase of flowers".

That W.H. Edwards was not just a painter of pretty pictures is evident from the following communication from the Botany Library of the British Museum (Natural History) "... we hold five sheets of drawings of mosses, made by your great-grandfather for Hooker and Taylor's 'Muscologia Britannica'. The pen and ink drawings are set out as for publication and show some very fine detail."

I am naturally trying to locate specimens of my great-grandfather's work. We have a few in the family but I am sure there must be many more somewhere, as he managed to earn a living as an artist for some 60 years (he lived until he was about 85). I have contacted

most of the obvious art sources but so far without result.

If any BSBI member can help me in tracing any of his paintings I would be most grateful and will gladly refund any postal expenses.

H.A. EDWARDS, 57 Downlands Road, PURLEY, Surrey CR2 4JJ

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BOOK NOTES

In the July 1988 part of Watsonia, Vol. 17(2), reviews of the following books will be included:

- The Origins of the Angiosperms and their Biological Consequences, edited by E.M. Friis, W.G. Chaloner & P.R. Crane.
- The Plant Book, by D.J. Mabberley.
- Coevolution and Systematics, edited by A.R. Stone & D.L. Hawksworth.
- The Euphorbiales, edited by S.L. Jury et al.
- Iconographia Palynologica Pteridophytorum Italiae, by E. Ferrarini et al.
- Checklist of European Pteridophytes, by L.N. Derrick, A.C. Jermy & A. Paul.
- The Brightest Jewel, A History of the National Botanic Gardens, Glasnevin, Dublin, by E.C. Nelson & E.M. McCracken.
- A Checklist of Mycorrhiza in the British Flora, by J.L. & E.L. Harley.
- The Complete Book of British Berries, by D.C. Lang.
- The Flowering Plants and Ferns of North Lancashire, by L.A. & P.D. Livermore.
- Jupiter Botanicus, by D.J. Mabberley.
- The National Trust Book of Wild Flower Gardening, by John Stevens.
- Biosystematics in the Nordic Flora, edited by B. & L. Jonsell.
- Planting a Bible Garden, by F.N. Hepper.

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

- The Flowering Plants and Ferns of the Shetland Islands, by W. Scott & R. Palmer.
- Supplement to The Wild Flowers of Guernsey, by D. McClintock.
- The Naturalist's Garden, by J. Feltwell.
- Aroids. Plants of the Arum Family, by D. Brown.
- The Correspondence of Charles Darwin, Vol. 3, edited by F. Burkhardt & S. Smith.
- The Heritage of Clonmacnoise, edited by M. Tubridy.
- Collins Photoguide to Wild Flowers of Britain and Northern Europe, by O. Polunin†, edited by J. Akeroyd.
- The Difficult and Critical Plants of the Lizard District of Cornwall, by L.J. Margetts.
- Flora of Lough Neagh, by J. Harron.
- \*Proceedings of the Isle of Man Natural History and Antiquarian Society, Vol. 9(3), edited by R.A. Curphey†. Price £5.00.
- Domestication of Plants in the Old World, by D.Zohary & M. Hopf.
- Key Works to the Fauna and Flora of the British Isles and North-western Europe, 5th ed. Edited by R.W. Sims, P. Freeman & D.L. Hawksworth.
- \*Pigments in Fruits, by J. Gross. Academic Press, London. 1987. Price £39.00 (ISBN 0-12-304200-3).
- \*Flora of Alderney, by B. Bonnard. Pp.90. 1987. Obtainable from B. Bonnard, The Twins, Le Petit Val, Alderney, price £2.50. This is "a new check list of the flowering plants, trees, and ferns of Alderney and its off-islets", a remarkable production by a very recent arrival in the island. It is an updated and expanded version of the previous check lists of 1964 and 1974 that will be needed by anyone with an interest in the island's flora. But care is necessary because some entries are incorrect, and not all the plants are wild. D. McClintock.
- \*Collins Guide to the Wild Flowers of East Africa, by M. Blundell. Pp.464, with 864 colour photographs, 4 maps and 8 pages of morphological drawings. Collins, London. 1987. Price £12.95. This is the pocket book to take with you on a visit to East Africa or, even, to any of the adjacent areas. Although only 'flowers' are included (no grasses, sedges or palms, for example), the beautiful colour photographs and helpful text should enable you to name many of the plants that will catch your eye during your visit. The short descriptions mostly supplement the illustrations, but some other

species are described. The ecological and geographical information should be particularly useful.

\*Biogeographical Evolution of the Malay Archipelago, edited by T.C. Whitmore. Pp.147, with 72 text-figures. Clarendon Press, Oxford. 1987. Price £30.00 (ISBN 0-19-854185-6).

This volume of essays represents the state of knowledge on Malesian biogeography in 1985, and as such shows some most interesting changes of view since Whitmore's previous compilation on the subject in 1981 (see *Watsonia* 14: 312, 1982). It includes discussions of the break-up of Gondwanaland in the Malesia-Australia area and its relationship to the origin of the Angiosperms.

\*Postglacial Vegetation of Canada, by J.C. Ritchie. Pp.xiii 178, with 72 text-figures. Cambridge University Press, Cambridge. 1988. Price £47.50 (ISBN 0-521-30868-2).  
Herbaceous Flowering Aquatic Plants, by M. Quigley.

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

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### NEWS FROM OUNDLE BOOKS

As expected, C.U.P. put the prices of their books up on January 1st, for example the Excursion Flora is now £17.50. Such changes, and also additions to the stock of botanical books, are incorporated into a supplementary list which I am now able to update frequently on a wordprocessor. Flowers of South West Europe is now available in paperback. Please ring or write if you would like the supplement and also my husband's list of secondhand books, including British and local Floras.

### BRITISH AND IRISH HERBARIA

This index to the location of herbaria of British and Irish vascular plants, compiled by Duggie Kent and David Allen in 1984 is an essential work of reference to all botanists. It includes data on British and foreign University and Museum herbaria as well as a list of over 5200 collectors from the thirteenth century to the present day. An extensive bibliography concludes the book. The BSBI Publications Committee has decided to reduce the stock by lowering the price to £7.00 (incl. postage).

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

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### THE FLORA AND VEGETATION OF COUNTY DURHAM BY REV. G.G. GRAHAM

We are glad to announce that the publication date for the above Flora was 1st March 1988, and members who placed an order should now have received their copy. As the book will not be reviewed for some weeks we take this opportunity of letting members know that copies can be obtained direct from the undersigned at the address given or from the author, G.G. Graham, whose address from 31st May 1988 will be: 3 The Willows, BISHOP AUCKLAND, Co Durham DL14 7HH (tel. 0388-602758). Unfortunately, costs have risen during the years of waiting and the full price of the Flora will now be £30.00 plus £2.75 postage & packing.

MYRA BURNIP, Treasurer, Durham Flora Project, 38 Langholm Crescent, DARLINGTON, Co. Durham DL3 7SX

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### FIELD MEETINGS 1988 - IRELAND

The programme for Irish Field Meetings in 1988 has now been completed. All are to areas where work needs to be done for the Monitoring Scheme.

Further details of any meeting are available from the address below.

JUNE 11-12, Wexford, Leader Jim Hurley

JUNE 25-26, Clare - Ennis & Loop Head, Leaders Sylvia Reynolds and Micheline Sheely-Skeffington.

JULY 23-24, Donegal - Letterkenny and Farad, Leaders Ralph Sheppard and Tom Curtis.

AUGUST 13-14, North Tipperary, Leaders Declan Doogue and Gerry Sharkey.

AUGUST 27-28, Monaghan/Louth/Meath, Leaders Con Breen and Donal Synnott.

E. NI LAMHNA, 6 Ashdale Gardens, Terrence, DUBLIN 6

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## 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 of Ulster, COLERAINE, Co. Londonderry, N. Ireland BT52 1SA.

To save space, the map showing the location of field meetings has had to be omitted this time.

### ENGLAND

#### BRECKLAND, WEST SUFFOLK. 27th JUNE

Thirty three members met at Ramparts Field, West Stow and for the majority, the occasion was an introduction to the Breckland flora. Here we found *Dianthus deltoideus*, rather late and just coming into flower; *Rumex tenuifolius* was everywhere on the acid sand and gravel, with *Vulpia ciliata* subsp. *ambigua*, *Apera interrupta*, *Ornithopus perpusillus* and *Bromus diandrus*. Our second stop was at Icklingham triangle where we bended knee paid homage to *Veronica verna* and were thankful that the season was late. A little *Medicago x varia* was in flower but *M. sativa* subsp. *falcata* was not. The wide road verge was in places, full of *Phleum phleoides* of such a height that it was completely out of the reach of rabbits.

We moved on to the south of Foxhole Heath and walked through the extensive road verge area of *Festuca longifolia* (*F. caesia*) and paused to consider its nomenclature of recent years. Again the *Phleum phleoides* population was greater than ever previously seen in Breckland and was completely covering *Astragalus danicus*. Following a brief halt for lunch, we moved on to Wangford Glebe, a reserve of the Suffolk Trust for Nature Conservation and the last remaining site of active erosion in the Breckland, which is annually maintained by cultivation. It comprises sand dunes which are largely colonized by *Carex arenaria* and immature fen, which represents the south easterly corner of the Wash complex. There is much bare land for *Teesdalia nudicaulis* and *Agrostis vinealis*. It is an inland sanctum for *Corynephorus canescens*, and both *Calamagrostis canescens* and *C. epigejos* are fed by an underground spring. Prior to entering the reserve, we were reminded of its Breckland status, "Please take care under foot as two Stone Curlew chicks are running about".

For our final stop we parked by the 'tip' at Maidscross and while my friend Marge Rutterford went ahead with the party, I went off to the aerodrome boundary to hail the mobile police and assure them that we had no wire cutters and that our interest was in plants. Marge led the way over the old stone pits and soon found a bank with an array of *Silene otites*. In small open spaces in the disturbed sand, we saw *Phleum arenarium* another maritime plant which has adopted Breckland, *Silene conica*, *Minuartia hybrida*, *Trifolium suffocatum* and more *Apera interrupta*. The latter is in one area and is a recent invader to this hill. As we turned over a low bank our final reward was several large patches of *Thymus serpyllum*.

Only as a footnote can I mention that there was an intention to do some recording for the new Monitoring Scheme. At Wansford I was grateful to a volunteer but on reaching Maidscross Hill, I gave up; the interest was on the ground!

P.J.O. TRIST

### THE IRISH WILLOW MEETING

This two day field meeting held in Central Ireland in July 1987 was a great success. A full report will appear in a future issue but, in the meantime, the photograph taken by J. White of Westonbirt Arboretum shows many of the participants waist deep in willow fen. The identification of members was kindly undertaken by Miss Maura Scannell; they are, from left to right: Mrs Faith White, Mr Desmond Meikle, Mr Con Breen, Mrs Sylvia Reynolds, Miss Maura Scannell, Mr David Riley, Mr Keith Lewis, Miss Rosaleen Fitzgerald, and Mr Declan Doogue.



The Irish Willow Meeting. Photo J. White

EDITOR

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### SCOTLAND

#### BANFFSHIRE COAST. 4th-5th JULY

Ten members and friends enjoyed a fine weekend recording plants on the Banffshire coast and in two of the 10km squares selected for the Monitoring Scheme.

On Saturday morning the party walked along the coast west-wards from Findlater Castle to Cullen. The colony of *Mertensia maritima* at Logie Head was found to be thriving with over 1000 plants in coarse shell sand and shingle. *Ligusticum scoticum* and *Thalictrum minus* were recorded on consolidated dunes. Small areas of salt marsh supported populations of *Blysmus rufus*, *Carex distans*, *C. extensa*, *Eleocharis uniglumis* and *Spergularia media*. Lunch was taken at the Cullen golf course car park where *Coronopus squamatus* was found.

The party then drove further west to the Forestry Commission area at Winding Walks east of Fochabers. The conifer plantation was searched unsuccessfully for *Linnaea borealis*, and we had to be content with *Goodyera repens* and other useful records for NJ(38)/35. (The *Linnaea borealis* site has subsequently been rediscovered.)

In the evening the party inspected a neglected potato field at Portsoy where there were several hundred heads of *Lamium moluccellifolium* and many other weeds of arable farmland. The route then led eastwards along the old railway line. *Anthyllis vulneraria* was plentiful on the ballast, and *Pyrola minor* was found by the side of the track where it went through Roughilly Woods. In a nearby ditch was a healthy colony of *Ranunculus aquatilis* (last seen in the county in 1926).

On Sunday, the party split into three teams to survey three tetrads in the 10km square NJ(38)/65. Team A visited Auchintoul south of Aberchirder, finding *Phyllitis scolopendrium* on a wall of the ruined mansion house, and *Peucedanum ostruthium* and *Doronicum pardalianches* in the grounds. Tetrad J is largely arable farmland, but its team managed to find a small area of lowland heath with *Trientalis europaea*. Team W found *Circaea lutetiana* (a second county record) in woodland at Forglen, and *Salix x multinervis* (a new county record) at Hillhead of Mountblairy.

After lunch, Team W returned to Forglen and brought their winning score up to 207. The rest of the party re-grouped, one team going to the raised bog S.S.S.I. at Reidside Moss, where they found *Viola cornuta* on the bank of the burn. The other team went down to Dunlugas. Here they found *Ranunculus fluitans* in flower on the River Deveron, and *Glyceria maxima* on the river bank. *Doronicum plantagineum* was found at the back of the old walled garden, and *Circaea x intermedia* in the woods opposite.

J. EDELSTEN

#### KINDROGAN FIELD CENTRE, PERTSHIRE. 27th-30th AUGUST BRITISH WILD ROSES COURSE

Nine years have elapsed since the last rose course at Kindrogan and much has changed in the interim period, not least the death of Dr Melville our foremost expert in the genus. However, the few amateurs that Melville trained have become more confident in the naming of hybrids and the Wolley-Dod era can now be said to have ended.

Participants in the course soon encountered some difficult bushes at Stormont Lough where hybrids of both *R. afzeliana* and *R. caesia* (= *R. coriifolia*) with *R. canina* were plentiful. However, the main species likely to be seen in the area (*R. canina*, *R. afzeliana*, *R. caesia*, *R. mollis* and *R. sherardii*) were soon spotted.

The same pattern was repeated at Hare Myre though here it was possible to recognize *R. canina* as the female in hybrids with both *R. caesia* and *R. afzeliana*. A difficult bush was thoroughly examined and the final verdict was *R. mollis x R. sherardii*.

At our third stop, the Loch of Clunie, having disposed of the 'straight' species we added *R. dumetorum* to our list, studied bushes with the putative parentage *R. mollis x caesia* and *R. sherardii x afzeliana*. Some lighter fare was therefore deemed to be necessary and we dabbled for a time amongst *Callitriche*, *Potamogeton* and *Myriophyllum*. It was also unusual and pleasing to be walking on carpets of *Peplis portula*.

Our second full day found us at Balenluig Island where typical forms of *R. mollis*, *R. afzeliana*, *R. caesia*, *R. afzeliana x sherardii* and possibly *R. caesia x sherardii* were seen. This pattern was repeated at Nether Ard near Spitalfield so once again our group was diverted to a most unusual site for roses. The presence of some most interesting waterside plants could possibly have been a contributory feature for the move.

The riverside at Meikleour completed the day with further common species and two most unusual *mollis*-type bushes, thought to be *R. mollis x sherardii*.

Sunday dawned bright and sunny so the coast at St Cyrus was reckoned both desirable and possibly profitable. Our first stop consolidated our knowledge of the common species and good representative examples of *R. canina*, *R. sherardii*, *R. mollis*, *R. afzeliana* and *R. rubiginosa* were seen. As we progressed over the dunes *R. canina x caesia* was encountered together with many bushes of *R. canina x afzeliana*. Some of the latter hybrids had glandular peduncles and were almost certainly triple hybrids, the third parent being *R. sherardii*. Some time elapsed before we spotted the hybrid for which we had been searching, *R. rubiginosa x pimpinellifolia*, which had been collected here in 1978. The male parent of this hybrid was not seen. A short stop at Lumen Bay yielded *R. sherardii x pimpinellifolia* and some planted *R. rugosa*.

The nine participants on the course came from Scotland, Ireland and every quarter of England. Those from the South of England and Ireland brought specimens of *R. arvensis*, *R. tomentosa*, *R. stylosa*, *R. micrantha* and *R. agrestis* for examination making it possible to gain an overall impression of 90% of the British native species of roses. It is odd that the only species we did not encounter during the stay was the Scottish or Burnet Rose, *R. pimpinellifolia*.

The members wish to thank Nick Stewart who drove us around like Jehu (2 Kings 9,2) albeit safely, leading us to some good rose sites near to his favourite watery haunts.

On the way south several members were shown a hillside near Blairstown supporting a wonderful population of typical *R. sherardii* and *R. rubiginosa* together with two fine hybrids *R. canina* x *rubiginosa* and *R. sherardii* x *rubiginosa*.

Species seen during the course were as follows:

*R. canina*, *R. dumetorum*, *R. afzeliana*, *R. caesia* (= *R. coriifolia*), *R. mollis*, *R. sherardii*, *R. rubiginosa*, together with the hybrids *R. canina* x *afzeliana* and reciprocal, *R. canina* x *caesia* and reciprocal, *R. afzeliana* x *sherardii* and reciprocal, *R. cf. caesia* x *sherardii*, *R. mollis* x *sherardii*, *R. mollis* x *afzeliana*, *R. sherardii* x *cf. afzeliana*, *R. sherardii* x *pimpinellifolia*, *R. rubiginosa* x *pimpinellifolia*, *R. sherardii* x *rubiginosa*, *R. canina* x *rubiginosa*.

It should be noted in the above account that *R. dumetorum* will probably be 'sunk' in *R. canina* as a variety and that the status of *R. caesia* as a full species is under revision.

G.G. GRAHAM

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## WALES

### SUDBROOK. 10th MAY

In a cold wind, the leader explained to the 56 members present why he had chosen the Sudbrook Camp site for the meeting. It had a number of interesting and county rare plants on the edge of a village that owed its existence to the construction of the Severn Tunnel (1873-86) and an Iron Age/Roman Camp half of which was in a remarkable state of preservation. The other half of the Camp had been eroded by the sea. The St Regis Pulp Mill, which is close by, distributes shredded wood by blowing it out of an overhead pipe, and the high winds of the past few years have now spread tannic acid and nitrogen rich material on to the banks well outside the confines of the mill. The locals also tip garden rubbish over the cliff edge and this has contributed to the destruction of the native cliff flora and also added to species diversity. Casuals and weeds, as well as coastal plants, were thus available and it was possible, for example, to compare the many clovers (*Trifolium* spp.) that grow in quantity and close proximity.

At the car park, *Onopordum acanthium* rosettes shared the spread soil with *Valerianella locusta*, *Anchusa arvensis*, *Barbarea vulgaris*, *Geranium rotundifolium*, *Armoracia rusticana* (not always recognised in flower), *Vicia sativa* subsp. *segetalis* (the common vetch of v.c. 35 (Mons.) (Hollings & Stace (1978), *Watsonia* 12: 1-14)) and on the shore, *Festuca rubra* subsp. *litoralis* (Howarth's Fescue). How the dumping of soil to push the coast seawards and create the car park would affect the *Lathyrus sylvestris* (not in flower) and the number of *Ophrys apifera* (not yet above ground) remains to be seen. The Camp cliff edge supported several species, a good colony of *Rapistrum rugosum* with fruits too immature for Tim Rich to identify to subspecies, and an equally persistent resident *Lavatera arborea*, which was first recorded in the v.c. in the 17th century on the visible, but distant island, The Denny.

At the end of the Camp defensive bank, *Trifolium subterraneum* was flowering but only careful searching revealed any plants of *T. scabrum* and *T. striatum*. Equally diligent observation revealed *Cerastium diffusum* and *C. semidecandrum*. Non-flowering *Helianthemum nummularium* covered much of the bank, though some *Myosotis ramosissima* emerged here and there with several patches of the sedges, *Carex divulsa*, *C. caryophylla* and *C. flacca*. A plantain caused much discussion and this was later identified as *Plantago major* subsp. *intermedia*. *Avena pubescens* and *A. pratensis*, the latter in its only county site, grew among *Pimpinella saxifraga* clumps. In two vertical holes, in Trias Sandstone cliffs, were six plants of *Asplenium marinum* and this caused speculation as to their origin since the

nearest colony is equally remote and many kilometres further down the Severn Estuary on the opposite shore. *Crithmum maritimum* and *Anthyllis vulneraria*, like so many coastal plants at this time of year, were not yet in flower. *Bromus diandrus* was flowering well ahead of *B. sterilis* with which it shares the cliffs. The arched branches of *Lycium barbarum* were dotted with purple flowers.

Most of the party, after a necessary stop at Caldicot's car park, ate their lunch on a grassy bank apart from an exclusive group who sat at 'high table' in the shade of trees on the edge of Hardwick Wood, the second site. The leader explained that this broad leaved wood had been purchased in the period of large scale wood acquisition by the Forestry Commission in the late 1950s and early 1960s for the planting of Larch, Douglas Fir etc. It was the last county site for *Daphne mezereum* and *Astragalus glycyphyllos*. Plants of the former were thankfully found in a forester's garden and plants grown from their seeds were to be re-introduced into an area allocated to the Gwent Trust for Nature Conservation by the Forestry Commission as a nature reserve. Offspring of the Wild Liquorice (*Astragalus glycyphyllos*), rescued from a road widening scheme, would also be re-introduced. Though the numbers had been reduced there were representatives of most, if not all, of the 325 species recently recorded surviving somewhere and now with the Forestry Commission's new remit and its co-operation, the wood might return to its former glory. In the walk, the party saw *Paris quadrifolia*, *Orchis mascula*, *Dactylorhiza fuchsii*, *Platanthera* spp. (both *P. chlorantha* and *P. bifolia* occur, but the buds were not quite open), *Listera ovata*, *Aquilegia vulgaris* in large quantity and some in flower, *Lathyrus montanus*, *Prunus cerasus*, *Viburnum opulus*, *V. lanata*, *Serratula tinctoria*, *Sanicula europaea*, *Calamagrostis epigejos* (the new discovery of the previous week), *Ophioglossum vulgatum* (four patches though few fertile spikes), *Primula veris* and *P. vulgaris* among others.

The afternoon sunshine continued at the final site, an unimproved meadow which was an SSSI Trust Reserve at Brockwell's Farm. Here, cameras were busy taking *Orchis morio* flowers and cowslips (*Primula veris*) and there was some study of a bush of *Rosa caesia*.

Before we went our separate ways I received many thanks for my arrangements and may I reciprocate by offering my thanks for the tolerance, friendliness and helpfulness of such a large party. 'Birdy' people tend to think that botanical meetings are straightforward and plants are always there, but from past experience plants can be just as contrary as any bird, with some species appearing in large numbers one year and yet be extremely uncommon the next.

T.G. EVANS

#### ST ASAPH, FLINTSHIRE. 16th MAY

Eighteen members spent the day furiously botanizing for the Monitoring Scheme, in what is the only 10km square in Flintshire designated for the survey (33/07). Fortunately it has the merits of being accessible, varied and botanically interesting, and on a day when the weather behaved itself, we compiled 377 records for the square, based on visits to seven tetrads, including the all important A, J and W. The number of records has now reached 500, due to the efforts of one or two local members.

One of the habitats which we 'do rather well' in Flintshire is limestone, and it was good to see *Helianthemum canum* and *Epipactis atrorubens* on the recording cards at the end of the day. These are two of our specialities - rare, but well known. It was more exciting to see that *Stellaria pallida* had been found, not only at Graig, Tremeirchion (where it was discovered in 1985 - the first v.c. record since 1909) but also on Moel Hiraddug, another limestone hill some eight kms distant.

It was good to have Tim Rich with us for the day. He supplied us with infectious enthusiasm, and a record for *Sinapis alba*, only the third post-1930 record for the county. Another group discovered *Cerastium Biebersteinii*, a casual not only new to the county but also to the county recorder! *Centaurea montana* (also of garden origin) was found on a road verge, another 'first' for the v.c. A farm pond yielded *Ranunculus trichophyllus*, some fine specimens of *Populus nigra* were re-discovered, and a wood just over the county boundary in Denbighshire produced a false oxlip, *Primula veris* x *vulgaris*, always a plant worth finding.

Many thanks to all who worked so hard - we hope to attack the square again in September 1988.

G. WYNNE

**TAL-Y-CAFN, DENBIGHSHIRE. 17th MAY**

Nineteen people came to the meeting place by the River Conway to record square 23/77 for the Monitoring Scheme. This square includes the NE end of the Carneddau range and the estuary of the River Conway, with the tunnelled crossing of the A55 in progress.

Two energetic members went to tetrad 'A' which rises to 621m, but had to abandon recording at midday because of driving rain. Behind the mountains it was drier, and six other tetrads were recorded. Two members enjoyed, and recorded, weeds in the National Trust's Bodnant Gardens. Interesting records included *Moenchia erecta* growing abundantly on rocky outcrops in an arable field, and a very robust form of *Ranunculus flammula*, thought at first to be *R. lingua*, in a pond near Groesffordd. 23/77 is a square with very varied habitats and a further recording meeting will be held in September, 1988.

J.A. GREEN

**FONTYGARY, GLAMORGAN. 30th MAY**

This was a joint meeting with the Botanical Section of the Cardiff Naturalists' Society to assist with Monitoring Scheme field work in ST(31)/06. In the morning the rather well explored coastal fringe turned up many of its well known plants. On the path to Rhoose Quarries *Desmazeria rigida*, *Medicago arabica* and *Allium vineale* were noted. The quarries had much *Linum bienne* in flower with *Cotoneaster horizontalis* and *C. dielsianus* spreading. From the shallow soil of the Lower Lias grew *Blackstonia perfoliata*, *Inula conyza*, *Orobanche minor*, *Picris hieracioides* and *P. echioides*, *Rubia peregrina*, *Sherardia arvensis* and *Trifolium scabrum*.

Walking westwards along the base of the cliffs towards East Aberthaw gave *Brassica oleracea*, with *Samolus valerandi* around a seepage. *Adiantum capillus-veneris* was recorded at its classic site to the delight of many visitors from further afield, and before climbing to the coast road we were able to admire some maritime sedges including *Carex distans* growing amongst the bare pebbles of the storm beach. The climb to the top, via the 'ninety-nine' not 'thirty-nine' steps, was rewarded with *Lithospermum purpurocaeruleum* being espied below the railway line, giving 171 species for the morning.

The threatened rain arrived over lunch to give us a continuous wetting in the afternoon. Time was spent west of the hamlet of Llanbethery on the alluvial plain of the River Thaw, and it was in this less studied area that new species were recorded. The grazed meadows were dominated by swards of *Juncus inflexus* rather than *J. effusus*, which is uncommon for meadows in southern Wales. These more eutrophic conditions were reflected in the sedges with tall stands of *Carex acutiformis* and the scarce *C. disticha* amongst *Mentha aquatica* and the green canes of *Equisetum fluviatile*.

A luring rape field above the river had a poor weed flora and by now the River Thaw was not felt by most to be the wettest spot in the area! The party returned along the old Aberthaw to Cowbridge railway, but no trains, just *Carex sylvatica*, *Ranunculus auricomus* and *Sanguisorba officinalis* in full flower. 155 species were recorded. Thanks are due to Arthur Chater for testifying Carices.

G. HUTCHINSON

**EFAILWEN, DYFED. 20th JUNE**

This meeting, primarily arranged to record for the Monitoring Scheme in SN/12, which includes parts of both Carms. (v.c. 44) and Pembs. (v.c. 45), was marred by a very poor attendance, due in part to the illness of the Pembs. v.c. recorder, one of the joint leaders.

SN/12W (Carms.), first visited during Wildflower Week a month earlier, was revisited and about 30 previously unrecorded species were noted in and around the valley mire at Plasbach farm. *Carum verticillatum* was quite frequent though not yet in flower, growing with *Narthecium ossifragum*, *Eriophorum angustifolium*, five species of *Carex* and nearby was *Corydalis claviculata*. *Vicia sativa* subsp. *segetalis* (probably the commonest subspecies in this district) was seen frequently on laneside verges. The remainder of the time was spent studying a wooded ravine of ash/hazel/hawthorn with invasive sycamore, at Rest farm. *Sanicula europaea* was occasional in the ground flora, dominated in part by *Conopodium majus* and the swampy ground of the valley bottom, supported *Viola palustris* and

**Chrysosplenium oppositifolium.**

Meanwhile other participants had visited SN/I2J (Pembs.) and SN12/A (Carms. & Pembs.) and both had successful sessions with, for example, some good, species-rich marshland habitats which were discovered in the latter.

R.D. PRYCE

**NEWBRIDGE-ON-WYE. 4th JULY**

On the first truly torrid day of summer, typically for mid-Wales well after the nights had started drawing in, a dozen English botanists assembled at Newbridge-on-Wye to bash a few species lists out in square SO(32)/05 for the Monitoring Scheme. The 'Celtic fringe' was however well represented by a strong contingent from Devon and Cornwall, keen to see what mid-Wales had to offer. With the pubs open all day in honour of Newbridge's Carnival and with bitter vetch (*Vicia orobus*) growing on the verge beside the pub car park the party might have been forgiven a slow start. Not a bit of it. With but a few hundred metres covered we launched into the complexities of the common vetch (*Vicia sativa*) aggregate. Fortunately it quickly emerged that none of us had a grasp of the group so we could get on to the first proper site of the day, the Radnor bank of the Wye, with its gravel, rocky islands and marshy areas with no delay.

The new salmon pink BSBI Monitoring Scheme cards proved to be particularly good in the bright sun as the recorder isn't dazzled by the glare when trying to find out what on earth had become of *Agropyron* or the currently fashionable name for the bluebell! The big print N. England card didn't prove to be too inconvenient in use in Wales either, as it was quickly discovered that a x10 lens was necessary for most of us to read the Wales 'ordinary' card. (Is everyone partially sighted in the North of England, or just honest?)

One hundred and thirty three species turned up by the Wye. Nothing very rare but a new site was discovered on river gravel for rat's-tail fescue (*Vulpia myuros*). It is almost exclusively reliant on British Rail and Aimey Roadstone for homes in mid-Wales, such that one has to doubt whether it is locally a native. But here it looked very much at home. In an area almost devoid of notable aliens (Oxford ragwort (*Senecio squalidus*), a threatened species and wall barley (*Hordeum murinum*), extinct if it ever occurred in Radnor) a large colony of slender rush (*Juncus tenuis*) on the path was noteworthy. Surely there must be money to be made if seed of a leafy form could be obtained.

A short journey brought a change of habitat, new vice-county (v.c. 42, Brecks.), a new card and a chance to sort out *Agrostis*, *Myosotis*, *Epilobium* etc. all over again. The Estyn Wood, a fine well-grown ash/oak wood produced a few choice species such as the intermediate enchanter's-nightshade (*Circaea x intermedia*) and stone bramble (*Rubus saxatilis*), amongst 113 more humble sorts.

Then back into Radnor and a challenge to the faint-hearted in the quaking lawns of the aptly and succinctly named 'The Bog'. Despite an assurance from the leader that he'd never fallen in and sea sickness was the most likely hazard, only two brave souls ventured out to find the third site in Radnor for *Eleocharis multicaulis* - many-stemmed spike-rush, and note large stands of common sundew (*Drosera rotundifolia*), bogbean (*Menyanthes trifoliata*) and marsh cinquefoil (*Potentilla palustris*). A quiet stroll along the nearby, annual-rich, old railway with its calcareous and possibly heavy metal rich ballast completed the excursion and added to the final list, bringing the total to 111 species.

Nothing particularly rare was encountered but it was an enjoyable day in good company and good weather. First time visitors to the area got a good introduction to a typical slice of mid-Wales, and a member of the NCC staff got an inkling of the immense task set BSBI members. Thanks to all who helped.

R.G. WOODS

**MOUNTAIN ASH, GLAMORGAN. 5th JULY**

Eight members met in the layby on the A2224. The outskirts of Mountain Ash, on one of the sunniest days of the year, seemed far removed from most people's conception of a South Wales mining valley. A clump of discarded *Lysimachia punctata* showed that some plants grow successfully in people's gardens in this area. A search of the roadside produced many plants including *Galinsoga quadriradiata* and *Silene vulgaris*. An area of long grass near the railway produced more typically upland plants like *Sanguisorba officinalis*. This

contrasted well with the newly levelled reclaimed land the other side of the tracks. This yielded a wealth of weeds such as *Spergularia rubra*, *Rorippa palustris* and a *Potentilla* (still awaiting determination). After a lunch in the shade of *Salix fragilis*, a walk was taken up the slopes of the hillside to an area of upland wet grassland dominated by *Molinia caerulea*. Here were found such plants as *Wahlenbergia hederacea*, *Galium saxatile*, *Pedicularis sylvatica* and several species of *Carex*. A quick count of the plants seen in this tetrad came to 219 species.

J.P. CURTIS

**ABERSYCHAN, GWENT. 12th JULY**

Thirteen members gathered at an old colliery site while just below, the local fire brigade pumped water out of a large hole in which the body of a missing small boy had been found on the previous day. Wet areas soon revealed *Mimulus moschatus*, *Nasturtium officinale*, *N. microphyllum* and the hybrid between them. *Juncus gerardi* grew, strangely, on some ash nearby, strange because this was far from any saltmarsh. A wet meadow looking more natural than the first site had a varied flora including *Dactylorhiza praetermissa*, *D. maculata* subsp. *ericetorum*, several sedges and cotton-grass. A gritty area was dotted with *Filago minima* and this was passed to enter a marsh where the following sedges were recognised: *Carex caryophyllea*, *C. demissa*, *C. echinata*, *C. flacca*, *C. hirta*, *C. hostiana*, *C. nigra*, *C. ovalis*, *C. panicea*, *C. pulicaris* and *C. pilulifera*. Some *Genista anglica* was found still bearing flowers. After finding *Serratula tinctoria* in bud, Jean Green made a new record by finding *Ophioglossum vulgatum* and soon everyone had found a frond of Adder's tongue for themselves. The party climbed up the hillside of SO/20M where in a stream or its wet margins *Wahlenbergia hederacea*, *Anagallis tenella*, *Hypericum elodes*, *Drosera rotundifolia* and *Potamogeton polygonifolius* grew together in plenty. Many other plants were recorded, and among them was *Philadelphus coronarius*, growing among very old bits of ruins of colliery buildings. The day ended as it began with a little local drama as an ambulance arrived and stretched away a youth who had fallen under his bike near the top of one of the steep tips that was being used as a dirt track.

T.G. EVANS

**PONTERWYD, CARDIGANSHIRE. 19th JULY**

Eight members took part in this meeting to record in an upland part of the Monitoring Scheme 10km square 22/78. The party kept together until lunch, so that identification hints could be exchanged, and divided into two groups of four afterwards in order to cover more ground. These numbers and this programme seemed ideal for recording purposes, and altogether 198 species were recorded in tetrad 22/78K and 135 in 22/78M. In this particularly acidic area, the Boulder Clay slopes east of the Afon Rheidol just above Ponterwyd proved unexpectedly rich, with *Linum catharticum*, *Carex hostiana* and *C. caryophyllea*. A colony of the more definite calcicole, *Hypericum hirsutum*, on the scrubby river bank by Ponterwyd bridge was presumably though an escape. *Silene maritima* was seen in abundance on the chapel yard walls and graves, having been accidentally introduced with gravel from nearby lead mines where heavy metal resistant races of the species occur.

At lunch time at Llyn Pendam (GR 22/709.839) a few plants of *Isoetes* were found, and all who were familiar with the species pronounced them to be *I. lacustris* on vegetative characters, although later microscopic examination of the megaspores showed them to be *I. echinospora*. It is clearly undesirable to record *Isoetes* without checking the spores. This reservoir has long had a large population of *I. echinospora* but has been treated with lime and oyster shells in the last few years to counteract acidification; one may speculate whether this may have affected the habit of the plants. Later, the two parties recorded up the Rheidol from Aberpeithnant, one finding *Wahlenbergia hederacea*, *Hymenophyllum wilsonii* and *Carex pallescens* among damp rocks on the west bank, the other recording generally drier and more acidic sites in the Peithnant gorge to the east, finding *Empetrum nigrum* and *Umbilicus rupestris* near its altitudinal limit in the county at 350m.

A.O. CHATER

**CARMARTHEN, DYFED. 14th-17th AUGUST**

A maximum of eleven participants was accommodated at Trinity College, Carmarthen for the fourth annual Carmarthenshire Flora Project recording weekend. It was planned to concentrate on some of the Monitoring Scheme squares, particularly SN/12, SN/42 and SN/72.

Some very productive sites were visited including ox-bow marshes, shingle banks and the old railway line in the Tywi valley which yielded, for example, *Bidens cernua*, *B. tripartita*, *Fallopia convolvulus*, *Melilotus altissima*, *Ononis repens* and *Picris echioides*. A large rhos-type heath near Llanpumsaint was mostly dominated by *Molinia caerulea* but on its northern periphery had some fine *Carum verticillatum* meadows. *Kickxia elatine* and *Myrrhis odorata* were recorded in the west of the vice-county.

The quality of the plant records reflected the richness of these habitats and the interest shown in conserving these sites by some of the landowners was encouraging. I wish to express my thanks to all those involved.

R.D. PRYCE

**RUBUS MEETING, CARMARTHEN, DYFED. 31st JULY-3rd AUGUST**

This meeting had been arranged in order to record intensively the brambles in Carmarthenshire (v.c. 44), a vice-county that previously had received scant attention on the subject. The small but enthusiastic party, led by Mr A. Newton, met for evening dinner at Trinity College, Carmarthen on Friday 31st July. After the meal, an initial foray was made into the wilds of Carmarthen town where, on an old railway cutting, the first bramble records were made.

Saturday's itinerary was to concentrate on the underworked areas west of the county town and highlight of the day was undoubtedly Marros Mountain where 14 *Rubus* species were recorded. The four new vice-county records noted here included *R. villicauliformis*, a predominantly Cornubian species, only recently recorded from Wales. Later in the day, to the north, the harsher climate of the lower slopes of the Presceli Mountains was marked by the presence of *R. silurum*. The rapid journey back to Trinity College for the evening meal was followed by a walk from the campus to Trevaughan Wood where *R. scaber* was recorded. This is a local plant, only recorded elsewhere in Wales at one locality in Mons. (v.c. 35), but was subsequently seen at several sites in the central part of Carms.

Sunday morning witnessed the party heading for potential *Rubus* sites on the coalfield. The line of the old Rock Castle Colliery tramway was followed where ten species of *Rubus* were recorded including *R. micans*, another first vice-county record, here atypically bearing white flowers, although comment was made that Breconshire plants were also often white flowered. After lunch the party continued over the Black Mountain and on entering the Sawdde Gorge, the convoy was delayed for 40 minutes by a large flock of sheep being driven along the road ahead. The slow progress provided an ideal opportunity for the experienced batologists to record the roadside hedges and woodland margins on passing. Motorists behind looked on in consternation on more than one occasion whilst the leader jumped out of the car, secateurs in hand, and proceeded to stride across the road in order to reach a particular plant and snip off a specimen for closer examination! At Pont-ar-Ilechau, nine species of *Rubus* were seen including *R. lanaticaulis*, first recorded here by B.A. Miles in 1960. The defunct railway line at Cynwyl Elfed and Bronwydd Arms was visited in the evening where, at both sites, *R. scaber* was recorded.

The final day had been reserved to visit some unworked 10km squares in the centre and north of the county. At Dolgran, eleven *Rubus* taxa were seen in the hedgerows and along the old railway. Another very productive stop was made at Lletty'r Aderyn, near Gwernogle, a roadside nature reserve, where *Myrrhis odorata*, *Helleborus viridis* and *Epipactis helleborine* were noted as well as nine bramble species. Further records were made on lanesides near Talley Lakes and at the new road bridge over the River Cothi near Edwinsford. The final locality visited was the Dolaucothi Gold Mines at Pumpsaint where fourteen *Rubi* were noted including the first vice-county record of *R. moylei*.

A total of 280 *Rubus* records were added to the vice-county files, 255 of which were 'good' microspecies or *R. caesius*, *R. idaeus* or *R. loganobaccus*, the remainder being undescribed taxa, hybrids or forms. Twelve new vice-county records were made, viz. *Rubus amplificatus*, *R. cardiophyllus*, *R. flexuosus*, *R. insectifolius*, *R. loganobaccus* (first Welsh record), *R. micans*, *R. moylei*, *R. plicatus*, *R. procerus* cv. Himalayan Giant,

**R. rossensis**, **R. scaber** and **R. villicauliformis**. There were, in addition, five second vice-county records and 126 new 10km square records and the total number of Carms. **Rubus** records was more than doubled.

The success of the meeting was due, in no small part, to the efficiency of the leader and the enthusiasm of the participants. I extend my sincere thanks to all involved. A full account of this meeting will appear in the BSBI's Welsh Bulletin No. 46.

R.D. PRYCE

#### MELIN-Y-WIG, GWYNEDD/CLWYD. 13th SEPTEMBER

Sixteen members and friends assembled in the village of Melin-y-wig in Merioneth (v.c. 48) to work the 10km square 33/04 for the Monitoring Scheme. The party divided up between the three designated tetrads.

A total of 266 species was recorded. This raised the 1987 total for the whole of the 10km square to 403 species - 83% of the all-time total of 487 species. Nine hybrids were also recorded.

The more notable of the plants seen during the meeting were **Populus tremula**, **Rosa canina** x **sherardii** and **Tilia cordata** at Corwen; **Equisetum sylvaticum**, **Scutellaria galericulata**, **Briza media** and **Polygonum bistorta** in the Llyn Mynyllod area; **Salix cinerea** x **viminalis**, **Galeopsis bifida**, **Calystegia sepium** subsp. **pulchra** and **Rosa afzeliana** near Melin-y-wig; and **Dryopteris carthusiana**, **Potentilla palustris**, **Menyanthes trifoliata**, **Vaccinium oxycoccus** and **Carex curta** both near Llyn Mynyllod and near Melin-y-wig.

A reconnaissance on the 24th August for this meeting resulted in the discovery of a plant of **Polygonum hydropiper** x **persicaria**, a hybrid apparently new to Wales.

P.M. BENOIT

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#### CONSERVATION MATTERS

This is the first of what will hopefully prove to be a regular feature on plant conservation and plant conservationists within the pages of BSBI News. Plant conservation is undergoing a spell of rapid evolution at the present time and we hope this slot will allow us to report the efforts that BSBI is making on behalf of plants in this swiftly developing field.

At present Ireland, Scotland and Wales can all boast active conservation elements within their regional Committees. The main Conservation Committee itself has undergone something of an upheaval with the birth of the Conservation Association of Botanical Societies. CABS is now nearly three years of age and it is only now that the respective roles of CABS and BSBI Conservation Committee are becoming clear. Over the last few months the Committee's Terms of Reference have been overhauled, and the revised Terms are reproduced in full below (see p. 54).

Turgid stuff, maybe, but they do give a flavour of what the Committee is achieving at the present time, as well as indicating avenues for future initiatives. The 'Guidelines for the Introduction of Rare Vascular Plants' (see p. 57) represent an excellent example of an initiative that is now reaching fruition as a result of the hard work of the 'Introductions Panel' on which BSBI is one of three contributing parties.

The Committee is currently discussing possible new projects, as well as investigating ways of streamlining the running of the main Committee, including the possibilities of dealing with all site-related casework at a regional level. At all times we shall be working closely with CABS, and we see our role as one of complementing rather than duplicating the work CABS undertakes.

At the end of the day, Conservation Committee represents a service that BSBI offers its members. For the Committee to be fully effective and viable it does rely on an input by members - if only to draw attention to plants and plant habitats that are currently in need of help. If you know of such a situation, read the Terms below, and if your species or site 'fits the bill' please let me know!

Hopefully next 'Conservation Matters' will make mention of at least a few plants and places! In the meantime **short** contributions of plant conservation news, **directly relevant** to the BSBI would be welcomed.

ANDREW BYFIELD, 21 Fishers Road, Totton, SOUTHAMPTON, Hampshire SO4 4HW  
(tel. 0703-871159)

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**TERMS OF REFERENCE OF BSBI CONSERVATION COMMITTEE**  
(as passed by Council 1 March 1988)

**1. The Protection of Sites of National Botanical Importance**

Whilst the Society is concerned about the conservation of all sites of botanical importance and wishes to encourage its individual members to be active to this end, nevertheless, because of limited resources the Conservation Committee must concentrate its efforts towards sites of national botanical importance.

**2. The Promotion of Plant Protection Legislation and its Enforcement**

The Committee has primary responsibility for preparing the Society's advisory literature on plant protection legislation and for promoting its enforcement.

**3. The Protection of Rare Taxa**

1. The Conservation Committee should encourage and seek to publicise autecological research on rare taxa and wherever possible make this available for those responsible for the management of such rare species and their habitats.
2. The Committee should ensure the maintenance of a Register of the whereabouts of cultivated stocks of rare native taxa of known wild origin, and should periodically publish summaries of such information.
3. The Committee through a Re-introductions Advisory Panel should ensure the monitoring of rare vascular plant introductions, and take appropriate action in conjunction with CABS or other bodies, (including the joint NCC/Cambridge University Botanic Garden Rare Plant Project).

**4. Liaison with other National Conservation Bodies**

1. The Committee will maintain routine liaison with the Conservation Association of Botanical Societies (CABS) through the Secretary and at least one member of the Committee sitting on the administrative Committee of CABS as a BSBI representative. The Conservation Officer of CABS (or other appropriate officer) shall be invited to attend BSBI Conservation Committee meetings as an observer.
2. The Committee shall through its Secretary and/or Chairman maintain full liaison with the Nature Conservancy Council and its regional staff, the Royal Society for Nature Conservation and other Societies as appropriate. The RSNC shall be invited to send an observer member to the Conservation Committee meetings.

**5. Communications and Education**

1. The Committee shall continue to develop and seek to publish leaflets, wallcharts and the like to promote plant conservation.
2. The Committee shall maximise all avenues of communication to channel the expertise of the Society into plant conservation and to draw the attention of members of the Society to plant conservation matters.

6. The Committee shall recommend to Council that it should take any other action, either alone or together with another organisation, which may be desirable to conserve the flora of the British Isles.

ANDREW BYFIELD, 21 Fishers Road, Totton, SOUTHAMPTON, Hampshire SO4 4HW

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WILD PLANTS AND THE LAW

Lynne Farrell informs me that all 31 plants recommended were added officially to Schedule 8 of the Wildlife and Countryside Act on November 30th 1987, and became law on March 18th 1988 (see BSBI News 47:19 (1987)).

EDITOR

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REPUBLIC OF IRELAND FLORA PROTECTION ORDER (1987)

I would like to draw the attention of BSBI members, particularly those proposing to visit Ireland in the future, to the new Flora Protection Order (1987) operating in the Irish Republic since the 20th October 1987. The previous list (1980) of 52 species has been modified and added to so that 68 species are now afforded legal protection throughout the state. Fifteen species have been removed from the original list as they are now considered more common than was supposed. Thirty-one species have been added including, for the first time, some of the rare and threatened arable weeds. It is an offence to uproot, destroy or alter the habitat of these species but licences to collect or work with protected species may be granted to bona fide workers on application to the Wildlife Service, Leeson Lane, Dublin 2, Ireland.

The complete list is as follows:

LIST OF VASCULAR PLANTS PROTECTED IN THE IRISH REPUBLIC  
UNDER FLORA PROTECTION ORDER 1987

SCIENTIFIC NAME	COMMON NAME
<i>Acinos arvensis</i> (Lam.) Dandy	Basil Thyme
<i>Allium schoenoprasum</i> L.	Chives
<i>Arenaria ciliata</i> L.	Irish Sandwort
<i>Arthrocnemum perenne</i> (Miller) Moss	Perennial Glasswort
<i>Asparagus officinalis</i> L.	Wild Asparagus
<i>Asplenium billotii</i> F.W. Schultz	Lanceolate Spleenwort
<i>Asplenium septentrionale</i> (L.) Hoffm.	Forked Spleenwort
<i>Astragalus danicus</i> Retz.	Purple Milk Vetch
<i>Calamagrostis epigejos</i> (L.) Roth	Bushgrass
<i>Campanula trachelium</i> L.	Bats-in-the-belfry
<i>Cardamine impatiens</i> L.	Narrow-leaved Bitter-cress
<i>Cardaminopsis petraea</i> (L.) Hiit.	Northern Rock-cress
<i>Carex depauperata</i> Curtis ex With.	Starved Wood-sedge
<i>Centaureum pulchellum</i> (Swartz) Druce	Lesser Centaury
<i>Colchicum autumnale</i> L.	Autumn Crocus
<i>Cryptogramma crispa</i> (L.) Hook.	Parsley Fern
<i>Deschampsia setacea</i> (Huds.) Hack.	Bog Hair-grass
<i>Epilobium alsinifolium</i> Vill.	Chickweed Willow-herb
<i>Erica ciliaris</i> L.	Dorset Heath
<i>Eriophorum gracile</i> Roth	Slender Cotton-grass
<i>Galeopsis angustifolia</i> Hoffm.	Narrow-leaved Hemp Nettle
<i>Groenlandia densa</i> (L.) Fourn.	Opposite-leaved Pondweed
<i>Gymnocarpium robertianum</i> (Hoffm.) Newm.	Limestone Fern
<i>Hammarbya paludosa</i> (L.) O. Kuntze	Bog Orchid
<i>Helianthemum nummularium</i> (L.) Miller	Common Rockrose
<i>Hordeum secalinum</i> Schreb.	Meadow Barley
<i>Hydrilla verticillata</i> (L. fil.) Royle	Irish Hydrilla
<i>Hypericum canadense</i> L.	Canadian St John's-wort
<i>Hypericum hirsutum</i> L.	Hairy St John's-wort

## Conservation Matters

<i>Inula salicina</i> L.	Willow-leaved Inula
<i>Kickxia elatine</i> (L.) Dum.	Fluellen
<i>Lathyrus japonicus</i> Willd.	Sea Pea
<i>Logfia minima</i> (Sm.) Dumort.	Slender Cudweed
<i>Lotus subbiflorus</i> Lag.	Hairy Birdsfoot Trefoil
<i>Mentha pulegium</i> L.	Penny Royal
<i>Mertensia maritima</i> (L.) S.F. Gray	Oyster Plant
<i>Minuartia recurva</i> (All.) Schinz & Thell.	Curved Sandwort
<i>Misopates orontium</i> (L.) Rafin.	Lesser Snapdragon
<i>Najas flexilis</i> (Willd.) Rostk. & Schmidt	Slender Naiad
<i>Oenanthe pimpinelloides</i> L.	A Water Dropwort
<i>Omalotheca sylvatica</i> (L.) Schultz Bip. & F.W. Schultz	Wood Cudweed
<i>Orchis morio</i> L.	Green-winged Orchid
<i>Ornithopus perpusillus</i> L.	Birdsfoot
<i>Otanthus maritimus</i> (L.) Hoffm. & Link.	Cottonweed
<i>Papaver hybridum</i> L.	Round Prickly-headed Poppy
<i>Pilularia globulifera</i> L.	Pillwort
<i>Polygonum maritimum</i> L.	Sea Knotgrass
<i>Polygonum viviparum</i> L.	Alpine Bistort
<i>Pseudorchis alba</i> (L.) Á. & D. Löve	Small White Orchid
<i>Puccinellia fasciculata</i> (Torr.) Bicknell	Tufted Salt-marsh Grass
<i>Pyrola rotundifolia</i> L. subsp. <i>maritima</i> (Kenyon) E.F. Warb.	Round-leaved Wintergreen
<i>Ranunculus tripartitus</i> DC.	Three-lobed Water-crowfoot
<i>Sanguisorba officinalis</i> L.	Great Burnet
<i>Saxifraga granulata</i> L.	Meadow Saxifrage
<i>Saxifraga hartii</i> D.A. Webb	Hart's Saxifrage
<i>Saxifraga hirculus</i> L.	Yellow Marsh Saxifrage
<i>Saxifraga nivalis</i> L.	Alpine Saxifrage
<i>Scirpus triquetus</i> L.	Triangular Club Rush
<i>Simethis planifolia</i> (L.) Gren.	Kerry Lily
<i>Spiranthes romanzoffiana</i> Cham.	Drooping Lady's-tresses
<i>Stachys officinalis</i> (L.) Trevisan	Woundwort
<i>Trichomanes speciosum</i> Willd.	Killarney Fern
<i>Trifolium glomeratum</i> L.	Clustered Clover
<i>Trifolium subterraneum</i> L.	Subterranean Clover
<i>Trollius europaeus</i> L.	Globe Flower
<i>Vicia orobus</i> DC.	Bitter Vetch
<i>Viola hirta</i> L.	Hairy Violet
<i>Viola lactea</i> Sm.	Pale Heath Violet

Copies of the Order can be obtained from the Stationery Office, Dublin price 0.75 punts (postage 0.32 punts extra).

TOM CURTIS, Wildlife Service, Research Branch, Sidmonton Place, BRAY, Co. Wicklow, Ireland

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### LADY'S SLIPPER ORCHID CONSERVATION

In 1987 the single wild plant continued to produce good growth and 6 flowers bloomed. Seed from this plant has been used in germination experiments at Leeds University and at The Royal Botanic Gardens, Kew. The latter has enjoyed a successful raising of protocorms, which we are all hoping will develop into plantlets with green leaves. Every effort will be made in 1988 to obtain more seed and to raise plants. It will be several years, however, before there are plants robust enough to reinstate in the wild.

Meanwhile, once again I am asking all members to refrain from visiting the wild plant in order to maintain the healthy situation we have at the moment. The surrounding

vegetation can suffer from trampling, and we need it to be relatively undisturbed for the reinstatement of small plants.

It is intended also to re-establish a site where there would be public access to see *Cypripedium calceolus*. I hope this meets with botanists' approval, and we all look forward to that time.

LYNNE FARRELL, Rare Plant Specialist, NCC, Northminster House, PETERBOROUGH PE1 1UA

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## GUIDELINES FOR THE INTRODUCTION OF RARE VASCULAR PLANTS

The Conservation Committee of the Botanical Society of the British Isles (BSBI) has set up a Consultative Panel, to review the field of rare plant introductions; to provide a forum for consultation and advice for those proposing schemes of rare plant introduction; to issue a code of conduct for such schemes; and to facilitate a rapid exchange of information about such proposals between the BSBI, the Nature Conservancy Council (NCC) and the Royal Society for Nature Conservation (RSNC). The panel at present comprises Duncan Donald, Lynne Farrell and Franklyn Perring.

### TERMINOLOGY

We have adopted the terminology used at a 1976 seminar on "Reintroductions : techniques and ethics" (1) and later used in the report Wildlife Introductions to Great Britain (2), viz.

- |                        |  |
|------------------------|--|
| <b>Introduction</b>    | The deliberate or accidental release of ...plants of a species or race into an area in which it has not occurred in historical times; or, a species or race so released. |
| <b>Re-introduction</b> | The deliberate or accidental release of a species or race into an area in which it was indigenous in historical times; or, a species or race so released.                |
| <b>Re-stocking</b>     | The deliberate or accidental release of a species or race into an area in which it is already present.   |

Further, plants released within a 1km radius of a site in which the species (or taxon) has been previously recorded will be deemed re-introductions or re-stockings as defined above, while plants released at greater distances from such recorded sites will be deemed introductions.

Rare plants will be taken as those listed in the British Red Data Book : Vascular Plants (3).

### CODE OF CONDUCT

#### Prior Considerations

1. Introductions, re-introductions and re-stockings of rare plants should not be carried out without prior consultation with the Consultative Panel - unless, that is, the plant is a non-persistent annual being introduced into a man-made or urban habitat for demonstration or for decorative purposes, where it will be a short-lived phenomenon which will not affect natural or semi-natural vegetation. (A list of such annuals is currently being drawn up : 24/2/1988).
2. Introductions, re-introductions and re-stockings of taxa protected in Schedule 8 of the Wildlife and Countryside Act 1981 (and subsequent amendments) would require a prior permit from the NCC if seed or any other living material had to be collected from the wild for this purpose.
3. Anyone carrying out an introduction, re-introduction or re-stocking involving plants rare in their own area, but not so rare nationally as to be included in the Red Data Book, ought to record this with the Biological Records Centre (4); they are also welcome to seek advice from the Panel about the advisability or methodology of their action.

#### Conditions under which consent may be given

4. In general, there will be a presumption against making introductions of rare plants other than for scientific research. An exception may be made where a rare plant is

threatened in an important area but the nearest suitable protected habitat is over 1km away.

Any such introductions should be recorded following the procedures given in paras 7-10 below.

5. Consent for re-introductions or re-stockings will usually only be given where:

- a) a rare plant has become extinct or has come to the verge of extinction in an area within the recent past, but the habitat is still apparently suitable or can be altered to become so and has some form of long-term protection;
- b) a rare plant is threatened in an area but, within 1km of that area, another suitable habitat exists in which the plant is absent or extremely scarce but to which natural spread seems unlikely;
- c) the action will not threaten other rare plants.

All such re-introductions or re-stockings should follow the recommended procedures given in paras 7-10 below.

6. Consent for introductions, re-introductions or re-stockings will only be given when the prior consent of the landowner or land manager has been obtained.

A special situation arises where the land on which such action is proposed is either a nature reserve or has been designated as a Site of Special Scientific Interest by the NCC: in the former case, the conservation organization concerned must be consulted and the proposal agreed by the appropriate committee/officer of that organization; in the latter case, any proposed operation would need the authority of the NCC and it would be advisable in the first place to contact the appropriate Regional Office of the NCC.

### Recommended procedures

7. Seek the necessary clearance from any landowner, land manager or the NCC Regional Office as outlined in para 6.

8. Apply to the Consultative Panel (address given below) for Rare Plant Introduction Forms. You will be sent two for each proposal : one for you to complete and return to the Panel; the other for you to retain for your own records, for help in submitting further information to the Panel in due course on the subsequent history of any introduction made.

The Panel shall notify the Biological Records Centre and the appropriate BSBI Vice-county Recorder.

9. Ensure that the material for your proposed scheme is acquired, with the necessary permission, from the nearest available source - which should not be more than 1km from your proposed site for the introduction, re-introduction or re-stocking (except in the special circumstances outlined in para 4 above).

10. To avoid contamination of the site by other, possibly weedy species, it is recommended that, when plant material other than seed is introduced, populations of the rare plant concerned should first be built up in cultivation so that they form a reliable monoculture.

### References

- (1) Proceedings of the seminar "Reintroductions : techniques and ethics", ed. L. Boitani. World Wildlife Fund, 1976
- (2) Wildlife Introductions to Great Britain, a report by the Working Group on Introductions of the U.K. Committee for International Nature Conservation. NCC, 1979 (ISBN 0-86139-090-3)
- (3) British Red Data Book : Vascular Plants, 2nd edition, by F.H. Perring & L. Farrell. RSNL, 1983 (ISBN 0-902484-04-4)
- (4) The Biological Records Centre's address is c/o I.T.E., Monks Wood Experimental Station, Abbots Ripton, HUNTINGDON PE17 2LS

We are interested not only in details of proposed schemes of introduction, re-introduction and re-stocking, but also in past experiments involving these and whether they succeeded. To record these, please apply for Rare Plant Introduction Forms, and submit completed forms, to the address below.

DUNCAN DONALD, BSBI Consultative Panel, c/o Chelsea Physic Garden, 66 Royal Hospital Road, LONDON SW3 4HS

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

Enquiries concerning the Society's activities and membership should be addressed to:-  
The Hon. Gen. Sec., c/o Dept. of Botany, British Museum (Nat. Hist.), Cromwell Road,  
LONDON SW7 5BD.

Camera-ready copy produced by Gwynn Ellis and printed by J & P Davison, 3 James Place,  
Treforest, Pontypridd, Mid Glamorgan CF37 2BT

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