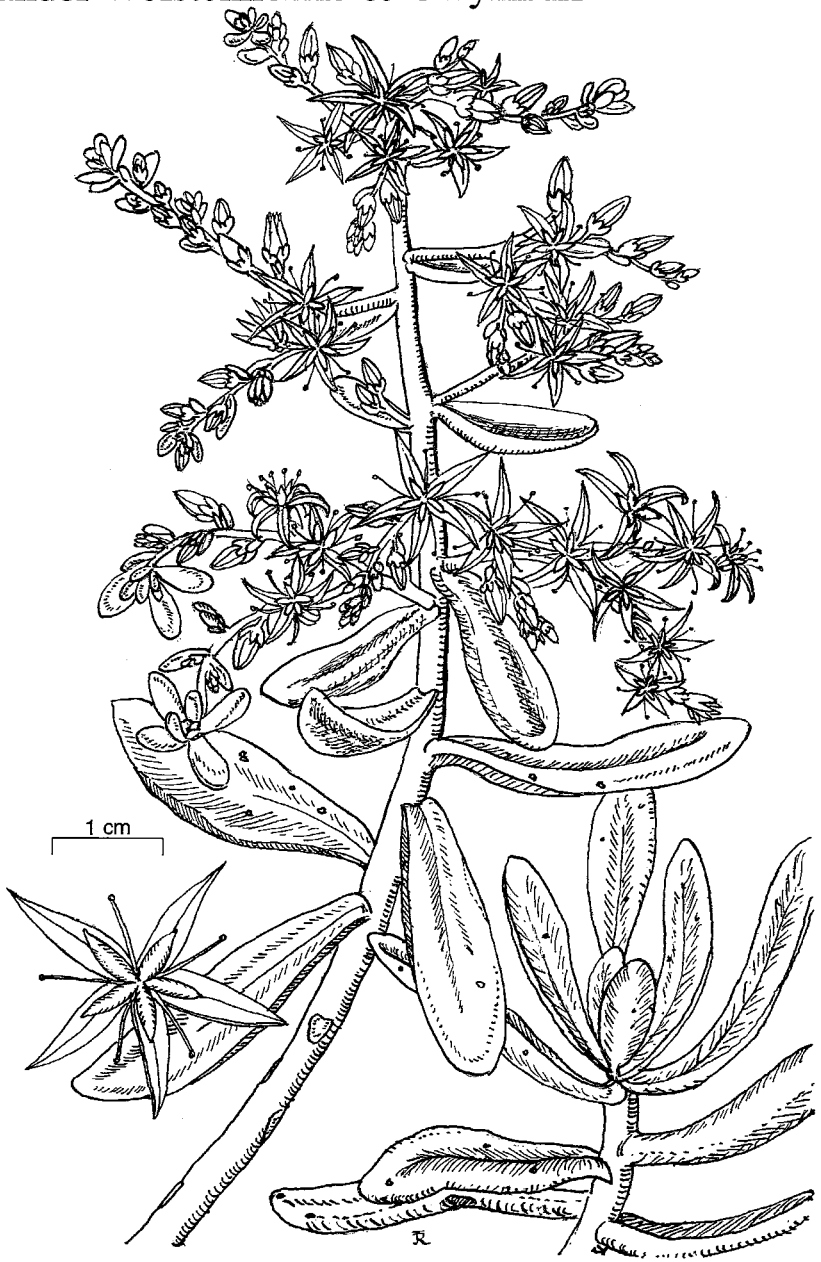
BSBI NEWS

September 2003

Edited by
Leander Wolstenholme & Gwynn Ellis

No. 94



Sedum praealtum A. DC. del. Jocelyn Russell (*c.* 1965) © 2003 (see page 30)

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CONTRIBUTIONS INTENDED FOR *BSBI NEWS* 95 should reach the Receiving Editor before NOVEMBER 15th 2003

IMPORTANT NOTICES

FROM THE PRESIDENT

I know you will all echo my thanks to Ailsa Burns, who has carried out the duties of Hon. General Secretary for several years now, but, due to ill health, is reluctantly relinquishing the post. Thanks, Ailsa for all your efforts, efforts which may often seem thankless and which often go unacknowledged. In the absence of a volunteer waiting in the wings, David Pearman, assisted by Mary Clare Sheehan, and with some help from Ailsa in the short term, will be undertaking the duties as a temporary measure, with a view to making a new appointment next year. Ailsa will continue to co-ordinate and advise on education initiatives within the society.

I also have to announce that Mike Walpole has recently let-go the reins as Membership Secretary, a task now taken-on by Gwynn Ellis. The Society owes Mike an enormous debt of gratitude for his long and outstanding service in many fields. He has been a BSBI Officer for at least thirty years, most notably as Honorary Treasurer, a task he managed, combined with all the details of membership, using computer programs which he had developed himself, well before the advent of DOS, let alone Windows! I've no doubt that he will welcome the increased time to pursue his passion for field botany and curation of his library! Thanks again and welcome to Gwynn who, I know, is currently grappling and, I hope, getting to grips with the new membership system!

I am also very grateful to Michael Braithwaite, not only for all the excellent work he does as our present Treasurer, but also, in association with Pete Selby, for the way in which he has promoted and developed the methodology for the *Local Change* scheme which, of course, we are now all using. But he has also recently produced the *BSBI Development Fund Appeal* leaflet in response to the increasing need for the Society to raise funds to secure its financial base for the future (for more details see separate notice, p. 4).

I must also convey my thanks to Jane Croft and to all the local helpers for the efficient organisation of the International Atlantic Arc Symposium held in Cornwall in May and, of course, to Franklyn Perring for making it all happen in the first place. The event was a great success and brought together botanists from Great Britain, Ireland and France who are carrying out research into species having an Atlantic distribution. The Proceedings will be published in due course. What really struck me was the youthfulness of many of the Irish and French speakers. It is a pity that British youngsters these days are not exposed to the excitement and satisfaction of discovering the intricacies of the natural world for themselves and that there is woeful lack of its coverage by both schools and colleges. Not just a pity but a profound omission, because there is certainly a pressing and increasing need for people with well developed skills in biological identification. The recent proliferation of Nature Conservation Legislation, Directives and the need for appropriate advice ensures that there are plenty of employment opportunities for those with the right expertise. Societies like BSBI can play a major role in developing these skills for anyone keen enough to learn by providing virtually one-to-one tuition with experienced naturalists willing to pass on their expertise to beginners.

Following on from the welcome I extended to new members in my last *From the President*, the consensus of opinion of those taking part in the week-long BSBI Carmarthenshire recording meeting based at Glynhir, in South Wales, was that it struck just the right balance between expert botanists and those with less experience. On some days, small groups comprising those of different abilities went out to do *Local Change* recording whilst on other days some of the county's hot-spots were visited by the whole party. All present appeared to enjoy the week despite the appalling weather. And, in common with many other BSBI meetings during the year, I also understand that the excursion to determine the altitudinal limits of certain species on Ben Lawers was of great value as well as great fun! If you are a new member and would like to become more involved please contact your local Vice-county Recorder who, I am sure, would be only too happy to help and would welcome your assistance.

As the 2003 field season comes to a close and the winter evenings draw-in, we look forward to receiving the multitude of records you have collected during the year for *Local Change*. I have found recording for the scheme very enjoyable and several species have been recorded for the first time in my Vice-County, some new since the 1987-88 Monitoring Scheme and some obviously overlooked at that time. I am sure that you have all come across similar instances in your own areas and the final results of the scheme will be most enlightening. The www.bsbi-projects.org.uk web site maintains a running total of records so far received by Pete Selby, the project's co-ordinator. By referring to this site, those under-recorded tetrads which will need further attention in 2004 can be identified (see also Pete's note on p. 8).

I look forward to seeing many of you at the Annual Exhibition Meeting in London on 29th November, in the meantime, good luck with the inputting!

RICHARD PRYCE, PRESIDENT 5 Sept 2003

BSBI DEVELOPMENT FUND APPEAL

BSBI really does feel threatened if it does not move forward. Its officers are finding it ever more difficult, as volunteers, to look after the interests of amateur field botanists in a world where there are so few of the academic professionals we have traditionally worked with and depended on, and so many conservation organisations with very different agendas, all of whom require considerable amounts of time to deal with. We need to be better organised and more able to help individual botanists to develop their own particular interests. For these reasons BSBI is launching its Development Fund Appeal. Two copies of a leaflet outlining the aims and objectives of the Appeal are enclosed with this mailing and I ask you to read it and take time to consider how you might further help the Society by providing additional support. Please, please use the stamped addressed envelope for your reply and please, please pass on the second copy to a potential donor from your own circle of friends and acquaintances. Further copies are available should you need them and either Michael Braithwaite or I would be glad to talk through any particular questions you might have.

RICHARD PRYCE, PRESIDENT 5 September 2003

NEW ATLAS OF THE BRITISH & IRISH FLORA

Although all orders for the *New Atlas of the British & Irish Flora* should by now have been fulfilled, I know that there were some members still waiting for their copies in the middle of August. The third reprint should have been ready for dispatch by then and if there is anyone who has still not received their copy, I repeat below the action that should be taken:

Contact Norma Short and/or Nicola Connery at Oxford University Press. You should write or phone Nicola Connery (OUP, Distribution Centre, Saxon Way West, Corby, Northants, NN18 9ES, Telephone: 01536 454560, Fax: 01536 454518) or email either (with copy to Gwynn Ellis) at: ShortN@oup.co.uk or ConneryN@oup.co.uk

1. Give your name and full address AND phone number,
2. Confirm that your copy was ordered through the BSBI (they can check against the list of the addresses provided)
3. Clearly state what the problem is, eg non delivery, damaged in transit, or missing CD (NOTE: the latter is affixed to the inside of the front or back cover, please check there first).
4. Be patient if she does not get back to you immediately.

BSBI does apologise to any member who has had to wait for so long to receive their copy although this was completely outside our control. Lessons have been learned, and the fiasco will not be repeated!

GWYNN ELLIS, General Editor

PROFILES OF NEW HONORARY MEMBERS

AILSA BURNS

I am delighted by the invitation to 'profile' Ailsa on the occasion of her election to Honorary Membership as we have been friends for some 40 years and have the same [Christian] 'philosophy of life'.

She was the daughter of teachers in the West Midlands who spent school holidays with a grandmother in North Wales, where her passionate interest in nature flourished. She graduated in botany at Bangor, famous under Paul Richards as one of the few universities teaching 'our sort of botany', and went on to be herself a teacher at Slapton Ley Field Centre and Cornwall Technical College [site of this AGM at which we are electing her!]

Joining BSBI in 1962, she was an obvious recruit to the Junior Activities Committee which we'd formed 10 years earlier. We needed a second 'professional' and she soon became our Secretary. [My botany notebook for Whitsun 1968 records that I must go to Cornwall before Ailsa Burns leaves; and, after 2 pages of field records, 'my best days for years'!]

After Cornwall she moved to Napier in Edinburgh and next came 'time out' to raise a family and devote herself to her garden. But when she returned to her professional work in 'Further Education' she was able to give us long service as Secretary of Meetings Committee. There I was happy to work with her again, often helping at indoor meetings which she had organised.

And now she has become famous to all members as our Hon. General Secretary (now semi-retired).

JOHN OUNSTED, May 2003

GORDAN GRAHAM

Gordon Graham trained as a metallurgical chemist and was working in Sheffield in the 1940s when he received the call to the priesthood. After reading theology at Durham he was ordained and took up the post of curate in Luton but did not meet John Dony. His interest in botany was sparked off in 1947, while at college, by the purchase of copies of Hutchinson's *Wild Flowers*. Later he moved back north, first to Bakewell and then to Co. Durham where he was successively Vicar of the two pit villages of Wheatley Hill and Hunwick. He joined the BSBI in 1956 and sent in records for the first *Atlas* from Lathkill Dale.

Gordon arrived in Durham when Prof. J.W. Heslop Harrison was still the leading field botanical figure in the area. His influence directed him into the two botanical works which were to occupy his spare time for the next 35 years. As he himself records: 'One afternoon in 1960 as I was being initiated into the study of wild roses .... I ventured to ask if he was indeed writing a Flora he indicated that it was all to be found in the pages of *The Vasculum*'. Gordon, sensing that this was the end of the H.H. era began compiling a plant index of all the *Vasculum* records — the seed corn which grew into the Durham Flora project which began in 1968. Though helped by the presence in Durham at that time of David Bellamy, David Valentine and Margaret Bradshaw, it was Gordon's own determination that set him on the path to mastermind the production of one of the most complete County Floras ever published.

Inspired by the *Computer-mapped Flora of Warwickshire* of 1971 Gordon aimed to collect tetrad data of all vascular plant species including critical groups like *Rosa* and *Rubus* and, to that end, with the assistance of Martin Wigginton, produced in 1976 that invaluable handbook for his field workers — *Critical Species, Subspecies, Varieties and Hybrids in the Durham Flora* which was later published by the then NCC and was really the inspiration of the Rich's *Plant Crib* of 1988. His knowledge of Critical Groups was honed by attending courses at Field Studies Centres and it was at one of these that

he met his wife Paddy who became his constant companion on field trips if only to mind their two little daughters whilst he botanised.

He had already turned his attention to bryophytes and lichens, both of which he began to study in 1965, and finally, as if this were not enough, he took an MSc in phytosociology under David Bellamy and became an expert in NVC classification doing stands for John Rodwell which led to the last 150 pages of the *Flora* being devoted to an exhaustive description of the vegetation.

In 1961, he met John Chandler, and botanised with him in Durham, Stamford and elsewhere for over 20 years, studying amongst many others, the genus *Rosa*. In 1980 he was ferried round Leicestershire by Tony Primavesi (with Guy Messenger) to help with the collection of rose records for the *Flora of Leicestershire*. So, as soon as the Durham and Leicestershire Floras had been published in the same year (1988), the way was clear for these two to work together on the preparation of *The Roses of Great Britain and Ireland.*

For his dedication and incredible range of expertise in writing *The Flora and Vegetation of County Durham*, for his contribution to our knowledge of the Genus *Rosa* in Great Britain and Ireland and for acting as Vice-county recorder for 35 years I have great pleasure in moving that Gordon Graham be made an Honorary Member of this Society.

FRANKLYN PERRING, May 2003

DIARY

N.B. These dates are supplementary to those in the 2003 Calendar in *BSBI Year Book 2003* and include dates of the BSBI's Permanent Working Committees.

2003

October

4	Irish AGM, National Botanic Gardens, Glasnevin, Dublin
8	Records Committee, London
11	Welsh Committee, Llandrindod
23	Publications Committee, London

November

5	Executive Committee, London
19	Council

EDITORS

EDITORIAL

Size of News: A much shorter issue of *BSBI News* than of late, much welcomed, no doubt, by those in charge of the purse-strings, but a bit of a surprise to the Editors. We both hope that is no more than a temporary decline and that the next issue will be back up to its 'regulation' size of *c.*72 pages.

Membership number: Observant readers will no doubt have noticed that their membership number was missing from the address label of the most recent mailing of *Watsonia*. When I took over as Membership Secretary, a new membership software package was purchased and there are still a few teething problems, such as the printing of membership numbers on mailing labels. Hopefully this will be no more than a temporary glitch and that 'normal service will be resumed as soon as possible'.

Congratulations: to the following members who received awards in recent Honours lists; Jane Smart OBE (Plantlife); Joyce Stewart MBE (Orchidologist at Kew and Chelsea Physic Garden) and John Topp OBE (member of Meetings Committee).

And also to David Pearman on receiving the prestigious Linnean Society Bloomer award for 2003. The citation, prepared by Richard Pryce and myself will be published in *The Linnean*.

Project Manager: David Pearman has abandoned the Old Rectory and moved even further away from the action (is he trying to tell us something?). He now resides at Algiers, Feock, Truro, Cornwall TR3 6RA, Tel: 01872 863388.

Apologies: to Laurie Spalton for inexplicably labelling the scans of *Bromus* panicles on page 15 in the last issue as belonging to *Bromus secalinus* instead of *Bromus pseudosecalinus* (see page 20)

Lost & found: Sincere apologies to several authors whose contributions 'miraculously' reappeared on my desk after over a year in the 'bottomless pit' that I laughingly call my filing system. Fortunately they are all still relevant and are printed in this issue with an indication of their status!

Colour section (centre pages): **Page 1** (upper): BSBI field meeting Avon Gorge (p. 43); (lower left) *Arabis scabra* (p. 43); (lower right) *Cerastium pumilum* (p. 43). **Page 2** (all) White Willow (*Salix alba*) (p. 22). **Page 3** (upper & lower left) *Ranunculus acris* (p. 23); (upper right) *Paulownia kawakamii* (p. 33); (lower right) *Thlaspi macrophyllum* (p. 23). **Page 4** (upper): BSBI field meeting Roundton Hill NNR (p. 44); (lower left) *Cardamine pratense* (p. 13); (lower right) *Euphorbia mellifera* (p. 29).

Mystery Book: Sue Atkins informs me that the mystery book on p. 30 of the BSBI Publications/Summerfield Books catalogue, enclosed with this mailing, is entitled *Les Fleurs Sauvages de Maroc* and the price should be £30!

Members email addresses: As reported in the last issue, members email addresses may now be included in the Membership List in *BSBI Year Book* and elsewhere, **if they agreed**.

There is still time for members to send me their email addresses if they have no objection to them being included in future.

Ashes to ashes: Mourners spreading ashes of loved ones on the Great Orme above Llandudno have been warned that they are damaging rare plants! (From the *North Wales Weekly News* and *The Guardian*.

'Nature's Calendar': An article in a recent issue of the *Cardiff Post* has pointed out that the UK Phenology Network is studying the timing of seasonal events especially in relation to climate. As part of the study the Woodland Trust has collected thousands of recordings from volunteer phenologists across the country and the results seem to indicate that climate change is already affecting our woods and forests and is the single biggest threat to our ancient woods. The ripening of blackberry fruit, it seems, corresponds strongly to changes in seasonal temperatures, but I wonder if different micro-species respond differently. More recorders are needed to note seasonal changes like changing leaf colour, falling leaves, the arrival and departure dates of migrating birds, and the ripening dates for a range of fruits from blackberry and holly to dog-rose and blackthorn. If you would like to help ring the Woodland Trust on 0800 083 7497 or log on to www.phenology.org.uk

And finally: Sod's Law strikes again: the Receiving Editors telephone number in the back of *BSBI News* remained wrong but has now been corrected; but his email address has now changed and is now leander.wolstenholme@liverpoolmuseums.org.uk

EDITORS

Solution to Botanical Crossword No. 3 (see page 53)

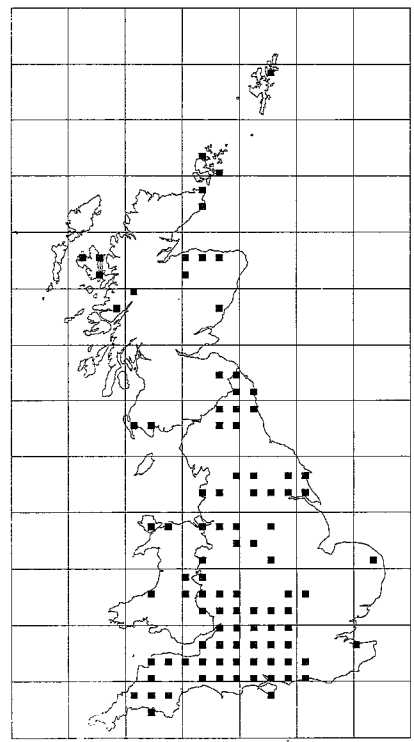
Across — 1 - Polymorphic, 6 - Mat 7 - O.S. map, 10 - Flora, 12 - Gowan, 14 - Petal, 16 - India, 18 - Bur, 19 - Spergularia.

Down — 1 - Pampas grass, 2 - Latin, 3 - Rum, 4 - Hippo, 5 - *Convallaria*, 7 - Ova, 9 - Uva, 11 - Lee, 13 - White, 14, 8ac - *Poa annua*, 15 - Tuber, 17 - Dig.

BSBI PROJECTS

BSBI Local Change

Progress with BSBI Local Change has been excellent in most vice-counties. Members have been out and about re-surveying the tetrads last surveyed in 1987/88 and recording what they find. These records will then be passed to the BSBI Hub database but at present not all records have been entered and sent to it. The map below therefore shows the 10k squares for which at least some records for 2003 have been passed to the database (as at 28th August). I await further records so that the map can next time reflect surveying activity, rather than data entry activity.



The question most frequently asked of me about BSBI Local Change concerns the 10-hour target time. Some people are finding that in order to cover the tetrad well, the primary target of the survey, they need more than 10 hours to visit all the habitats in the tetrad, particularly with diverse lowland tetrads with lots of habitats. Also when searching for a particular species recorded in 1987/88, people find it takes more time to not find something than it does to find it. Thus, although the time is an important factor in deciding whether squares are well covered or not, it is more important to know what time has been taken rather than trying to adhere strictly to the target time. Therefore the entry of the time taken on any card is most important. At a later stage in the project we will be asking for a summary of findings for each tetrad which will include total time taken and the number of different people involved in the recording.

To help us get some feedback on Local Change in areas of particular interest, an experimental web site has been created. This can be reached via the BSBI main web site, www.BSBI.ORG.UK, Records area, or directly to www.BSBI-Projects.org (**no** UK). If you visit this web site you can see a list of species recorded for each of the 813 Local Change tetrads. You can see what has been already found, species apparently lost (not yet recorded), species gained (usually missed last time) and the overall totals for the square.

If you are going away on holiday you could look up the squares in the area you intend visiting and, if you become a user by providing a username and password, you can download a recording sheet for the tetrad or tetrads. If you find that there has been no recording activity in your local area, please get in touch and we can get organised for next year.

My next Local Change Project report will be about the exercise of the local assessment of change by those who have recorded the squares, including a total time taken, the number of people doing the recording and whether they were also active in the same tetrads in 1987/88.

Do keep in touch and remember that it is my job to help you.

PETE SELBY, BSBI Volunteers Officer, 12 Sedgwick Road, Bishopstoke, Eastleigh, Hampshire SO50 6FH; Tel.: 02380 644368; email: VolunteersOfficer@bsbi.org.uk

CO-ORDINATOR'S CORNER

Botany and conservation

The relationship between scientific botany and conservation is a fascinating subject. Reading our annual reports from vice-county recorders, I was surprised and delighted to find out just how many of us are involved in conservation in some way. Even those who are somewhat disillusioned with the conservation movement and come across superficially as 'anti-conservation', seem actually to take their stance in the cause of protecting plants. 'I'm not telling the conservation folk where the rare plants are — they'll just fence them off and kill them' is a common complaint. But they still want to protect the plants.

Personally, I believe that conservation is now implicit in the work of the BSBI. It was not always so, but it would be very strange today if any botanist did not care about species becoming extinct. However, I would dare to suggest that the conservation sector is lagging behind the scientific one in the development of its philosophy. For instance, the recent introduction of archaeophyte status by Chris Preston and David Pearman has thrown the conservation world into turmoil. It is an elegant and highly practical model for adding to our understanding of the history and ecology of plants, and to a scientist it is immediately obvious and indispensible. But there has been confusion and bewilderment amongst some conservationists who perceive that many of their most treasured plants have suddenly turned into 'aliens'. See for instance Simon Leach's article in the previous edition of *BSBI News* (**93**: 18-20), where he wonders whether roadside halophytes are just as natural (and worthy of conservation) as those in a saltmarsh.

The underlying problem is the lack of a modern philosophical rationale for conservation. When Derek Ratcliffe was chief scientist he was brave enough to write on this subject (see, for instance, *A Nature Conservation Review* p. 352), but there seems to be no-one these days who would dare philosophise. Business plans are more the order of the day. Ironically it is the Ratcliffe Criteria that have inadvertently been the cause of much of the problem by setting out a whole host of standards by which SSSIs are judged. But this is a misunderstanding: the criteria are about prioritising, not about justifying conservation. There is one and only one role for the conservation movement: to conserve natural systems as unaffected by human activities as possible. To paraphrase Isaac Asimov, one can define three laws of conservation:

Rule 1: conservationists must seek to preserve the natural environment intact except where this may cause harm to human beings or the economy.

Rule 2: where natural conditions cannot be maintained, conservationists may establish reserves and manage semi-natural habitats to protect species and communities, so long as this does not conflict with rule 1.

Rule 3: in desperation, conservationists may protect artificial habitats, conduct *ex-situ* programmes, reintroduce species, or commission video footage; but only whenever they cannot protect that feature of the natural environment under rules 1 & 2.

Apply these three rules rigorously and you can hardly go wrong. Danish Scurvygrass by the side of the M1 is about as natural as a dancing bear in a tutu, so the only way you could justify any sort of conservation action would be under rule 3. Clearly it is a species that can be looked after under rules 1 & 2 quite easily, so there can be no justification for an English Central Reservations SSSI. You might still do it for publicity purposes, of course, as seems to be the justification for many things these days (see the recent debates in *British Wildlife* magazine), but just don't account for it under the conservation budget ...

Evidence

An exciting new initiative from English Nature, borrowed from the world of medicine, is a research project being trialled at the University of Birmingham on evidence-based conservation. It is a simple enough concept: look at the way people have managed a particular situation, see what works, and then apply the most successful strategy across the board. It seems that in the bad old days each surgeon was free to conduct operations in the way they felt was best, but it turned out that some procedures were more successful than others, so now the surgeons have guidelines to tell them when and where to cut. Amazingly, it seems that this doesn't happen much in conservation. Each site warden, for example, is still expected to reinvent the wheel for themselves.

A stark example of this is given by the canal restoration programme. Over the last few decades British Waterways and other canal owners have restored nearly all the canals in Britain. 'Restoration' in this sense is more akin to turning a green lane into a motorway, because they don't manage the canals in the traditional way, but instead race up and down them in motorboats. This has the unfortunate effect of making the water murky, and killing off all the aquatic plants that have, in the past, always been part of the charm of canals. Perhaps it would be more appropriate to say the canals have been 'commercially redeveloped'. Anyhow, each time a canal is redeveloped, the conservationists and the developers agree a programme of mitigation measures on the understanding that these will conserve the wildlife. And each time they fail. Not just a little bit, but spectacularly, immediately and completely. But along comes the next time, and a new set of conservationists sits down with the developers and agrees a slightly different set of measures, and the whole process starts again.

There's only really one canal left in Britain that hasn't been redeveloped for motorboats, and CCW are currently negotiating over mitigation measures. I can only hope the evidence-based philosophy filters through to the discussions before the Montgomery, too, is lost. All CCW needs to do is ask for evidence — as opposed to speculation — that the mitigation measures work. That way the canal would never be redeveloped, because they don't.

Threatened Plants Database

A quick note to say thank you to Geoff Battershall, Stephen Bungard, Arthur Chater, John Edgington, Paul Harvey, Heather McHaffie, Jonathan Tyler and everyone else who sent records of Bog Orchid (*Hammarbya paludosa*) after the last issue of *News*; and especially to Rose Murphy and friends in Cornwall for their excellent work on Purple Ramping-fumitory (*Fumaria purpurea*). Can I now make a desperate appeal for records of Few-flowered Fumitory (*Fumaria vaillantii*), which seems to have suddenly disappeared from the face of the planet. Specimens or photographs would help. Many thanks.

ALEX LOCKTON, 66 North Street, Shrewsbury, Shropshire, SY1 2JL
Email: alex@whildassociates.co.uk or coordinator@bsbi.org.uk

RECORDERS AND RECORDING

PANEL OF REFEREES AND SPECIALISTS

The following changes have taken place since publication of the 2003 *Year Book* and the addenda in the April issue of *BSBI News*.

We have a new referee for *Calluna*, *Erica* and *Daboecia* — Dr Charles Nelson, who is already a referee for Maritime Drift Seeds. His address is Tippitiwitchet Cottage, Hall Road, Outwell, Wisbech, Cambs PE14 8PE; email: tippitiwitchet@zetnet.co.uk. He says dried specimens in flower are needed.

Dr Peter Yeo has said he would like to retire from the job of *Geranium* referee at the end of this year; any suggestions or offers?

Dr Franklyn Perring, our referee for several groups, has moved and his new address is 18 High Street, Chesterton, Cambridge, CB2 1BG

Mr David Pearman, our referee for *Carex* (General), has moved and his new address is Algiers, Feock, Truro, Cornwall TR3 6RA

MARY CLARE SHEAHAN, 61 Westmoreland Road, Barnes, London SW13 9RZ
email: m.sheahan@rbgkew.org.uk

PANEL OF VICE-COUNTY RECORDERS

The following changes have taken place since publication of the 2003 *Year Book* and the addenda in the April issue of *BSBI News*.

V.c. 9	Dorset	Mr D.A. Pearman has now moved to Algiers, Feock, Truro, Cornwall TR3 6RA
V.c. 104	N. Ebudes	Dr S.J. Bungard to be joint recorder. Correspondence, as before, to Mrs C.W. Murray.
V.c. H28	Co. Sligo	Dr S.L. Parr has now moved to c/o Peter Byron, Dooneen, New Quay, Burrin, Co. Clare, Ireland

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NOTES AND ARTICLES

CARDAMINE PRATENSIS FLORE PLENO IN ORKNEY

The double flower of Lady's Smock is not uncommon in Orkney. It is easily propagated by small pieces of the leaf, snipped carefully between each pair and inserted in damp compost kept shaded and covered and will form roots in a few days. Where grass is cut regularly but the cuttings left it may become quite abundant but quickly lost if the cuttings are removed or the grass allowed to grow long and rank before cutting. It is a very pretty flower and worth a little trouble to keep going.

Incidentally the name 'Cuckoo Flower' would be quite unrecognised in Orkney!

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CARDAMINE PRATENSIS FLORE PLENO IN V.CC. 24 & 86

It was very interesting to read about the double-flowered *Cardamine pratensis* (*BSBI News* **91**: 28 & **92**: 23).

I first came across this plant when I worked in Blanefield, Stirlingshire (v.c. 86), for the then called 'Strathclyde Waterboard'. Here it was growing as a 'weed' in the grounds (gardens) and I have grown it since in my garden in Milngavie, Glasgow.

Nearly ten years ago my wife and I were 'Down South' where we stayed with friends in Amersham. Here on the road verges outside their house I found another form or variation of *Cardamine pratensis* flore pleno, just before the lawn mowers moved in. The flowers are pale lilac and the centre is fairly tight. The interesting thing about this one is that at the end of flowering the flowers metamorphose into small plantlets complete with roots. The two forms also readily produce plantlets at the base of the leaflets when leaf touches the ground.

Cardamine pratensis flore pleno, showing plantlets, scanned from a herbarium sheet.

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MORE ON THE DOUBLE FORM OF *CARDAMINE PRATENSIS* — 1

The letter from David Lang (*BSBI News* **93**: 23) re a double variety of *Cardamine pratensis* prompts me to send the following letter from Sir Edward Salisbury which appeared in the *West Sussex Gazette* on 17th June 1971.

Double Lady's Smock
From Sir Edward Salisbury, F.R.S.

> The article by Mr. Venables on the Double Lady's Smock calls for comment. There are two species grouped under this name, both of which are found double in the wild state. One of these, **Cardamine palustris**, is prevalent in wetter situations than the other, **C. pratensis**, and both can reproduce very freely by means of new plants that develop, from the surface of the leaflets, under moist conditions.
>
> Some years ago (Proc. Roy. Soc. B.163.pp. 321-342. 1965) I produced evidence that showed this vegetative mode of propagation to be so effective that the absence of seeds was no handicap to the plants' frequency. It is scarcely surprising therefore that when I was a child 70 years ago the Double Lady's Smock was common in Hertfordshire, as it was according to White in the Bristol area, but, since its vegetative multiplication is dependent upon damp conditions, this double variety has become increasingly rare with the accelerated land drainage, especially during the last half century.

A number of interesting points arise. He suggested that the form was more common in the early 20th century and draws attention to the unusual method of vegetative reproduction. However, his acceptance of two species is not currently supported and *C. palustris* is now regarded as a synonym of *C. pratensis*.

Others may wish to investigate this further, starting with Martin Venables' article (probably headed 'Selborne Notes') and continuing with Salisbury's communication to the Royal Society.

FRANK PENFOLD, Morels, Burpham, Arundel, BN18 9RR.

MORE ON THE DOUBLE FORM OF *CARDAMINE PRATENSIS* — 2

Following David Lang's comments on his find of an extensive colony of a double form of *Cardamine pratensis* in Devon, a few years ago I found a similar colony on a road verge (SX512754) north of Moorshop near Princetown on the southern edge of Dartmoor. There was also a large scattered colony in a field at Moorshop (SX513746). His note prompted me to see if the colonies still existed. The field appeared to be rather overgrown and may well have been 'improved' and no plants were seen from the roadside gate. The colony alongside the road was also looked for without success however a couple of hundred yards to the south three plants were discovered (SX51257520; see photo, colour section p. 4). Why this colony has disappeared is not clear since it is a country road with a large bluebell population. It may be that as the colony was close to the edge of the verge, the verge may have been cut before the seed was able to set.

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GERANIUM PURPUREUM SUBSPP. IN W. SUSSEX

I hesitate to add more complication to the story of the subspecies of *Geranium purpureum* but we must get it right! (*BSBI News* **93**: 30-33).

Cockbush Common was on the east, not west side of Chichester Harbour and, incidentally, the location is figured on Budgen's 1724 map. See also my article on this subject in *BSBI News* **88**: 24.

FRANK PENFOLD, Morels, Burpham, Arundel, BN18 9RR.

DISAPPEARING GROUND-ELDER

Ron Payne's contribution in *BSBI News* **90** on possibly decreasing urban weeds has prompted me to describe a surprising phenomenon in our suburban garden in Godalming, Surrey. Until the year 2000, Ground-elder (*Aegopodium podagraria*) had been a rampant weed in most of the flower beds of our fairly small garden. Apart from digging up a (small?) proportion of its rhizomes each year, I had taken no more drastic measures such as using herbicides. In the late Spring of 2000 I suddenly realised that I had seen no sign of my old enemy. Again in 2001 and 2002 not a leaf was to be found. On the other hand there has been a great increase in Hedge Bindweed (*Calystegia sepium*). No fungal pathogens or pests of Ground-elder that I know of could result in its complete elimination in one season. In fact, of course, diseases and pests are very rarely responsible for the complete destruction of a plant population. A wild hypothesis would be that the Bindweed is strongly allelopathic to Ground-elder and has displaced it, but it seems extremely improbable that allelopathy could result in the replacement of one species by another.

I would very much like to know whether any other members have experienced or heard of a similar phenomenon. The sudden disappearance of a species in natural or semi-natural plant communities would, of course, be of great potential ecological interest and importance.

[This is another of the contributions 'lost' last year, see Editorial p. 7]

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BEE ORCHIDS

Am I alone in wondering whether, if John Presland (*BSBI News* **90**: 13-14) and others can find and photograph a Bee Orchid (*Ophrys apifera*) and not realise that it is var. *belgarum*, that this var. is perhaps not very significant? Furthermore, Richard Lawrence (*ibid.*, 14) suggests that it is a widespread variety which indicates, perhaps, that this form represents no more than the limits of normal variation in one particular direction.

Tim Rich (*Watsonia*:**23**: 469) has recently shown fairly convincingly in Kidney Vetch (*Anthyllis vulneraria*, that subsp. *corbierei* should not be regarded as a subspecies at all but as a plant exhibiting various degrees of polymorphism towards a moderately extreme form. Maybe the same applies to the orchid?

[This is another of the contributions 'lost' last year, see Editorial p. 7]

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BAD BOTANY OR NAIVE NEWSMEN

Chris Lowe's note on p. 38 of *BSBI News* **90** reminds me of one of the occasions when I have been misquoted or misunderstood by ignorant newspaper reporters. In 1977 I wrote an article for the journal of the Loughborough Naturalist's Club containing the following:

> I recently found a place on a roadside where someone had evidently emptied the rubbish from the bottom of a parrot cage. Here were growing Sunflowers, Opium Poppies, Canary Grass, and a couple of fine big Cannabis plants, all of which are included in bird seed mixtures.

A few days after publication of this I was startled by a headline in the Leicester newspaper: OPIUM AND CANNABIS FOUND ON A LEICESTERSHIRE ROADSIDE.

[This is another of the contributions 'lost' last year, see Editorial p. 7]

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DIOECIOUS SEEDLINGS

With reference to the article in *BSBI News* **90**: 28-29 (April 2002) on the probability of a dioecious seedling becoming male or female upon maturity, the following assumptions were made:

1. the sex of a tree is genetically pre-determined,
2. the genes involved segregate out 50:50 male:female,
3. sexual determination is not effected by environment or hormones.

I contacted the Hop commodity specialist here at Horticulture Research International Peter Darby who provided me with the following information:

1. In theory hops should segregate 50:50 in an XY system (as in people).
   This XY system controls functionality and not morphology and so plants may appear to be sterile females but are actually XY males. Or appear to be sterile males but are actually XX females.
2. Pollen competition usually results in a 2:1 bias female to male.
3. Ratio is also affected by the age of the pollen.
4. Spontaneous triploids are common with XXY genetics and hermaphrodite morphology and function.

Freeman *et al.* gives over 100 angiosperms that alter their sexual state depending on age, environment and size, and discusses the survival values of such strategies.

Reference

FREEMAN, D.C., HAPER, K.T. AND CHAMOV, E.L. 1980. Sex change in plants old and new observations and new Hypothesises, *Oecologia* **47(2)**: 222-232.

[This is another of the contributions 'lost' last year, see Editorial p. 7]

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A HYBRID *COCHLEARIA OFFICINALIS* × *C. DANICA* FROM NORTH DEVON

Hybrids between *Cochlearia officinalis* and *C. danica* (Common & Danish Scurvygrass) have been reported in the *New Phytologist* (Fearn, 1977) and *BSBI News* (Palmer, 1996), and Stace (1975) gives a rather scattered distribution of records. On a recent trip to North Devon I found a hybrid *Cochlearia officinalis* × *C. danica* growing in a 'natural' habitat at the foot of low cliffs on rather disturbed soil and shingle at Bucks Mills (SS355236) on 31 May 2003. The plant had most characters intermediate between the parents but was large like *C. officinalis*. It was robust, around 40cm tall, and had a thick, woody, root and pale lilac flowers 7-8mm wide. The basal leaves were fleshy, reniform and cordate but the stem leaves were distinctly ivy shaped, the lower with petioles about as long as the lamina whilst the upper were sessile and clasped the stem. The nearest *C. officinalis* was some 10m away whilst the nearest *C. danica* was some 250m away leading to the speculation that *C. officinalis* may have been the seed parent.

References:

FEARN, G.M. 1977. A morphological and cytological investigation of *Cochlearia* populations in the Gower Peninsula, Glamorgan. *New Phytol.* **79**: 455-458.

PALMER, J.R. 1996. Hybrid Scurvygrass (*Cochlearia danica* × *C. officinalis*) by a salt treated road. BSBI News, **73**: 23.

STACE, C.A. 1975. *Hybridization and the flora of the British Isles*. Academic Press, London.

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BASSIA SCOPARIA ON YORKSHIRE ROADSIDES NOW REPLACED BY *ATRIPLEX LITTORALIS*

In 1997 I reported the rapid and dramatic spread of *Bassia scoparia* (Summer-cypress) along the major road network in Yorkshire and Humberside (Cook, 1997) and later commented on its possible connection with East coast ports (Cook, 1998).

In 2001, groups of plants could still be found on otherwise salt-denuded areas between the slip road and the main carriageway of trunk roads and on the edge of roundabouts. In 2002, I saw isolated plants occurring on the central reservation of the A1 near Wetherby and at Scotch Corner (A1–A66 intersection). Now, five years later, I have been able to find this plant only on a section of the M18 south-west of Thorne in v.c. 63.

The place of *Bassia scoparia* appears to have been taken by *Atriplex littoralis* (Grass-leaved Orache), which can now be found in broad ribbons alongside both A and B Class roads in Yorkshire and Humberside. In 1997/1998, *A. littoralis* was just starting to enter the records as a road verge plant with occasional singleton plants being seen alongside trunk roads and on roundabouts.

References:

COOK, P. J. 1997. 'Summer Cypress' (*Bassia scoparia*) on Yorkshire roadsides. *BSBI News*, **74**: 48-49.

COOK, P. J. 1998. *Bassia scoparia* in v.cc 28, 53 and 54. A possible connection with east coast ports. *BSBI News*, **78**: 63.

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ROADSIDE HALOPHYTES

Simon Leach (*BSBI News* **93**) raises a series of important and interesting points about the native/alien conundrum, with particular reference to roadside halophytes. To deny native status to such records, notwithstanding their (unintentional) dispersal as a result of the activities of our species, is to deny the fact that *Homo sapiens* is a part of the environment. Yes, we cannot fail to accept that our species has a huge, often malign, impact upon the natural environment, but we are also part of nature. To imply otherwise, through allocation of alien status to such records, is to refute the huge advances in eco-philosophy which have taken place since the time of Darwin.

Should we — indeed, can we — distinguish between, say, *Galium aparine* (Cleavers) dispersed on badger's fur (native) from those dispersed on a human's clothing (alien)? And if the fruits are dispersed on sheep's wool, is this alien too (sheep being present only thanks to humans)? And what if attached to a rabbit (a key ecological influence derived from long-forgotten human interventions)? The bottom line is basically this: how on earth do we ever know, for sure, how a plant got to the place it's growing in?? Unless we wittingly put it there ...

In my view, plants which are undoubtedly native (*sensu* New Atlas) in part of their UK range, should be treated as native wherever they occur, provided there is no evidence they have been distributed by anything other than accidental or incidental means. My justification is drawn from analogy with the British bird list. Birds are listed under various categories, category A being those which have occurred in the wild state within Britain since 1950. Occurrence in the wild state include those which have arrived here with non-deliberate human assistance (e.g. on board a ship — ships are now deemed to be part of the environment), provided that on the balance of probabilities it can be determined that those birds received no targeted support (through for example being fed) in transit.

Or look at it another way. Under an anthropocentric view of the universe, we are somehow apart from nature, and thus what we do is in some way exploiting it. But what if we are the exploited, not the exploiters? The plants which are spreading with our unwitting assistance can be thought of as exploiting us as dispersal vectors, treating us in the way we should be treated, as part of nature, and allowing them to explore the further reaches of their potential living space. So what further justification do we need to treat them as native?

Taken to its extreme, however, this line of argument runs into problems. Our exploitation by the botanical world could be thought of as extending to garden plants (exploiting our aesthetic tendencies with their beauty) or to plants being deliberately promoted in the name of conservation (exploiting our conscience by virtue of their rarity). Should these be treated as native? Of course not — it simply makes the point that native versus alien is an outmoded and unhelpful concept.

If we must parcel up the plant world, perhaps a better approach would be to subdivide it into groups based upon a meaningful descriptor of our relationship with those plants: 'good' plants (which have no significant adverse effect upon other environmental attributes and values; these may be native or alien according to the Atlas concept, and which merit conservation if threatened by human actions or inaction) and 'bad' plants, which do have adverse impacts and which require negative management to effect declines, control or eradication.

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ARE ROADSIDE HALOPHYTES RED OR ARE THEY BLUE?

Should coastal halophytes invading roadsides be recorded as native or introduced?

The questions raised by Simon Leach concerning coastal halophytes on roadsides in the last newsletter (*BSBI News* **93**) were all ones that intrigued me when I did my PhD on this subject in the early 1980s. Although this was not the main part of the study, I did my best at the time to try to answer them, did experiments and published the results. So he is wrong to say there is 'very little or no solid evidence'. However, I do not blame him for his mistake as that work, unlike the papers we wrote on the distribution of halophytes which have become well known, was not published in *Watsonia*, and is hardly ever referred to. Because the paper was given at a conference in Holland it came out in a Dutch journal (Scott and Davison 1985a). The intention had been to later publish a further two papers in a British journal but as is the way for those of us who choose not to follow academic careers the demands of my new work in conservation swamped that intention.

We used seed traps to investigate seed dispersal from isolated roadside plants of *Puccinellia distans* (Reflexed Saltmarsh-grass) and *Plantago maritima* (Sea Plantain). The results showed that more seed travelled in the direction of traffic flow and it travelled further with the flow than against it. Just as important though, was the fact that there was very little dispersal at right angles to the road; seeds going no distance in this direction. The maximum distances of dispersal for *Puccinellia distans* were: with traffic flow 24 meters; against traffic flow 12 meters; away from the road 2 meters. The results demonstrated how important air movement caused by passing vehicles was in aiding the dispersal of these two coastal halophytes particularly the light seeded *Puccinellia distans*. (See graphs, p. 18)

The heavier seeded *Plantago maritima* occurred in discrete colonies unlike *Puccinellia distans* which occurred as continuous bands beside the road. We also demonstrated the effect of vehicular slipstreams with this species by mapping the size and distribution of individuals in these colonies. The smaller and younger plants were nearly all in the direction of traffic flow and trailed away from one large individual, which was presumably the original plant. We speculated that these original 'founder' individuals must have been introduced by some other means. As this species has seed covered in a sticky mucus layer we wondered whether the seed was being carried on grass cutting machinery.

As to how the seed of coastal halophytes got to the roadside in the first place the obvious answer for us in the North East was carriage on vehicles. There are several places where cars drive past coastal populations, the most notable being the causeway over to Holy Island which is not far from the A1, the road on which the populations were first found (Scott and Davison 1982). Something which I think is only mentioned in my PhD is that I also attempted to find out if seed was carried on vehicles by putting seed traps in a car-wash which was beside the A1 and near to coastal halophyte populations. I did get a positive result, but as it was only two germinating seedlings of *Puccinellia distans* we did not feel it was positive enough to publish.

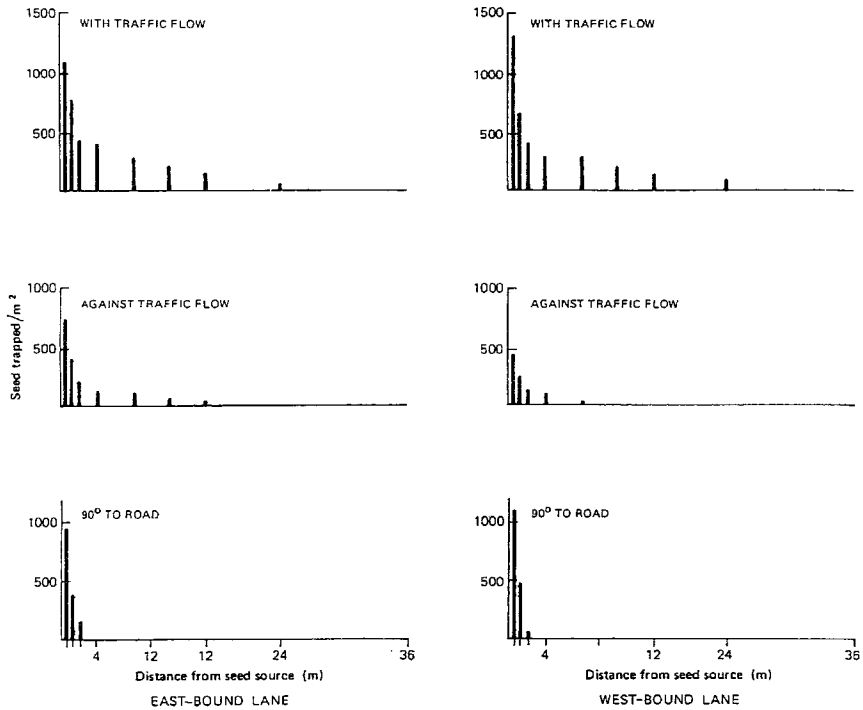

Fig. 4. Numbers of seed trapped around colonies of *Puccinellia distans* on opposite sides of a road.

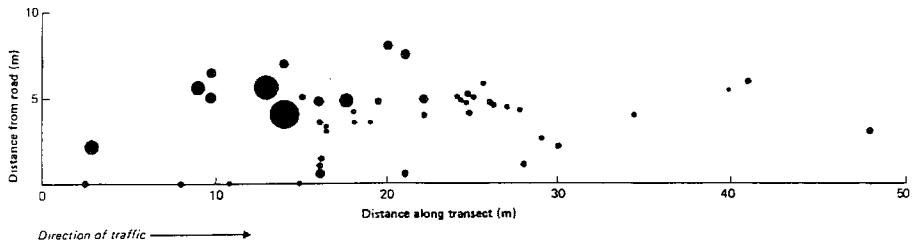

Fig. 2. Distribution of individuals in a roadside colony of *Plantago maritima;* individuals on a scale 5× that of axes.

Two of the figures demonstrating the effect of vehicular slipstreams on the seed distribution of coastal halophytes. From Scott & Davison 1985a.

I do know that I introduced *Puccinellia distans* to a couple of sites during that work, including the cottage I lived in the Cheviots which was far, then, from any other roadside population. Seed must have been carried on my car as the plants first appeared at spots where I parked. The car, however, was owned by the botany department and strictly not supposed to be used to go home in so I was reluctant to make too much of this find.

The work I did for my PhD did not solve the question of how coastal halophytes got on to our roadsides but it did at least clearly indicate that their dispersal along roads was strongly aided by human activity. So if we are to follow the definition as in the *New Atlas* of an introduced species as one brought to the study area by man, intentionally or unintentionally then to my mind the Floras and the *New Atlas* are correct in classifying them as introduced and records should be shown in red (alien) in the *Atlas*. But then if that is the case, Simon Leach is right to point out our double standards, as the same is surely the case for those native species spread with the aid of trains along our railway system, and by boats along the canals.

Some of the other work I did for that PhD is also relevant to what Simon Leach wrote. He mentions that the coastal halophytes occur on roadsides because the habitat there mimics the conditions of their natural one. He explains this simply in terms of the severity of the conditions excluding competition. It is always assumed that halophytes have no requirement for such saline conditions. I found that the reality was not so simple. Experiments with sowing the seed onto strips of bare ground I had created running away from roads demonstrated, much to our surprise, that the halophytes were only able to survive where there was salt. For some of the strips the salt was just at the roadside and in others I had added it to all of the bare ground. Seed germinated on both the saline and non-saline soils and the plants established, but then the next spring I discovered that they had disappeared from all the non-saline soils despite no competition. We attempted to repeat this result on experimental plots in the university grounds and this time got a slightly different result. The halophytes survived but really struggled without salt, and the annual species, *Puccinellia distans* failed to produce seed and to re-establish where there was no salt. These discoveries were reported in the same paper (Scott and Davison 1985a) and a poster shown at the conference (Scott and Davison 1985b) and it became my consuming interest at the end of the PhD. We found in laboratory experiments that it appeared to be either frost or drought that was killing the plants growing in the non-saline conditions, but only if we watered them with low levels of nutrients. Watering with the levels of nutrients usually used in laboratory experiments overcame this dependency, presumably because the nutrients were having the same effect as the salt. That work was very interesting and really should have both been published and followed up but I gave my heart instead to wildlife conservation and my supervisor's academic interests were elsewhere. So it is only published in full in my PhD thesis (Scott 1985). I still have this lingering sense of guilt about that and perhaps one day I will publish it all, and perhaps also the other interesting results we got on the distribution of salt in the roadside soils. But there is so much in this life worth doing and you can't do it all.

References:

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SCOTT, N.E. & DAVISON, A.W. 1985a. The distribution and ecology of coastal species on roadsides. *Vegetatio* **62**: 433-440.

SCOTT, N.E. & DAVISON, A.W. 1985b. The requirement for salt by coastal halophytes growing on N.E. England's roadsides. Poster. *Vegetatio* **62**: 549

SCOTT, N.E. 1985. Road de-icing salt and the invasion of verges by halophytes. PhD Thesis. The University of Newcastle upon Tyne, Newcastle upon Tyne.

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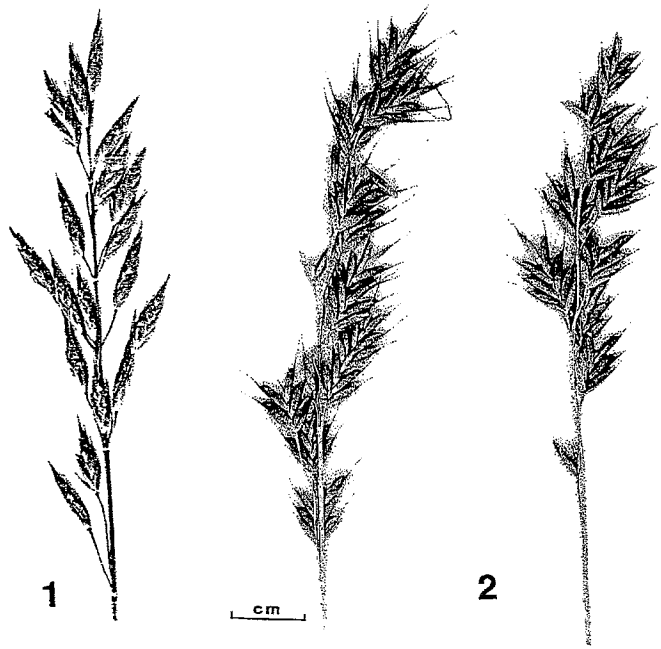
BROMUS PSEUDOSECALINUS

In my paper 'Recent records of Bromeae that are rare in Britain' in *BSBI News* **93** (April 2003) the caption under the illustration of *Bromus pseudosecalinus* on page 15 was unfortunately changed in the editing process to *Bromus secalinus*, which it is not. The grass illustrated is *Bromus pseudosecalinus* and this illustration, with correct caption and additional text is given below.



Bromus pseudosecalinus: Scans of panicles **1** – at 16/6/02; **2** – grains not dropped at 25/7/02
Plants cultivated by L.M. Spalton

It will be seen from panicle no. 1 on the left of the illustration, that until fruiting, *Bromus pseudosecalinus* resembles *Bromus racemosus* except that the lemmas are smaller, 5-6(6.5)mm long, compared with 7-9mm in *Bromus racemosus*. Furthermore during cultivation the dense stiffly patent hairs on the lower leaf-sheath are identical in both species.

In July or August when fruit is formed (rather later than in *Bromus racemosus*), the spikelets of *Bromus pseudosecalinus* divaricate, and the lemmas roll around the caryopses and remain within the spikelets for a long time before being shed. This can be seen in panicles no. 2. At this time *Bromus pseudosecalinus* is very distinctive. However it can be confused with small specimens of *Bromus secalinus* with lemmas 7-9mm long which occur in abandoned arable fields and old hay meadows. But *Bromus secalinus* is readily distinguished by its lower leaf-sheath which is glabrous. Consequently, if collected, grasses should be cut at ground level.

Bromus pseudosecalinus is a diploid (2n=14) and *Bromus racemosus* is tetraploid (2n=28). This suggests that *Bromus pseudosecalinus* is probably the diploid ancestor of *Bromus racemosus* which is why it is such an interesting grass.

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A SEA COUCH HYBRID *ELYTRIGIA × DRUCEI* INLAND ALONG AN OLD DORSET TRAMWAY

Sunnyside, a recently declared extension to Stoborough Heath National Nature Reserve in Purbeck, Dorset, is an area of former heathland that was reclaimed for agriculture in the early 1960s. It has recently been acquired by English Nature with the long-term aim of restoring heathland habitats to the site and providing back-up grazing and hay provision to assist with the management of the National Nature Reserve. A botanical survey of the site was carried out by English Nature in 2002, and during this survey an interesting inland population of a glaucous couch grass was discovered, with plants bearing some similarities with Sea Couch (*Elytrigia atherica*), including the presence of minute hairs along the free margins of the lower leaf sheaths. Specimens were sent for determination to Dr Thomas Cope who identified them as the hybrid between *E. atherica* and Common Couch (*E. repens*), which has recently been renamed as *E.* × *drucei*, having previously been known as *E.* × *oliveri* (Stace, 2001). I am aware of only one other record for this hybrid in Dorset (Bowen, 2000). At Sunnyside the grass grows along the edges of an old disused tramway that passes through the site, in some areas raised on an embankment, and is scattered along a length situated between one and two kilometres from the coast. Associates include False Oat-grass (*Arrhenatherum elatius*), Yorkshire-fog (*Holcus lanatus*), Creeping Bent (*Agrostis stolonifera*), Common Nettle (*Urtica dioica*) and Bramble (*Rubus fruticosus* agg.).

Elytrigia × *drucei* has been recorded in scattered places around the coasts of Britain and south-west Ireland (Sell & Murrell, 1996), and was found to be fairly common at the upper edges of salt-marshes and near seawalls in Cumbria (Halliday, 1997). The parent *E. atherica* is usually found in brackish habitats such as the margins of salt-marshes and brackish creeks, in sandy or gravelly muds, and on shingle and consolidated sand-dunes (Hubbard, 1984), although it may extend above the tidal limit and may thrive on unmown sea walls (Rodwell, 2000). It has occasionally been found on road verges in Norfolk (Beckett, Bull & Stevenson, 1999), perhaps benefiting from salt used on roads.

A possible explanation as to how the plants at Sunnyside came to be growing so far inland relates to the history of the old tramway, which was used to transport ball clay from workings north of Purbeck Ridge to the coast. When it was in use between 1840 and 1943 the old tramway extended northwards all the way to Ridge Wharf on the tidal stretch of the River Frome. I found both *E.* × *drucei* and *E. atherica* growing alongside the tidal river here when I visited in July 2003, and it seems likely that the tramway plants originated from this location. There are different possibilities as to how the grass might have spread inland down the tramway. In the early years of the tramway between 1840 and 1866 horses were used to pull the wagons loaded with clay, and small locomotives replaced these after 1866 (Kidner, 1973). *E.* × *drucei* may have been carried as fragments of rhizomes in mud on the hooves of horses, the boots of clay workers or the wheels of wagons or locomotives. Clods of such mud would be likely to fall off *en route*, and thus the grass might spread inland down the tramway. An alternative explanation is that seeds of the parent *E. atherica* may have been ingested by horses grazing on brackish vegetation near the tidal river and then deposited within dung along the tramway, where they could germinate and hybridise with *E. repens*. The viability of such seeds is suggested by records of seeds of *E. repens* surviving ingestion by horses (Muenscher, 1952, cited in Wemer & Rioux, 1977). Whatever the agent of dispersal, this inland population of *E.* × *drucei* appears fairly well established and provides an interesting link to the history of the site.

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Acknowledgements

I would like to thank Dr Thomas Cope for identifying the specimens of *Elytrigia* × *drucei*.

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EROPHILA — HOME AND AWAY

Some years ago Richard Fitter asked me 'Have you ever seen *Erophila majuscula*?'. 'No' was the answer but this conversation led me to start examining closely every patch of *Erophila* (Whitlowgrass) which I came across; before this I had not been too aware of the differences between the three species. Richard, meanwhile just continued examining every patch. However, we never had any luck and my sole success has been to find *E. glabrescens* (Glabrous Whitlowgrass) in the New Forest.

Barry Phillips provided details of two sites in Surrey (v.c. 17) for *E. majuscula* (Hairy Whitlowgrass) but when I visited there was only *E. verna* at one and nothing at all at the other. Asking other recorders after the publication of the *New Atlas* drew many blanks (probably because the records originated from the BRC) but Ian Bonner (v.c. 52) and John Hawksford (v.c. 39 and 57) have given me locations which I have not yet been able to visit.

However, there has been one spin-off. My obsession has led me to look at *Erophila* in Cyprus, whenever I am there in spring. As usual, everything has been *E. verna* until I found, on a driveway at Prodromos (the highest village in Cyprus, but probably of no significance) on 30th April 2003 what seemed to be *E. glabrescens*. This identity was confirmed by the *Erophila* referee, Trevor Elkington and by Tim Rich. However, the confirmation came with the warning that the *Erophila* 'split' is not really recognised in continental Europe, probably because there have been no recent studies on the genus outside the UK. In Cyprus *Erophila verna* is therefore taken to be *sensu lato*. If my plants were British, they would be *E. glabrescens*; since they are not there must be reservations. But meantime, if you go to Cyprus, or anywhere else in the Mediterranean, why not look at *Erophila* if you find it? You may even find *E. majuscula*. And if the split is eventually recognised by all, the record will be useful. Bear in mind that old herbarium specimens are not always easy to identify, as the hairs tend to drop-off with age.

My thanks to all those mentioned above and others who have been consulted.

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POETS' IVY (*HEDERA HELIX* F. *POETARUM*)

It is good to learn in *BSBI News* **93** that Poets' Ivy (*Hedera helix* f. *poetarum* (Nyman) McAllister & Rutherford) has escaped in so many places. It is regarded by the *Hedera* Project team as a low anthocyanin form of *H. helix*, and is considered native only to Transcaucasica, though it is naturalised in several countries. *H. maroccana* McAllister and *H. algeriensis* Hibberd (Moroccan and Algerian Ivies) are two N. African endemics, both are black-fruited.

The Himalayan Ivy (*H. nepalensis* Koch var. *nepalensis*) has orange berries as has var. *sinensis* (Tobler) Rehder; these occur in the NW Himalaya and E Hindu-kush and the E Himalaya to SW China, respectively.

However, Poets' and Nepal Ivies belong to different trichome groups. *H. helix* is in the large white-haired group while *H. nepalensis* is in the small reddish-haired group (as are the Moroccan and Algerian ivies).

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ALBINO *RANUNCULUS ACRIS* IN SOUTH YORKSHIRE

In June 2003 I came across a single albino plant of *Ranunculus acris* (Meadow Buttercup) growing among a large population of normal yellow ones on a road verge in the Porter Valley on the outskirts of Sheffield (see photo, colour section p. 3). The plant was most striking, the flowers having a superficial resemblance to those of the garden plant *Limnanthes douglasii* (Meadow-foam) with snow-white petals and a golden centre. The golden centre comprised the stamens and the lower third, or broad 'claw' of the petal which was a normal yellow colour. The underside of the petals were also yellow, so in bud, the flowers appeared to be typically coloured with the white upper side of the petals only being revealed on opening. In every other way the plant looked normal. To check fertility, ripening of the achenes was observed, only a few per receptacle enlarged and ripened in the typical manner while the adjacent, ordinary buttercup plants, produced full heads of ripe seed. Around 50% of the pollen was small and shrunken. Seed of the aberrant form has been collected to see if it breeds true.

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THLASPI MACROPHYLLUM — NEW TO SCOTLAND

Caucasian Penny-cress (*Thlaspi* or *Pachyphragma macrophyllum*) was found quite naturalised and in full flower in early April 2003 in NE Fife (v.c. 85), in the Stravithie area south-east of St Andrews (NO5210) (see photo, colour section p. 3). There were two neighbouring patches totalling some 5×5 square metres at the edge of a small plantation, adjacent to farm buildings, accompanied by Blue-eyed Mary (*Omphalodes verna*), an extensive stand of Lesser Periwinkle (*Vinca minor*), daffodils and snowdrops. Enquiry revealed that the plants were probably introduced between the two world wars, a fact seemingly borne out by several nearby decidedly moribund Laburnums; as they are comparatively shortlived this points to their having been planted some 60-70 years ago. *Thlaspi macrophyllum* was first noted as being present in the wild in Britain at Failand, near Bristol (v.c. 6) in 1964 and by 1982 was 'apparently naturalised' (Davie & Akeroyd 1983) who also quote a station in Shropshire (v.c. 40) in 1979, while the CD of the *New Atlas* gives a further two dots, one pre-1970. There are no previous records for Scotland (Welch *et al.* 2001). The initial presence of the colony was notified by Mrs Elizabeth Sprot and Dr Edith Cormack, whose help is gladly acknowledged, as is that of Eric Clement.

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FLUCTUATING RIVER LEVELS AND COMPLEX LAYERING BY AN ANCIENT WHITE WILLOW

Arguments concerning the River Kennet water levels include the following:

a. Reduced flow caused by abstractions for the rapidly increasing Swindon population.
b. Falling levels the consequence of increased efficiency of agricultural and other drainage systems.
c. Falling levels the consequence of climatic changes.
d. No true long-term diminution of flow, just irregular variations over decades, following recurrent weather cycles.

Compared with 50 years ago, the Winterbourne stretch of the Kennet has shifted downstream. Also, the transition boundary between *Ranunculus peltatus* (Pond Water-crowfoot) and *R. penicillatus* subsp. *penicillatus* (Stream Water-crowfoot) has moved downstream since studied by John Killick when at Marlborough College. At Clatford, where the willow under consideration grows, the Kennet runs W→E, and can be a swirling torrent in February (photos 2 & 3, page 2, colour section), but can become dry by August.

The tree is one single White Willow (*Salix alba*). Its main primary trunk is 'S'-shaped, snaking downwards from the old north riverbank 4m southward into the newer river bed, where the main and biggest southern limbs have been periodically savaged by the River Authority as part of winter flood prevention. To permit photography and measurements, and for reasons of aesthetics, I removed the formidably thorny epiphytes (Dog-rose, Bramble, Sloe & Hawthorn). Some parts of this remarkable and beautiful tree are shown in the photos in the colour section page 2.

Photo 1, from the north. The old original but still living primary base of the tree, presumed to have fallen southward into the river in the distant past. The primary trunk, parts of which can be seen on photos 2 and 4, has a girth of 690cm at 30cm (1ft), and 293cm at 150cm (5ft) south of this mound, towards the riverbed. The root mound itself is 120cm (4ft) high.

Photo 2, from the north-west. The left hand side of the photo shows the descending main primary trunk. The bottom of this photo is mostly filled by the rooted base of the 'Secondary Southern Trunk' (SST) in the water (Feb., 03). The circumference of the SST is 365cm at 30cm. Its main axis is only (irregularly) 1–1.5m high, the consequence of a split (see photo 3) and repeated assaults by the River Authority, but with a fringe of young verticals.

Photo 3, from the north, from above. The little girl is in the great fissure over the SST, surrounded by the fringe of new young verticals.

Photo 4, from the north-east, showing layering to the east. The bottom left hand corner shows the base of the 'Secondary Eastern Trunk (SET), with 2 vertical trunks shown. The whole complex, mounds, arch, verticals and branches derive from the one single tree, the only White Willow on the north bank here. The circumference of the SET base at 30cm, partly under water (Feb., 03) is 210cm. From near the base of the two verticals on the left hand side, there can be seen the start of two small descending branches. One of these has grown down into the mud to the east, like a mangrove stilt root. From this, a new tertiary rooting has begun, derived from the SET, the start of a new trunk for the future.

One vertical, 16m high (not shown on photos) arises from the horizontal primary trunk. There are 12 substantial verticals (few shown), but only 5 have girths (at 150cm) between 50 and 100cm. Most, including the tallest (17m) arise from the SET.

The original fall towards the riverbed, followed by many past decades of mutilations of the main limbs of the SST have contributed to this White Willow forming a complex of living green sculptures, which in turn have begun tertiary rooting colonies (see 4 above) along the river edge. Mammals and birds use this habitat, the feathers in the bottom right hand side of photo 1 coming from a wood pigeon killed by an ermine in February. Apart from the four thorny species mentioned above, epiphytes obvious in summer include the ubiquitous stinging nettle, dandelions, three grass and three willowherb species. The greenery in all four photos is mainly attributable to Velvet Feather Moss (*Brachythecium velutinum*) and Cypress-leaved Feather Moss (*Hypnum mammillatum*), but there are various other

moss species interspersed, and liverworts below. On the verticals above the mosses, there are lichens (mainly *Xanthoria* and *Parmelia* species just visible on photos 2 and 4).

Sawn off branches and logs of Crack Willow (*Salix fragilis*) readily root, but I've not seen detached timber from White Willow survive. However if chain-sawing tidiness is resisted, layering by White Willows can result in magnificent miniature habitats.

Acknowledgement: My thanks to Joan Davies for processing the digital photographs.

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BOTANICAL NOMENCLATURE IN LITERATURE — 32

Botanical nomenclature has many origins, a great majority of them being Greek, often derived from Greek mythology. The term *glaucus* is one example, as is apparent in the myth of 'Glaucus and Scylla'. This particular rendition is from the great re-teller of myths, Thomas Bulfinch (1796-1867), pp. 72-73.

> Glaucus was a fisherman.[1,2] One day he had drawn his nets to land and had taken a great many fishes of various kinds. So he emptied his net, and proceeded to sort the fishes on the grass. The place where he stood was a beautiful island in the river, a solitary spot, uninhabited, and not used for pasturage of cattle, nor even visited by any but himself. On a sudden, the fishes, which had been laid on the grass, began to revive and move their fins as if they were in the water, plunged in, and swam away. He did not know what to make of this, whether some god had done it or some secret power in the herbage. 'What herb has such power?' he exclaimed; and gathering some of it, he tasted it. Scarce had the juices of the plant reached his palate when he found himself agitated with a longing desire for the water. He could no longer restrain himself, but bidding farewell to earth, he plunged into the stream. The gods of the water received him graciously, and admitted him to the honour of their society. They obtained the consent of Oceanus and Tethys, the sovereigns of the sea, that all that was mortal in him should be washed away. A hundred rivers poured their water over him. Then he lost all sense of his former nature and all consciousness. When he recovered, he found himself changed in form and mind. His hair was sea-green,[3] and trailed behind him on the water; his shoulders grew broad, and what had been his thighs and legs assumed the form of a fish's tail. The sea-gods complimented him on the change of his appearance, and he fancied himself rather a good-looking personage.

The story continues by describing his encounter with Scylla.

NOTES

1. *Glaucus was a fisherman*: Glaucus (Ancient Greek Γλαυχός) came from Anthedon in Boeotia, a region in Central Greece. His transhumanisation, as a result of eating a herb or weed sown by Saturn is mentioned by Dante in his *The Divine Comedy 3: Paradise* (1. 67-9) and by Keats in his poem *Endymion* (3. 380-400).
2. *glaucus*: rendered glaucous (from Ancient Greek γλαυχός; (Modern Greek γλαυκός)) in English, has, like the derived genus name *Glaucium* (glow-kee-um (Coombes, 1992), glaw-ke-um (or glaw-se-um) (Johnson & Smith, 1986), or Glaúcium (Harvey-Gibson, 1923)), been pronounced variously, but the 'au' should be pronounced as in German *auf* i.e. as in English *out*, not as in English *glow* or *law*
3. (a) *sea-green*: many other colours are cited for the term *glaucus*, such as blue-grey-green, blue, grey-green (the original meaning of the Greek word), and also bluish grey, greenish grey (Cassell's Latin Dictionary, 1968), azure, (blue, sea-green) (Stavropoulos, 2001), blue-grey (Harvey-Gibson, *ibid.*), greyish green or blue (Wall & Allan, 1950), (sea-green), dull green, passing into greyish blue; light sea-green (Stearn, 1983). Hyam and Pankhurst (1995) give grey-green.
   (b) In plant names the term was often found, before they became illegitimate, in trinomials, such as *Abies nobilis glauca* (now *A. procera* 'Glauca' ('Argentea') (Blue Noble Fir; Noble Fir, Christmas

Tree)), *Cedrus atlantica glauca* (now *C. libani* subsp. *atlantica* 'Glauca' (Blue Atlas Cedar; Atlas Cedar, Atlantic Cedar), *Juniperus virginiana glauca* (now. *J. virginiana* 'Glauca' (Pencil Cedar; Eastern Red Cedar), and *Picea pungens glauca* (now *P. pungens* f. *glauca* (Blue Spruce; Colorado Spruce). (Cultivar names from Griffiths, 1994).

In binomials the term is found in, for example (Dony *et al.*, 1986), *Chenopodium glaucum* (Oak-leaved Goosefoot), *Festuca glauca* (now *F. longifolia* but still called Blue Fescue in the vernacular), *Koeleria glauca* (Dune Hair-grass), *Picea glauca* (White Spruce), *Poa glauca* (Glaucous Meadow-grass), and with reference to leaf colour, in *Glaucium corniculatum* (Red Horned-poppy) and *G. flavum* (Yellow Horned-poppy), and in the diminutive *glaucidium* (meaning poppy-like flowers with few petals).

(c) Herewith, a short glossary of terms pertaining to glaucus (and other related terms). The asterisk after a description denotes that it comes from Ridgway's colour chart (*apud* Stearn, *ibid.*). The numbers indicate the position on Ridgway's chromatic scale.

aerugineus: verdigris* (37, 39, 41)
aquamarinus: a clear sea-green verging towards blue
atrocyaneus: dark greenish blue* (43, 45)
atrolazulinus: dark blue* (47, 49, 51, 53)
atrovenetus: dark bluish green * (37, 39, 41)
azureus: sky-blue (see also caeruleus, coeil, coelestus)
caeruleo-glaucus: glaucous sky-blue* (35, 37, 39, 41, 43)
caeruleus: dark blue; sky-blue* (43, 45) (see also azureus, coeil, coelestus)
caesius: bluish grey; eye-blue* (43, 45, 47, 49)
coeil: heavenly, sky-blue (see also azureus, caeruleus, coelestus)
coelestus: sky-blue (see also azureus, caeruleus, coeil)
cyaneus: greenish blue* (43, 45)
glaucacanthus: having glaucous thorns
glaucescens: somewhat glaucous, covered with a grey bloom, of sea-blue, grey or lavender (= lavandulus* (55, 57, 59))
glaucifolius: with leaves of a grey lavender (griseo-lavendulus = greyish lavender* ((49, 51, 53), 55, 57, 59, 61)); lavendulo-griseus = lavender grey* (43, 45, 47, 49, 51, 53, 55, 57, 59, 61) colour
glauciifolius: with leaves like Horned-poppy, *Glaucium*
glaucinus: with grey-blue shine
glaucistipes: having grey-blue stems
glaucoides: grey-blue, sea-blue
glaucophyllus: with grey-blue leaves
glaucopis: having grey-blue eyes
glaucopus: with grey-blue stem or stalk
glaucus: grey-blue, sea-blue, or lavender (but see above); glaucous* (39, 41, 43)
glauco-griseus: glaucous grey* (25, 27, 29, 31; 33, 35, 37)
glauco-venetus: glaucous blue-green* (39, 41, 43)
griseo-caeruleus: greyish sky-blue* (45, 47, 49)
griseo-lineus: greyish flax-blue* (51, 53)
griseo-venetus: greyish blue-green* (37, 39, 41)
lazulinus: blue* (47, 49, 51, 53)
lineus: flax-blue* (49, 51, 53)
sappirinus: sapphire-blue
sublazulinus: pale blue* (47, 49, 51, 53)
venetus: deep sea-green; bluish green* (39, 41)
viridi-caeruleus: pale bluish green* (39, 41)
viridi-glaucus: greenish glaucous* (25, 27, 29, 31)

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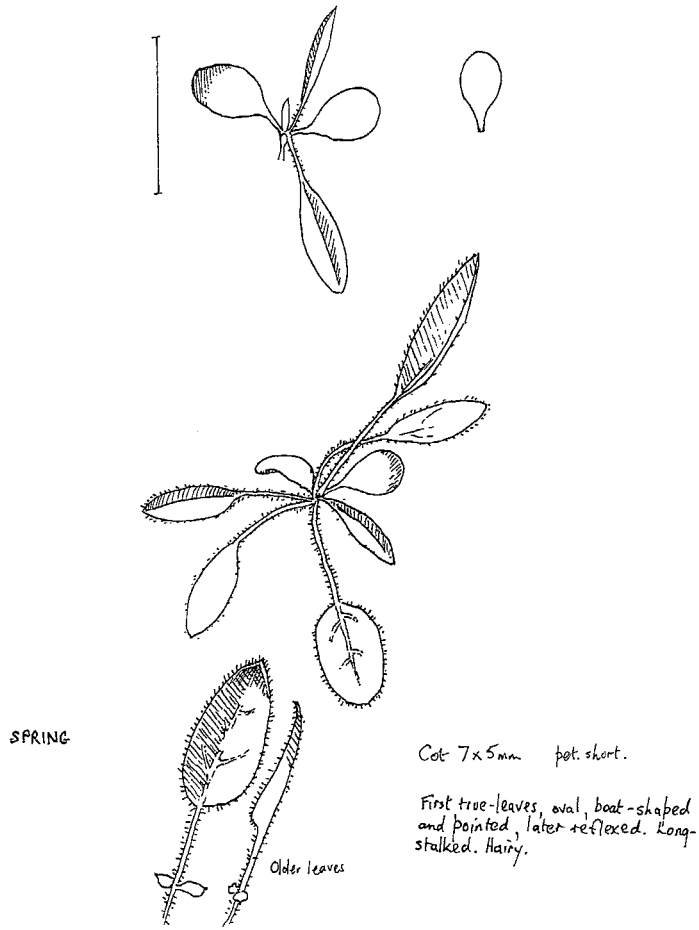

Anthyllis vulneraria seedlings del. S. Evans © 2003. Scale bar = 1cm.
See *BSBI News* **83**: 68 & **90**: 60 for a more detailed explanation of these drawings.

CONSERVATION NEWS & VIEWS

RECLAMATION OF SLATE QUARRY SPOIL?

Did I see, on television, a marvellous garden exhibit at the Chelsea Flower Show created from the reject rocks of a Welsh slate quarry? These rocks will have lain around in great heaps for many years as an unsightly reminder of past industry. It is commendable that something beautiful can be created from such rubbish. However the oppressive heaps will never be removed entirely, even to supply all the gardeners inspired by The Chelsea Flower Show, and the most that can be hoped for is that the land will eventually be rehabilitated through spontaneous development of a vegetation cover.

Did I see part of an incipient natural cover being removed? Were not rocks with colonising lichens, a moss (*Rhacomitrium lanuginosum*) and a fern (*Polypodium vulgare*) being avidly selected for the display, and carted off? And was the whole aesthetically praiseworthy exhibit expected to be sold, eventually, for rather a large sum?

I ask these things because over a very long period of time, even without the form of gardening known as 'reclamation', such heaps might be mellowed through natural plant colonisation and succession. This is perhaps the most that can be hoped for, as deliberate ecological rehabilitation of most waste heaps (through addition of fine moisture-retaining material and the planting of native trees) may never occur.

The above 'letter' was sent to the Editor of the RHS journal '*The Garden*' but was not published (or answered). A copy was also sent to Clare Coleman, an environmental lawyer and member of BSBI Council, who offered the following comments:

'I am increasingly concerned about the impact that the fashion for 'wild gardening' is having on our wild higher and lower plants. Partly because of the pressure mass popularity puts on wild populations — nurseries are offering landowners cash to clear woodland of Spring bulbs both in the UK and abroad to satisfy this demand. This is a real problem, hence Plantlife's current campaign in Scotland to curb the growing practice of collecting from the wild.

But much more damaging is the far-reaching effect that the 'wildflower' gardening craze may be having on the general public's perception of wild plants. People are encouraged to see wild plants as ornamental and desirable in the garden, with no value being placed on them in the wild where they are classified still as 'weeds'. Various presenters of TV garden shows may protest that their intention is to educate gardeners about wild plants but intentions are not relevant — it is the effect they are having that is. And why is a ild flower invariably a cornflower or corncockle?! Obviously these and other arable species have suffered a lamentable decline but what about our many equally beautiful common species that people can actually relate to as they have seen them *in the wild*?

We need a balance — people enjoy growing wild flowers, which is great, but arguably there does need to be a debate about the current 'wildflower' gardening bandwagon that conservation charities are gaily joining — *if you can be bothered to grow them, why not go and see them in the wild too and learn something about valuing and preserving them in their natural habitats?*'

Clare also offered the following interesting, and useful comment on the legality or otherwise of uprooting: 'Uprooting' encompasses removing a plant from the land on which it is growing (but this definition has not been tested by the courts as yet) and could arguably include removal of rocks bearing plants, which would therefore be illegal, for *all* species, without the landowner's consent. Yet if you get the landowner's consent [which the makers of the garden referred to above patently did], perversely, you can help yourself to everything, except for very rare and very limited list of Schedule 8 plants (i.e. plants listed in Schedule 8 of the Wildlife and Countryside Act 1981 and later amendments). The BSBI's *Code of Conduct* contains a useful summary of the relevant legislation and yes, I know it is bizarre, but it is illegal to uproot cow parsley, without the consent of the county council or farmer!'

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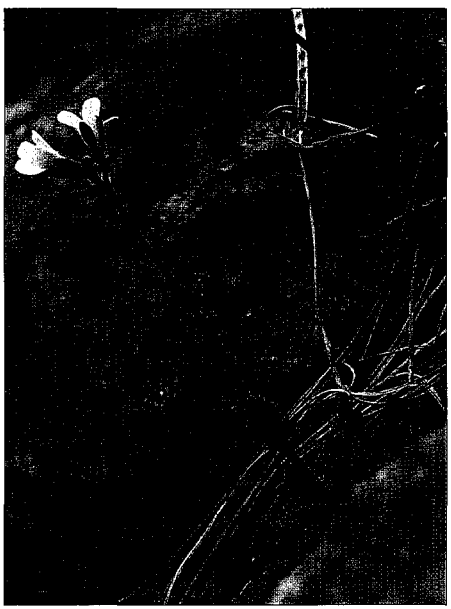
BSBI field meeting at Avon Gorge (v.c.34) April 2003



Arabis scabra (Bristol Rock-cress)

Cerastium pumilum (Dwarf Mouse-ear)

Both at Avon Gorge (v.c.34)

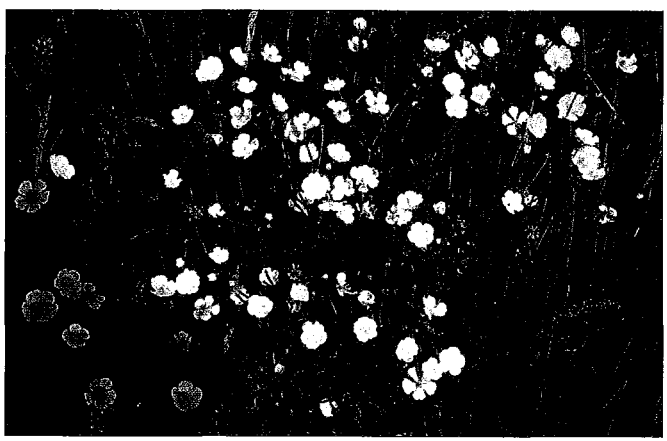
Photo 1

Photo 2

Photo 3

Photo 4

White Willow (*Salix alba*), River Kennet at Clatford (v.c. 7). All photos © J.E. Oliver, 2003



White flowered *Ranunculus acris*, Sheffield (v.c. 63).
Upper & lower photos © O. Gilbert, 2003

Paulownia kawakamii, Colchester (v.c. 19)
Photo © C. Gibson, 2003

Thlaspi macrophyllum in the Stravithie area of NE Fife (v.c. 85)
Photo © G.H. Ballantyne, 2003

BSBI field meeting Roundton Hill NNR (v.c. 47)
Photo © A. Stephens, 2003

Cardamine pratensis (double form), Dartmoor (v.c. 3).
Photo © D'Oyly, 2003

Euphorbia mellifera, Drumcannon (v.c. H6)
Photo © P.R. Green, 2003

ALIENS

EUPHORBIA MELLIFERA (CANARY SPURGE)

Euphorbia mellifera from the Canaries is a tree-spurge which perhaps is being increasingly planted as the climate grows warmer and gardeners become more adventurous. It forms a lush evergreen shrub. In Co. Waterford I have seen specimens well over 3m high. Stems are green, turning to a grey bark after a couple of years. The leaves are clustered at the branch ends, up to 22cm in length and to 4cm wide with pubescent midribs. The flowers are remarkable for their strong honey scent. In my garden in Cornwall it sets abundant seed with seedlings appearing about the garden, which are removed and sold at car boot sales.

It has naturalised at a few places in the British Isles, usually near the coast, as it is somewhat tender.

Irish sites

Co. Waterford (H6):

Knockmahon, X440990, 4/6/02 — single specimen about 50cm high on road verge at base of wall. Parent plant could not be seen in any neighbouring gardens.

Gortnadiha Upper, X258891, 25/7/02 — single specimen on road verge, later killed by weed killer spraying. Parent plant in adjoining garden.

Ballygarran, S629056, 25/10/02 — specimen over a metre high on side of track to forest plantation. Parent plant in neighbouring garden.

Drumcannon, S59520365, 15/03/03 — eleven plants of various heights in field hedge. Very large parent plant in garden on other side of road (see photo, colour section p. 4).

Co. Wexford (H12)

Tagoat, T11131144, 15/03/03 — two plants in field hedge, one flowering. The only specimen in cultivation I could find in the area was one medium size bush in nearby churchyard.

The only other records I have been able to trace are:

West Cornwall (1a)

Mousehole, 1984, Miss B.M. Sturdy, self-sown on cliffs at Mousehole. I have looked around Mousehole without any success (and couldn't even spot a plant in any gardens).

Isles of Scilly (1b)

Tresco Abbey Gardens, before 1994, seedlings on wall. 1995, A. Butcher, walls of Abbey Gardens and on dump at Borough Farm. 1996, A. Underhill, walls near planted ones in Abbey Gardens.

St Martins, 2002, N. de Sausmarez, on roadside up from quay.

There is very little mention of this spurge in literature. Stace (1997) only includes it under other species of *Euphorbia*, giving it a brief description saying that it has produced seedlings on walls, etc., in W. Cornwall (incl. Scillies). Clement & Foster (1994) only mentions the Mousehole and Tresco Abbey gardens sites, as does the *Flora of Cornwall* (French, Murphy & Atkinson 1999).

Is *Euphorbia mellifera* becoming established as another alien species?

Acknowledgement: I would like to thank Rosemary Parslow for providing the information for the Isles of Scilly.

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MELAMPODIUM MONTANUM BENTH. — NEW TO BRITAIN

Melampodium (Asteraceae) is an American genus of 37 species containing several prolific weeds in the (sub)tropics. It is surprising that in Britain we have, to date, failed to find (or name) any one of them to species level. The genus is rarely grown in our gardens — the *RHS Plant Finder 2000–2001* lists only *M. paludosum*. The species are not easy to distinguish, but *Rhodora* **74**: 1-70, 161-222 (1972) contains a fine monograph by T.F. Stuessy.

A 'mystery' plant was collected as '?*Bidens* sp.' by Ian P. Green. There was one sprawling plant at the base of a wall of The City Arms (P.H.), Queens Street, Wells, Somerset, v.c. 6, ST547456, November 2000. It grew with *Bidens ferulifolia*, but neither species was present in the hanging baskets on the wall above.

The same species was also grown in his garden at Bexley Heath (Kent) by David J. Nicolle in May 2001 and pressed for his herbarium (as no. BX379), with a generous duplicate for **herb. EJC**. Sold as Creeping Zinia, a tender plant, he correctly matched it with an illustration, wrongly captioned *Sanvitalia*, in Thompson & Morgan (Young Plants) Ltd. (Sudbury) *Plant Catalogue Spring 2001*, p. 2.

With much-appreciated help from Caroline Whitefoord at **BM**, I managed to (approximately) match a small piece of the Wells plant (now in **herb. EJC**) with *Melampodium montanum* Benth., as native material (from Mexico and NW Guatemala). A garden 'selection' probably accounts for the minor differences.

The genus *Melampodium* has opposite, simple leaves; the yellowish disc florets are functionally male; the ray florets are yellow or cream; the cypselas are obovoid, laterally compressed, and the pappus is always absent. The nearest relative to be found in Stace's *New Flora* (ed. 2, 1997) is *Guizotia* (see *BSBI News* **89**: 40 (Jan. 2002) for a coloured photo by Ian Thirlwell).

The coloured illustration in C. Brickell (RHS) *A-Z Encyclopedia of Garden Plants* (Dorling Kindersley, 1996), p. 604, captioned as *Leucanthemum paludosum* 'Show Star' is presumably of a *Melampodium* sp. See *BSBI News* **88**: 61 (Sept. 2001) for my reference to the *same* error by Segall (1997). Thompson & Morgan (Ipswich) *The seed Catalogue 2003*, p. 106, has yet another photo labelled as *M. paludosum* 'Melanie', promoting it as a half-hardy annual, 20-25cm tall, with golden yellow flowers over a long period. For the 'correct' name for all these three items, I hazard a guess at *M. divaricatum* (Rich. ex Pers.) DC., a very variable plant that Stuessy (*loc. cit.*) treats as including both *M. paludosum* Kunth and *M. flaccidum* (Benth.) Benth. as synonyms. Who can find it as a self-sown escape? — in Stevens *et al.* Flora de Nicaragua **1**: 342 (2001), a full (Spanish) description can be found, with the comment 'Maleza común en todo el país; 0–1400m; fl y fr todo el año.'

The two species discussed above can be easily separated by the following key:

Rhizomatous perennial; main leaves ± sessile; phyllaries not ciliate	*M. montanum*
Annual; main leaves ± petiolate; phyllaries ciliate	*M. divaricatum*

The best horticultural subject in the genus is probably *M. aureum* Brandg. with many larger flowers (19–38mm diam.; *cf.* 11–21mm in *M. montanum*), but it has ?yet to be introduced from Mexico, growing in the pine-oak forests at 1800–2500m. I failed to find it when I was in Oaxaca and Puebla in 2001.

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SEDUM PRAEALTUM A.DC. BY DAVID MCCLINTOCK

Back in the early days of *BSBI News* **9**: 2 (March 1975) members read excitedly about the efforts that David McClintock was putting into producing his '*magnum opus* on adventive plants in Britain.' As a preview, the cover illustration was a drawing of an *Amsinckia* sp. (presumably *A. micrantha*, but that name was not in vogue then) by Jocelyn Russell (JR). Regretfully, on DMcC's demise — see *Obituaries: David McClintock (1913–2001)*, by Alan Leslie, in *Watsonia* **24**: 257–270 (2002) — his list of countless publications did not include this work. The majority of the drawings will soon be published by the BSBI, but because DMcC completed so very few descriptions these will all be omitted. As a flavour of what we might have had, our cover drawing, again by JR, displays a plant from his beloved

Channel Islands, the Greater Mexican-stonecrop as it grew at St Katherine's, Jersey, in *c.*1965, and the draft description below (unedited) represents the text that would have accompanied it.

'*Sedum praealtum* A. DC. (Crassulaceae). ?English name.

A stout bushy glabrous shining evergreen perennial from Mexico. Stems thick, widely branched, woody below, to 100cm or sprawling even further; leaves 5–7cm, scattered up the stem, spreading, sessile, lanceolate-spathulate, gradually narrowed below, often curved upwards towards the apex, flat above, somewhat rounded beneath, closely clustered at the apex of sterile shoots; flowers in lax branched terminal panicles, to 10cm or more across, calyx *c.*2mm, 5–lobed, petals 5–6, 6–9mm, narrow lanceolate, acute, bright yellow, stamens 10, spreading, nearly as long as the petals, styles and stigmas yellow; fruit spreading when ripe, rarely matured in our climes. Fl. May–July.

At one time grown as an indoor plant, now frequent in gardens in the Channel Islands and able to hold its own outside on banks, rocks, etc., in warmer parts. It has been misnamed *S. dendroideum*, which has shorter, spathulate, pedicelled leaves and is rare.

A. flower × 1.'

I cannot explain why JR consistently draws 5 stamens only per flower, whereas DMcC's description calls for the expected 10. I have not yet seen this plant as an escape, but I can report that in gardens in Gosport it happily thrives — e.g. in full flower in late March 2002 on a garden wall in my own road.

On a personal note, I wish to record here my deep gratitude to the late DMcC for his enormous help and kindness when I first started my studies on alien plants, and that continued unabated till his death.

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MORE ABOUT *NOTHOFAGUS ALPINA* (POEPP. & ENDL.) OERST.

In Clement (1999) I introduced members to the total confusion in Britain (and beyond) over the application of the name *Nothofagus alpina* (Phil.) Krasser: it is currently applied to three different plants. Contrary to Stace (1997), in Stace (1999) we fall in line with the N&S American viewpoint that has persisted for so long there, yet has not been widely accepted here. To clarify the situation, the synonymy is worth relisting here — especially since a hasty reading of Stace (1999) seems to imply that *N. nervosa* is a synonym of the related species *N. obliqua*! The correct (earliest) name for this timber tree, known as Rauli, is:

N. alpina (Poepp. & Endl.) Oerst.
Basionym: *Fagus alpina* Poepp. & Endl. (1838)
syn: *N. nervosa* (Phil.) Krasser
Basionym: *Fagus nervosa* Phil. (1857)
syn: *N. procera* Oerst. (1873)
Basionym: None in *Fagus* is allowable

The name *N. procera* is still often misconceived, e.g., in Akeroyd (1993), as being the correct name for our *N. alpina*, in spite of a detailed reasoning contained in Lennon *et al.* (1987) and elsewhere. I reiterate, very briefly, the reasons for its rejection into synonymy.

When Poeppig & Endlicher published their new plant as *Fagus procera* (1838) they unfortunately duplicated the name: the same binomial *F. procera* Salisb. (1796) already existed, and so the later (1838) name is valid but not legitimate, and is not therefore available for transfer to another genus. Hence, when the binomial *Nothofagus procera* Oerst. (1873) was published, it must be treated as if it were a new name. But, prior to this date both *Fagus nervosa* Phil. (1857) and *Fagus alpina* Poepp. & Endl. (1838) were legitimate and the epithets were available for transfer to *Nothofagus* and hence have date priority according to the Botanical Code (Greuter, 2000).

Clement & Foster (1994) correctly appreciated the synonymy, but then wrongly sank *N. alpina* under *N. nervosa*, instead of *vice versa*. Some members may be intrigued (like me!) why *N. alpina* has had such a tumultuous history: to them I now address the next four paragraphs.

Most species of Southern Beech in Chile and Argentina are found in the southernmost parts of these countries (Patagonia) and comparatively few reach C Chile, whence the infamous *Fagus alpina*

was first described and illustrated by Poeppig & Endlicher (1838) together with *F. procera* and other species, all now belonging to the genus *Nothofagus*. Sceptics will immediately challenge: how can the same species be described twice and named differently in the same work? In truth, the authors guessed (correctly) at the genus for *F. procera* since the collector, Poeppig, could find no flowers or fruits, only large (7-10cm long) many-veined leaves in the woods below the Andes at Antuco. But, much higher up, above Antuco 'in montibus elevatis,' he found trees not exceeding 18ft tall, with tiny leaves (2-3cm long) and abundant flowers, a very different-looking plant, but in reality only an ecotype of *F. procera*. To suggest that pollen of the 'warmth-loving' (Bean, 1976) *N. obliqua* was available at this altitude and responsible for a hybrid colony is not credible. Similarly, Bean's statement that the other parent might be *N. pumilio* is not a viable alternative, since this species fails to reach this far north in Chile: see the distribution maps in Böhlmann (2001). One other convincing argument is that Poeppig & Endlicher's Fig. 198 shows details of the cupules of both *F. alpina* and *F. obliqua* and, not surprisingly the former are a perfect match with the cupules of *F. procera*: they are not intermediate between any presumed parents.

Other factors that I will list in the next three paragraphs all hint at a possible hybrid origin, but they are probably without substance. The type illustration of *F. alpina* shows leaves with only 9-10 pairs of lateral veins, whereas *N. nervosa* normally has 14-24 pairs: this is presumably a feature concomitant with the reduced leaves due to altitude and probably exaggerated by the artist. Note that the artist responsible for Fig. 12 in Stace (1997) has shown only 8 pairs of lateral veins. Lennon *et al.* (1987) report on their search for a type specimen. They found only a rather scrappy Poeppig duplicate sent to E. Boissier in Geneva (**G**): a facsimile of it appears in their paper but they do not quote the collection number, actually no. 1845 (but scarcely legible), as is revealed by inspection of the coloured photograph in Herb. Kew (**K**) where this specimen has been accepted as an isotype, with a further annotation of W+, implying that the holotype in Herb. Vienna (**W**) has apparently vanished. They fail to clarify whether they approached this herbarium where Poeppig's own herbarium is held (Stafleu & Cowan, 1983). Alas, Poeppig's alleged duplicates distributed as *F. alpina* were not uniform: A. de Candolle (1864) later determined another one (no. 868) as *F. antarctica*, and it presumably could not have come from Antuco.

At first, more worrying, is the claimed fact that scanning electron microscope characters of the leaf cuticle of Poeppig no. 1845 have verified a hybrid origin by comparison with known hybrid plants in Britain (Lennon *et al.* 1987). This paper, placed in a non-taxonomic journal, appears somewhat unclear to me. The reference therein to the precise characters that they used (Lennon *et al.* 1982) is incorrectly quoted (read the page number as 231, not 321). One character that they may have used was the expected presence of papillae around the stomata in *N. obliqua*, but more recent work by Hill & Read (1991) revealed that they were present only 'in some specimens' of that species. True *Nothofagus* species often appear to be variable in other characters, and have, presumably, given rise to much of the data on hybrids in South America that they describe as 'anecdotal' (p. 66).

However, if Lennon *et al.* (1987) are indeed correct about the type specimen being of hybrid origin, the botanical code (Greuter *et al.*, 2000) now allows us to submit a proposal to conserve a name with a conserved type so that the current widespread usage of *N. alpina* as a species may be upheld. This would surely be supported by the relevant ICBN special committee.

Finally, I should point out that the hybrid *N. alpina* × *N. obliqua* (now lacking a valid nothoepithet!) that is claimed by Stace (1997) as a British 'endemic' is apparently widely known by foresters in both Argentina and Chile — the evidence is well presented in Gallo *et al.* (1997) and doubtless elsewhere. Many more references to hybridisation in *Nothofagus* may be found on the world-wide web at www.southernconnection.org.au/january-2002/research_news.html

I am much indebted to Allen J. Coombes (Hillier Gardens and Arboretum, Ampfield) and Mike L. Grant (RHS Gardens, Wisley) for helpful discussion and for supplying copies of relevant references.

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PAULOWNIA KAWAKAMII ITO, IN ESSEX: A MYSTERY SOLVED

In the early summer of 2000, a large plant sprung up from a crack in the tarmac, at the foot of a south-facing wall, in the car park of English Nature's Colchester office. Despite the local concentration of informed observers, nobody could put a name to it. Even as it grew, to some 2m in height, with huge heart-shaped, shallowly-lobed leaves, to 80cm across, we were no nearer to identifying it, nor even being able to assign it to a particular family.

At the end of the summer, the aerial parts withered rapidly, and the plant was forgotten until in 2001 and 2002 when up it sprung again. In 2003, it was even more robust, reaching nearly 4m. It was a mystery which refused to go away. Then, in June 2003, I visited Kew Gardens, and saw the same plant growing in the herbaceous borders — it was *Paulownia kawakamii*, a relative of the more familiar Foxglove Tree *P. tomentosa*. *P. kawakamii*, one of several species bearing the English name 'Dragon Tree', is not listed by Stace or Clement & Foster as occurring in the 'wild' in Britain.

Paulownia kawakami is native of China, and can grow into a deciduous tree up to 8m in height. It bears flowers in large racemes, up to a metre long and 50cm wide, each with around 300 frilly, scented flowers. It is cultivated in Australia and the United States (often the bluish-flowered cultivar 'Sapphire Dragon') for ornament, shade, timber and the rehabilitation of degraded farmland. Other cultivars are available in different flower colours (from white to pink), and with differing degrees of drought tolerance and hardiness. However, the susceptibility of the Colchester specimen to cool temperatures suggests we are not likely to see it in its full, flowering glory here. (See photo, colour section p. 4).

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MORE ABOUT *LONICERA NITIDA*

In *BSBI News* **37**: 22–23 (1984) I wrote at length about *Lonicera nitida* (Wilson's Honeysuckle) in Britain and Ireland. That article lacked an illustration, an omission now superbly rectified by Delf Smith (DPJS). It was drawn in 2001 from a garden plant in Gosport, some 2 metres tall, that flowered in March–April. It may well represent the clone 'Fertilis' which flowers more readily than the earlier introduction(s). The flowers were borne four per node, starting at the first or second node of each side shoot, and normally extending for just three nodes — *i.e.* sprays of exactly twelve flowers.
The plate shows:

A Flowering branch
B Section of flowering stem
C Winter bud
D Leaf from flowering stem
E1 Inflorescence (corolla removed)
E2 Details (a–e) of E1
a Peduncle and bracts
b Carpels within cup of connate bracteoles
c Calyx surmounting carpel
d Calyx viewed from above
e Inside of calyx opened out
F Corolla
G Style
H Corolla opened out
I Fruit (berry)

The flowers always occur as twins and the four bracteoles that one might expect to see are remarkably fused into a single cup-shaped organ (see b). DPJS was also struck by the wide distribution of glands visible under the microscope — they occur on the young shoots, leaves, peduncle, bracts, bracteole cup, calyx and corolla.

Although the *New Atlas of the British & Irish Flora* (2002), p. 600, maps a staggeringly huge number of records (1110 in all), this species is undoubtedly still overlooked and frequently mis-determined. Indeed the current *The Garden* **128(7)**: 554 (July 2003) displays a fine, coloured photograph of the shiny leaves ('nitida' means shining) and it is captioned as *Muehlenbeckia complexa*. More often it is misnamed as *Cotoneaster* sp., but both these genera have alternate leaves! Much more excusable is the frequent confusion with *Buxus sempervirens* (Box) which does have opposite leaves, but the 4–angled stems of the latter that soon become glabrous quickly separate it.

Finally, I must confess that I sometimes find the separation from *L. pileata* difficult — see the key in Stace's *New Flora*, ed. 2, p. 654. It is possible that hybrids are now escaping. *The Hillier Manual of Trees and Shrubs*, ed. 7 (2002), edited by John Hillier and Allen Coombes, tells us that one form of *L. nitida* 'is now regarded as a hybrid between *L. nitida* and *L. pileata*.' No hybrid epithet is yet available.

In the *European Garden Flora* **6**: 438 (2000), D.Z. Li separates these two species by a character not mentioned in Stace (*loc. cit.*), *viz.*

Leaves with prominent main veins above — *L. pileata*
Leaves not as above — *L. nitida*

I find this difference too subtle for me! The description therein of *L. nitida* agrees well with our illustration except for 'Style hairy at base' — our style is hairy throughout.

More study is required of this pair of 'species'. In some older Chinese literature one meets the name *L. pileata* f. *yunnanensis* (Franch.) Rehd., which is an alternative name for our *L. nitida*, but most confusingly, *L. yunnanensis* Franch. is an unrelated species! See *Baileya* **12(2)**: 58 (1964) for an explanation.

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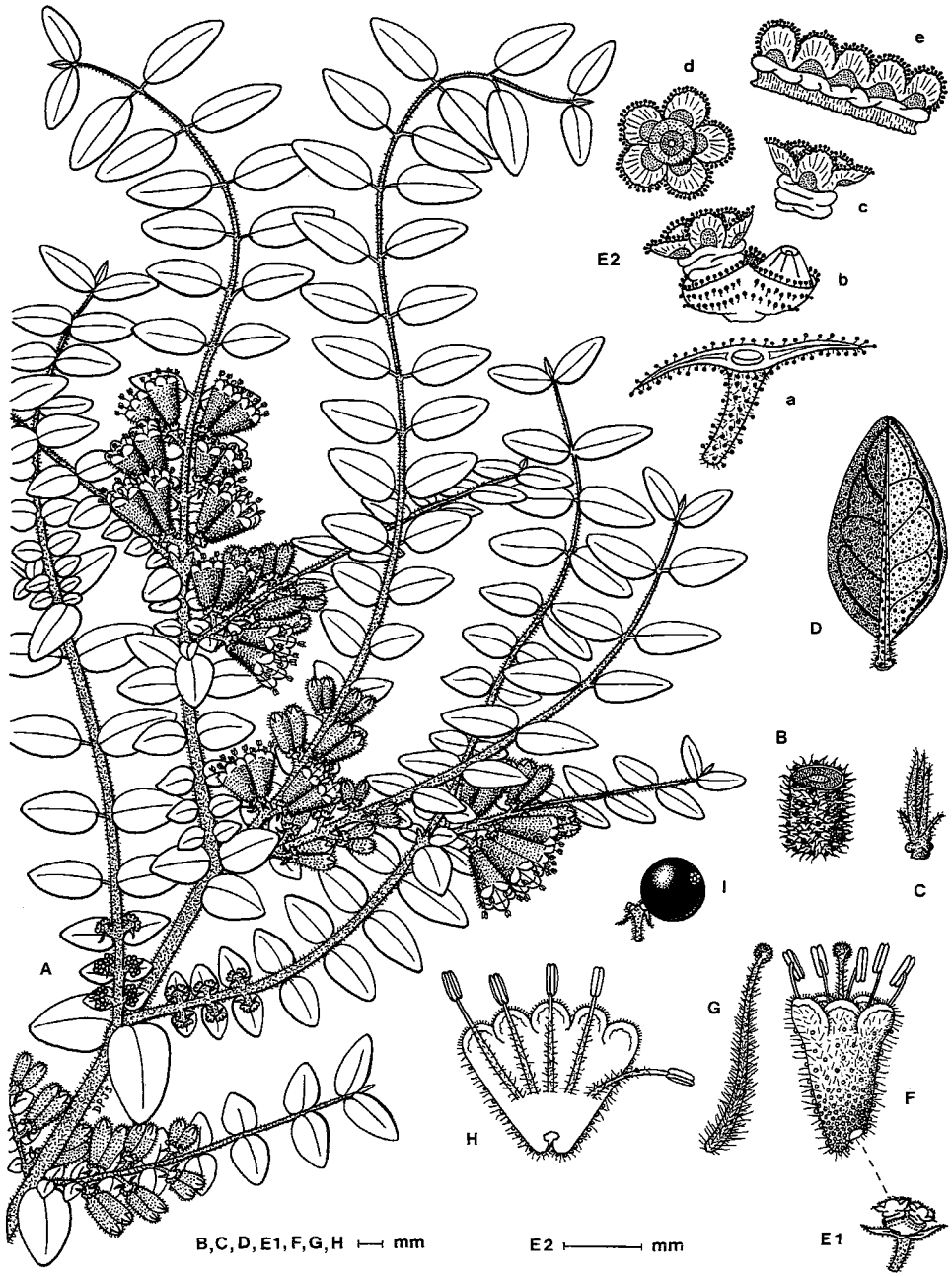
NATURALISED CULTIVATED IVIES

The self-branching, ramosa or ramulose ivies which are sold often in florists and the indoor sections of garden centres, are increasingly being successfully grown outside. They are slightly less hardy than their wild ancestor *Hedera helix*. Having thinner foliage, they are more prone to damage from frost or cutting winds, but their frequent production of shoots at the axils makes them rich and decorative.



Lonicera nitida E.H. Wilson, del. D.P.J. Smith © 2001

However their unstable genetics have possibly put off many botanists from ivies. They suppose this 'sportiveness' is found in all Hederas, making them too difficult to study never mind get to grips with. They are descended from a sport in the USA some time after 1915 and it was launched about 1920 as 'Pittsburgh'.

'Pittsburgh'-derived ivies have been found naturalised four times in mainland Britain. The old 'Parsley Crested' known in the UK as the 'Holly Ivy' in the 1950s was found by my sister with a commons clearing party near Nettlebed (v.c. 23) well away from houses. I've found two as yet unidentified small-leaved cultivars during a survey for a local flora, one on a gravel island in a burn, and the other on waste ground, the former was varigated. Both were from Helensburgh, v.c. 99. Julie Clarke discovered the large-leaved variegated 'Heise', on an old wall by a canal south of Bolton, and the tough crinkle-margined 'Ivalace' beginning to climb a disused railway viaduct in the Medlock Valley, between Manchester and Oldham. The latter was so large-leaved and rampant I wondered if it might be 'Stuttgart' (similar, but bigger) so some was sent to the National Collection at Fibrex Nurseries. Both are in v.c. 59.

It might be worth looking out for self-branching ivies in built-up areas or their environs, if your recording reaches down to cultivar level!

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NAMING DAFFODILS – SOME COMMENTS

I offer, if I may, some comments on the article 'Naming Daffodils' in *BSBI News* **89** (Jan. 2002).

- Mick Crawley's key to daffodils identified in churchyards in v.c. 22 is a fine key to one particular group
- But there are many more daffodil cultivars than the minimum 3,000 mentioned (more than 25,000 are held in the daffodil database at the RHS), and there are probably more cultivars to be found in churchyards than the 70 or so that are keyed out here
- The key could lead to misidentification if it were used on daffodils other than those in the one particular group
- For example, there are many more daffodils like 'White Lady' (Key C, no. 23) which have been or still are in cultivation and are offered in the trade. 'White Lady' itself is indeed still offered. It is known to be persistent in gardens and a good choice for 'naturalising' so it is a likely candidate to be found, but not the only one. There are also many other old fashioned daffodils persisting on old estates and escaping from them (especially Div. 3 daffodils like 'White Lady') which up to now nobody has been prepared to identify
- Identifications according to the key should be double-checked in the International Daffodil Register (1998) for more characteristics than the few mentioned here
- In any event, it would be safer to conclude from using the key that a find is not, say, 'White Lady', but a daffodil "aff. 'White Lady'"
- Otherwise I fear that the key could lead to a lot of definite identifications for a lot of uncertain cultivars.

[This is another of the contributions 'lost' last year, see Editorial p. 7]

SALLY KINGTON, International Daffodil Registrar, PO Box 313,80 Vincent Square, London, SW1P 2PE
Telephone 0207 821 3083 Fax 0207 828 3022

NOTICES (BSBI)

CYPRUS, TROODOS MOUNTAINS 2004

Plans are being made to organise a field excursion to Cyprus in November (13-20 if flights available). We will be based in Platres, 1100m, at the Hotel Minerva. Here, the hotelier Dr Yiannis Christofides, a BSBI member and known to many of you already, will share with us his invaluable local knowledge and organise a varied schedule to see some of the autumn flowering plants. An excellent opportunity to prolong the field season!

To find out more about the region visit the websites:

http://users.globalsoft.com.cy/flora

http://users.globalsoft.com.cy/minerva

Those wishing to know more details should contact me as soon as possible.

JANE CROFT, Hon. Field Secretary, 12 Spaldwick Road, Stow Longa, Huntingdon, Cambs. PE28 0TL;
Tel.: 01480 860561; email: jane@stowlonga.fsnet.co.uk

THE SMALL BRITISH HERBARIA PROJECT

The Small British Herbaria Project (SBHP) is a joint venture between the BSBI and the University of Hull, Department of Geography. It aims to bring together information about specimens of British plants held in various collections and make it available from a single internet source. Kent and Allen's *British and Irish Herbaria* (1984) already provides a comprehensive insight into the extent and location of collections but no information about individual specimens. At the present this information is, with some notable exceptions, only very sparingly available.

The project has arisen from the successful completion of the on-line catalogues of **HLU** and **HLL** held in the University of Hull. Until the electronic catalogue was created it had been assumed that the collection had been 'formed by past and present members of staff and students', (Kent & Allen 1984). Although the statement is largely true, it was found that several old collections had been incorporated as well. By making the catalogue publicly available over the internet, much useful feedback has been obtained and several historically important specimens located.

It is intended that the SBHP will provide a general indexing service to herbaria, some of which may have their own comprehensive on-line resources but for others it could represent the sole catalogue. The searching service will be freely available to all and the catalogue hosting will be available, again free of charge, to anyone willing to provide suitable data sets. Although the kinds of information stored for each specimen will need to be standardised, users will be free to provide as much or as little information as they wish. The potential for data storage is outlined in table 1 but only the taxon name and an automatically generated record number are mandatory, although without additional information it is difficult to envisage what use the record would be!

The index records will be grouped by collection and they will, where possible, be identified by the standard abbreviations of Kent & Allen. Data providers will retain full and secure ownership and control of their data, and be able to edit, add and delete specimen records over the internet using a standard web browser with no additional software.

In the earliest stages of the project, it is expected that the main data sets available will be those that can be extracted from herbarium catalogues that already exist in some electronic form. One of the main aims, however, will be to encourage individuals (and institutions) to use the system to create catalogues for collections that are poorly documented or little known. The only investment required will be that of time and effort; anyone with access to a herbarium and the internet will be able participate.

The success of the project will hinge on the goodwill of data owners. Although they will be making their information available free of charge or restriction, in return they can expect useful feedback about their collection from a very wide audience. It will also help filter requests for data, as many people with simple questions will be satisfied with the information gained from their search results, leaving only those queries of a more direct and potentially valuable nature.

Since internet resources are generally somewhat ephemeral, it is important that due consideration is given to inevitable advances in technology from the start. Any data sets generated by the project must be transferable. It is only planned to run the project until such a time as improved technology can provide a similar but better service. When this happens all of the data sets, with the permission of their owners, will be made available to the new service and the SBHP project terminated.

For more information and a taste of what is already available, visit the project's web site at: www.herb.hull.ac.uk/SBHP/index.htm

Item	Description	Notes
Taxon	Plant name	after Kent, Foster & Allen. This will be validated by the system and only names in the master dictionary will be accepted.
[Record]	Unique record identifier	Automatically generated
UserID	Text	By default will be set to the Record identifier but may be changed to represent the herbarium accession number, etc.
Determined	Text	Name [and date] of determiner
Collector	Text	Name of specimen collector
Locality	Text	Place collected
Vice County	v.c. identifier code	Uses standard system, e.g. 61, H16, etc. In addition : 0 = Great Britain, H = Ireland.
Map Reference	Grid reference (text)	e.g. TA 1632, SE 97824341, etc.
Year	Number	Collection year [0 = unknown]
Month	Number	Collection month [1..12, 0 = unknown]
Day	Number	Collection day [1..31, 0 = unknown]
Notes	Text	Any further details about the specimen

Table 1 : Specimen information to be stored in the index

Reference

KENT, D.H. & ALLEN, D.E. 1984. *British and Irish Herbaria.* BSBI, London.

RICHARD MIDDLETON, Department of Geography, University of Hull, Cottingham Road, Hull, HU6 7RX; Tel: 01482 465578; email: r.middleton@hull.ac.uk

ALEX LOCKTON, 66 North Street, Shrewsbury, Shropshire, SY1 2JL
Email: alex@whildassociates.co.uk or coordinator@bsbi.org.uk

NOTICES (NON-BSBI)

DERBYSHIRE FLORA QUIZ

Botanists in Derbyshire have been gathering for some time now plant records for a new county flora. As a step towards this, we recently published a checklist of the plants of the area (Moyes & Willmot 2002) [see also p. 40]. The value of this has just been recognised by the Derbyshire County Council who awarded it first prize in the wildlife conservation section of their annual Greenwatch awards. As well as the prestige, the award came with a cheque for £800 that we will use towards the publishing costs of the final work. We are now looking at other ways to raise funds to assist with these publishing costs. One way some local supporters have come up with is a written quiz sheet, which has prizes for the winners. Compiled by the Secretary of Derby Natural History Society it features cryptic clues, botanical puzzles and general knowledge questions with a floral theme. It is now on sale with the closing date for entries being Sunday 30th November 2003. If you would like to obtain a copy please send s.a.e. with a cheque for £1 (payable to Derbyshire Flora Committee) to S.M. Jones, 'Flora Quiz', 12 Chertsey Road, Mickleover, Derby DE3 0RA.

Reference:

Moyes N.J. & Willmot A. 2002. *A checklist of the plants of Derbyshire*. Publ. Derby Museum.

Alan Willmot, 2 Kedleston Close, Derby, DE22 2RA

REQUESTS

REQUEST FOR INFORMATION ON *QUERCUS*

I am carrying out private research with the view to publishing a comprehensive guide to the life of the two indigenous oaks in the United Kingdom, *Quercus robur* and *Quercus petraea.*

The main areas of research include: Evolution &. Distribution; Physiological Characteristics; Ecology/Natural History; Woodlands; Diseases/Predators; Uses of Oak; Pollution/Climate; Cultural Heritage; and Conservation.

I would be interested to hear from anyone who has a specific interest or has information on these two oaks. Further details of the areas covered under the above headings may be obtained from me.

Mike Tyler, The Acorn, Shute Road, Kilmington, Axminster, Devon EX13 7ST; Tel: 01297 34958; e-mail: mike@mwtyler.freeserve.co.uk

BOOK NOTES

Those that will not be reviewed in *Watsonia* are marked with an asterisk (*). Unattributed comments in square brackets are mine.

Arable Plants — a field guide. Phil Wilson & Miles King. Pp. 312. English Nature & WildGuides. 2003. Price Hbk £15. ISBN 1-903657-02-4.

**Cassell's Wild Flowers of Britain & Northern Europe*. Marjorie Blamey & Christopher Grey-Wilson. Pp. 544. Cassell. 2003. Price large hbk £30. ISBN 0-304-36214-X.

[A reissue, unchanged other than a new preface, of the 1989 title '*The Illustrated Flora of Britain and Northern Europe*, (reviewed in *Watsonia* **18**: 97 (1990)). The layout is generous, the paintings, to me at least, a delight. It has been out of print for many years, the victim, I understand, of a publishing merger, and is recommended as a comprehensive, if heavyweight, guide.]

Cassell's Trees of Britain & Northern Europe. David More, John White. Pp. 800. Casell. 2003. Price large hbk £50. ISBN 0-304-36192-5.

[A magnificent *magnum opus*, covering 1800 species and cultivars, with illustrations of habit, leaves, flowers and bark.]

A catalogue of alien plants in Ireland. S.C.P. Reynolds. Pp. 414. Occasional papers no. 14, National Botanic Gardens, Glasnevin, Ireland. Sbk. Available from The National Botanic Gardens, Glasnevin, Dublin 9, Ireland. Price Sbk €25, plus postage to Ireland, €2, & to Britain or Europe, €5. ISSN 0792 0422. Hbk (which I have not seen) €40, with the same postages as above.

**Checklist of the Flowering Plants and Ferns of Angus (v.c. 90).* Barbara Hogarth. Pp. 64. 2003. Available from the author for £4 (incl. p&p), 14 Greystane Road, Invergowrie, Dundee DD2 5JQ.

[A straightforward listing of all the plants that have occurred in the county, arranged by 10km square, with bracketed entries for those with only pre-1987 records. The listing is alphabetical, by scientific name, with the common names and statuses shown for each.]

**A Checklist of the Plants of Derbyshire.* N.J. Moyes & A. Willmott. Pp. 51. Derby Museum. 2002. Price £2.50. No ISBN.

[I missed this last year, though the authors put their own note in *News* (**91**: 59). But I wanted to mention it myself because it was a cut above most checklists, which are often just a list of names. This is an alphabetical list of Latin and English names, with notes of the latest year recorded and of status in the county. This is followed by details of conservation status — i.e. whether in the British Red Data lists or whatever. Other lists in the booklet cover new records for Derbyshire (most since the two supplements to Clapham's *Flora*) and errors and unconfirmed plants.

There is an introduction covering the layout of the list, and a proper helpful key to the entries. I think this is a model that many others who do not wish to go to a full Flora could well emulate.]

**The Cultural History of Plants.* Consulting Editor Sir Ghillean Prance, Scientific Editor Mark Nesbitt. Pp. 432 (with 350 b&w drawings and 200 maps). Routledge. 2003. Price large hbk £65. ISBN 0-415-92746-3.

[I have not seen a copy but the flyer includes

- Details the history of 800 culturally significant plant forms
- Organized in thematic chapters, by common plant name
- Glossary and chronology of plant migration
- Invaluable aid for enthobotaniststs and horticultural enthusiasts, and anybody concerned with the relationship between humanity and nature]

Flora of North America north of Mexico. Volume 23 Magnoliophyta: Commelinidae (in part): Cyperaceae. Flora of North America Editorial Committee. Pp. xxiv + 608. Oxford University Press, Oxford. 2003. Price Hbk £65.00. ISBN 0 19 515207 7.

A garden of herbs: traditional uses of herbs in Scotland. A. Walker. Pp. 126. Argyll Publishing, Glendaruel, Argyll. 2003. Price Hbk £12.99. ISBN 1 902831 55 1.

Flora of North America north of Mexico. Volume 25 Magnoliophyta: Commelinidae (in part): Poaceae part 2. Flora of North America Editorial Committee. Pp. xxv + 783. Oxford University Press, Oxford. 2003. Price Hbk £70.00. ISBN 0 19 516748 1.

Flora of North America north of Mexico. Volume 26 Magnoliophyta: Liliidae: Liliales and Orchidales. Flora of North America Editorial Committee. Pp. xxvi + 723. Oxford University Press, Oxford. 2003. Price Hbk £65.00. ISBN 0 19 515208 5.

**Genera Orchidacearum. Volume 3. Orchidoideae (Part 2) Vanilloideae.* Edited by A. M. Pridgeon, P.J. Cribb, M.W. Chase & F.N. Rasmussen. Pp. xviii + 358. Oxford University Press, Oxford. 2003. Price Hbk £100.00. ISBN 0 19 850711 9.

[Attractively produced book including accounts of 115 genera, including *Vanilla*, source of the familiar flavouring, and the British genera *Goodyera* and *Spiranthes*. Each genus is illustrated by a line drawing of one or more species, a distribution map and text under such headings as (for *Goodyera*) Derivation of name, Description, Distribution, Seed morphology, Palynology, Cytogenetics, Phytochemistry, Ecology, Pollination, Uses, Cultivation, Taxonomic notes, Taxonomic literature. CDP]

Great natural history books and their creators. R. Desmond. Pp. 176. The British Library, London & Oak Knoll Press, New Castle, Delaware, U.S.A. Price Hbk. £25.00. ISBN 0 7123 4774 7 (British Library).

Irish trees: myths, legends & folklore. N. Mac Coitir. Pp. viii + 231. The Collins Press, Wilton, Cork. 2003. Price Sbk €22.50, £15.75. No ISBN.

**Leicestershire and Rutland (v.c. 55) Rare Plant Register.* Michael Jeeves. Pp 40. Leicestershire and Rutland Wildlife Trust in partnership with the BSBI. 2003. (Available from the Wildlife Trust at Brocks Hill Environment Centre, Washbrook Lane, Oadby, Leics. LE2 5JJ, for £4 incl. p&p.

[A listing of all the rare plants in the county, according to the BSBI criteria, arranged by alphabetical scientific name, with details of rarity category, location, 6 fig. GR (where known) and date of last record. A simple and completely effective list.]

**Review of non-native species policy — report of the working group.* Pp. 136. London – Defra. Price £37. No ISBN.

[The working group consisted of government and private bodies, the latter including the Wildlife Trusts, Plantlife and many others. Eight key recommendations are given, including the setting-up of a single lead co-ordinating organisation. The text is enlivened with some case studies, including the cost of control of Japanese Knotweed, reckoned, conservatively, to be £1.56 billion! Certainly worth a read if you can borrow one.]

Wild Flowers of Britain & Ireland. Marjorie Blamey, Richard Fitter, Alastair Fitter. Pp. 482. A & C Black Publishers Ltd. 2003. Price pbk £16.99. ISBN 0-7136-5944-0.

[Not to be confused with similarly titled works by some or all of the authors, this is a completely new work containing all our native plants, plus about 600 aliens, with extra drawings of key features and small distribution maps based on the *New Atlas*.]

Brian Bonnard writes from Alderney:

The Wild Flowers of Alderney (826 photos, 652 1km^2 distribution maps, etc.),
An Illustrated Guide to the Wild and Naturalised Flowers of the Channel Islands (with 1,250 photos) and
Channel Island Plant Lore (with many woodcut illustrations from Gerard's Herbal)
is available on CD to UK and CI members for £30 incl. p&p. For other destinations please add £3 p&p, c.w.o. please. Discs are prepared to order and dispatched within 2-3 days of my receiving payment, providing I am at home. Each varies very slightly if I have taken new/better photos or have additional species to include.

Full details are on my web page at www.flora.org.gg which interested members might like to look at before ordering.

DAVID PEARMAN, Algiers, Feock, Truro, Cornwall TR3 6RA; Tel: 01872 863388

WHITE ELEPHANT INDEED!!

I must protest at the comments given by Elizabeth Rich about the *New Atlas*! Although it is very large, and heavy, just look at all the information it contains! Mine lives on the floor of the sitting room in front of the botanical bookcase, since it does not fit within it. However, I find this a very suitable position for its use. I consult it at least 3 or 4 times every week, and the CD about once a month. My elderly mother is a good botanist, but does not have the *Atlas*, so I consult mine for her too. I was absolutely thrilled when it arrived on my birthday last autumn, and read all the introductory chapters in the first week or two. I can hardly put it down, so to speak, except that mine lives 'down'. I am quite happy reading it while stretched out in a prone position on the floor, and I regularly look at the newspaper there too as that is also hard to read while sitting but for different reasons! I warmly recommend this strategy to others who find the *New Atlas* a bit hard to handle.

PS. The transparent overlay available from Summerfield Books helps greatly in the interpretation of the maps.

MARY SMITH, 33 Gaynes Park Road, Upminster, Essex RM14 2HJ
Email: mary@smith33gpr.fsnet.co.uk

OBITUARY NOTES

With much regret we report the following death.

Brian Hopton, the Staffordshire Flora Group's third most prolific recorder, died suddenly on Wednesday 13th August. He was a retired teacher, formerly Head of Biology at Wolverhampton Grammar School, and only 58 years old. Brian's contribution was invaluable, particularly in the extreme south-west of the vice-county. He totalled 7,883 records, with large lists for forty tetrads in the last four years alone. He first joined the BSBI in 1975. [John Hawksford.]

MARY BRIGGS, Hon Obituaries Editor, 9 Arun Prospect, Pulborough, West Sussex RH20 1AL

REPORTS OF FIELD MEETINGS

Reports of Field Meetings (with the exception of Reports of Irish Meetings written by Alan Hill) are edited by, and should be sent to: Dr Alan Showler, 12 Wedgwood Drive, Hughenden Valley, High Wycombe, Bucks, HP14 4PA, Tel.: 01494 562082. Potential authors of reports should note that they should not be much longer than 500 words (half a page of *News*) for a one day meeting and 1000 words (1 page of *News*) for a weekend.

2001

CAENLOCHAN GLEN, ANGUS (v.c. 90) July 22nd 2001

Caenlochan Glen appears to have been a favourite hunting ground for botanists in the 1800s and early 1900s with many accounts appearing in journals telling of days spent searching the crags. In recent times there have been few such accounts as a series of owners have been prejudiced against those wishing to gain access to the glens. This field meeting was made possible by liaison with Scottish Natural Heritage and taking the opportunity to use one of the few days they are allowed access for plant monitoring. It was just a pity that none of the staff from the local office was prepared to give up a Sunday and put our expertise to good use! However we were accompanied by Ken Slater from the Angus Glens Ranger Service and his support was very much appreciated.

SNH had failed to provide any specific remit so it was agreed that the group of fourteen should concentrate on exploring a section of crags known to support a good range of montane plants but one less frequently visited than the famous Craigie Doubs. We headed into Caenlochan Glen from Glen Isla and after a route march along the flat valley bottom we eventually reached the lowest buttress of rock via a steep traverse. This crossed several screes with pockets of *Cryptogramma crispa* (Parsley Fern) — a good excuse to pause briefly during the climb. To the east the granite cliffs of Creag Caorach support a very sparse flora so we progressed slowly in a north-westerly direction along the base of the crags to an area with frequent outcrops of lime-rich schists above the Glasallt Burn.

Here the vegetated ledges contained an assemblage of noteworthy species such as *Carex capillaris* (Hair Sedge), *C. vaginata* (Sheathed Sedge), *C. atrata* (Black Alpine-sedge), *Salix reticulata* (Net-leaved Willow), *Coeloglossum viride* (Frog Orchid), *Botrychium lunaria* (Moonwort), *Viola lutea* (Mountain Pansy) and *Anthyllis vulneraria* (Kidney Vetch). On a few ledges and precipitously steep grassy slopes we found reasonable quantities of *Veronica fruticans* (Rock Speedwell). Probably the best ledge seen that day was the one with a small colony (about 23 flowering plants) of *Gentiana verna* (Snow Gentian).

Some sheltered, flushed gullies contained swathes of lush tall herbs dominated by *Trollius europaeus* (Globeflower) whilst others supported an abundance of *Saxifraga aizoides* (Yellow Saxifrage). On one such flush sharp eyes spotted the only specimen of *Veronica alpina* (Alpine Speedwell) seen that day.

The section of crags visited proved to be relatively species-rich with only a sample of plants seen listed above. The weather had stayed fair and the botanising had been good — as always on such occasions we wanted to stay and search some more but with long journeys home for some and B & B dinners beckoning others we descended from the dizzy heights.

[This is another of the contributions 'lost' last year, see Editorial p. 7]

BARBARA HOGARTH

2003

AVON GORGE (v.cc. 34 & 6) 6th April

Although so early in the year, it was exactly the right moment to catch the six first-flowering rarities of the Avon Gorge. Twenty-two members met at Sea Walls, the northern cliff top of the Gorge on the Gloucestershire side, to spend the day progressing gradually and deviously the 1.5km upstream to the southern end (see photo, colour section p. 1). Sea Walls gives an excellent view of the Gorge, with Brunel's Suspension Bridge crossing the far end, but a very wooded view. The ancient woodlands of Leigh Woods on the Somerset bank appear thoroughly echoed on the east side by what is relatively recent, post-grazing, secondary woodland. One aim of the meeting was to trace the remaining areas of open limestone grassland, whether they originated in colonisation after quarrying or represented 10,000-year survival. Where we started, the shallow soil pockets on the exposed cliff edge (beyond wall and railings) support a stressed, stunted, and scarcely visible population of *Arabis scabra* (Bristol Rock-cress). However, a new locality was discovered almost immediately on the nonhazardous side of the wall itself, near the public conveniences, with a single plant at its most luxuriant and beautiful. Six more of its varied sites were visited altogether. Photographs confirmed interestingly that though the petals may be creamy, as commonly described, on first opening, in full flower they are white, often with mauve- or pink-tinged underside (see photo, colour section p. 1).

We headed south to the Gully, for the easiest access route to river level (and arterial A4), with substantial ancient grassland patches on either side. *Potentilla neumanniana* (Spring Cinquefoil) was in flower and the bluish leaves of *Trinia glauca* (Honewort) were recognisable on the south-facing Gully Outcrop. Lower down, *Carex digitata* (Fingered Sedge) was flowering well on a north-west-facing scree, having increased from 15 to 150 plants following scrub clearance in 2000; *C. humilis* (Dwarf Sedge) is locally abundant on open slopes nearby. Low on the 70m quarried Sea Walls cliffs is a tiny (2m) linear site for *Hornungia petraea* (Hutchinsia). Here it was withering, but high on the Gully edge, and later on St Vincent's Rocks (the southern massif of the Gorge), healthier plants were found still flowering in new stations on scrub-cleared sites. *Cerastium pumilum* (Dwarf Mouse-ear) had also colonised bare soil left by *Quercus ilex* (Evergreen Oak) (see photo, colour section p. 1). A serious threat to native plants, this Mediterranean evergreen thrives in the sheltered microclimate, destroying any grassland species with its impervious shade. Conservation management is now targeting it, along with *Viburnum tinus* (Laurustinus), another rampant alien evergreen; also, apparently, identified by members from its healthy regrowth, a single *Arbutus unedo* (Strawberry-tree).

Sites for later-flowering species and the different *Sorbus* (Whitebeam) taxa, e.g., the Great Quarry — and access routes — were pointed out along the way. In early spring one can compare leaf characters of five *Allium* species: natives *A. sphaerocephalon* (Round-headed Leek), *A. oleraceum* (Field Garlic) and *A. vineale* (Crow Garlic), and highly competitive Mediterranean introductions *A. carinatum* (Keeled Garlic) and *A. roseum* (Rosy Garlic); also the true extent of their distribution. Where a joyrider's car had burned out on an *A. sphaerocephalon* site at the Gully Outcrop, we saw the stoutest and most leek-like shoots of this RDB plant perhaps ever recorded here. New shoots of July-flowering *Veronica spicata* subsp. *hybrida* (Western Spiked Speedwell) were noted on St Vincent's Rocks; also fragile hanging patches of *Sedum forsterianum* (Rock Stonecrop).

We were exceptionally lucky in weather and records. Seven members stayed on for one last landfall, crossing the Bridge to Leigh Woods for opposite views, and a final species in *Helleborus viridis* (Green Hellebore) on the Iron Age fort. Many thanks to Mandy Leivers, Education Officer for

the Avon Gorge & Downs Wildlife Project, for providing each participant with a surprise set of splendid postcards of Avon Gorge rarities — 3 of the plants, and the Peregrine Falcon. Also to Stephen Woodward for his excellent and generous photographs of the day.

LIBBY HOUSTON

ROUNDTON HILL NNR & MEADOWSWEET FIELDS, CHURCHSTOKE, MONTGOMERYSHIRE (v.c. 47) 17th May

The small group of rufty-tufties who braved the lowering skies and climbed the knobbly craggy lump of Roundton Hill were rewarded with charismatic panoramic views of north Wales and the Shropshire plain (see photo, colour section p. 4). Millions of years ago, in the Ordovician period, this Welsh border region was a centre of volcanic activity and the hills now seen are the remains of mountains formed. Roundton is mostly composed of a hard erosion-resistant rock called andesite intruded into limestone.

Unlike much of the surrounding farmland, this ancient grassland has never been ploughed or reseeded with agricultural grasses and so is still today a medley of native wild flowers.

A couple of days of heavy showers had resulted in the resurrection of a good selection of spring annuals, despite the dry weather almost desiccating them in early April. *Teesdalia nudicaulis* (Shepherd's Cress), *Aira praecox* (Early Hair-grass) and *Vulpia bromoides* (Squirreltail Fescue) were all found in bare short turf on south facing scree and the beautiful diminutive *Myosotis ramosissima* (Early Forget-me-not) and *Myosotis discolor* (Changing Forget-me-not) were sought out and compared. *Viola lutea* (Mountain Pansy) was admired in its typical local all yellow form.

After visiting the toposcope at the summit in atmospheric weather conditions, there was much joy in the discovery of *Filago minima* (Small Cudweed), impersonating a worn grey floor mop, in more sheltered conditions near the disused barite mines. One member aptly described the species as covering 'a good big little bit', which was very rewarding to see as the genus *Filago* is shown in the *New Atlas* to be declining nationally due to changing agricultural practices. The dainty native and nationally scarce *Sedum forsterianum* (Rock Stonecrop) was the finale of the morning.

A sheltered lunch was partaken next to the Aga in a Welsh longhouse belonging to the landowner of Meadowsweet Fields. Welcome hot drinks and a botanical cake with ingredients from Poaceae, Rutaceae and Lamiaceae families were provided.

The afternoon session was spent in glorious hay fields and damp meadows, which had escaped the ravages of modern farming. Here, members discovered the attractive leaves of *Silaum silaus* (Pepper-saxifrage) in one of only a couple of known sites in Montgomeryshire and fronds of *Ophioglossum vulgatum* (Adder's-tongue) amidst a superb mixture of grasses and abundant *Rhinanthus minor* (Yellow Rattle).

In the wetter fields, *Caltha palustris* (Marsh Marigold) flowers coloured the ditches and *Filipendula ulmaria* (Meadowsweet) leaves carpeted the ground, interspersed with sedges and rushes. Magnificent specimens of Oak, Ash and Field Maple had been retained in the old hedgerows and gnarled pollarded *Salix fragilis* (Crack-willow) lined the stream. The site visit concluded with a visit to a magnificent grove of *Populus tremula* (Aspen), where the pink-tinged spring leaves glistening with raindrops were much admired.

Landowner, Anne Stephens, of Field Studies Council Overseas, was thanked for her kind hospitality and congratulated on her management of the meadows.

RUTH DAWES

GRASS IDENTIFICATION WEEKEND NORFOLK AND SUFFOLK (v.cc. 25, 26, 27, 28) 14th-15th June

Twenty-five members in addition to the leader met on Saturday at Mellis Common (v.c. 25) about 5km south of Diss. The weather was perfect and was to remain so throughout the meeting. Specimens of *Anisantha diandra* (Great Brome), widespread in the area, were distributed and used to illustrate the essential features of the grass plant, particular emphasis being placed on the inflorescence. One participant drew attention to the presence of gland-like swellings at the base of the panicle branches

(vaguely reminiscent of the glands at the top of the petiole on some leaves of *Populus* × *canadensis* (*P. nigra* × *P. deltoides*) (Hybrid Black-poplar). These had not previously been noted and are not shown in published illustrations of *A. diandra*. Whether the swellings were galls or natural could not be decided. Furthermore, as all the specimens were collected from a single site, it was impossible to assess how widespread a feature this was. Perhaps members who live where *A. diandra* is common will watch out for it in 2004. (Fresh secondary inflorescences from a different site on 17th August possessed similar swellings).

The party then took a leisurely circular walk to examine the grasses of a small part of the common for which a late summer hay cut is the principal form of management. Specimens of *Arrhenatherum elatius* (False Oat-grass) were at anthesis and afforded an opportunity to study their spikelet structure without dissection. Other species present such as *Anthoxanthum odoratum* (Sweet Vernal-grass), *Holcus lanatus* (Yorkshire-fog), *Dactylis glomerata* (Cock's-foot), *Cynosurus cristatus* (Crested Dog's-tail) and *Lolium perenne* (Perennial Rye-grass) provided good illustrations of the diversity of inflorescence structure to be found among the common grasses, and some time was devoted to discussion of these. Gradually the emphasis changed to examining the less frequent grasses on the common, including *Bromopsis erecta* (Upright Brome), *Festuca pratensis* (Meadow Fescue), *Briza media* (Quaking-grass) and *Alopecurus geniculatus* (Marsh Foxtail). Of particular interest in a damp patch was the sterile hybrid between *Alopecurus pratensis* (Meadow Foxtail) and *A. geniculatus*, *A.* × *brachystylus*.

The second venue was Wortham Ling (v.c. 25), a heathland SSSI which, like Mellis Common, is managed by the Suffolk Wildlife Trust. Most of the Ling is markedly acidic, but one or two small basic areas occur where the underlying chalk comes to the surface. The verges of the roads which cross the Ling are also somewhat basic. Upon the acid parts were found *Danthonia decumbens* (Heath-grass), *Agrostis vinealis* (Brown Bent), *A. capillaris* (Common Bent), *Vulpia bromoides* (Squirreltail Fescue), *Aira praecox* (Early Hair-grass), *A. caryophyllea* (Silver Hair-grass) and *Nardus stricta* (Mat-grass) with *Festuca filiformis* (Fine-leaved Sheep's-fescue) dominant over large areas. Curiously we were unable to find *Festuca ovina* (Sheep's-fescue). The basic soils yielded *Koeleria macrantha* (Crested Hair-grass) and *Helictotrichon pratense* (Meadow Oat-grass), the latter somewhat grazed down by rabbits. An enormous tuft of *Carex divulsa* subsp. *leersii* (Grey Sedge) growing on the road verge was much admired.

In mid-afternoon the party moved on to Shelfanger Town Meadows (v.c. 27), a privately owned SSSI consisting of a series of damp meadows bisected by a stream fed by basic ground water. The meadows have not been fertilised and the long-established management regime consists of an annual late hay cut. SSSI status was initially granted largely because of the presence of *Persicaria bistorta* (Common Bistort) which is rare in East Anglia. However, in 2000 the site was discovered to contain immense populations of *Bromus commutatus* (Meadow Brome) and *B. racemosus* (Smooth Brome). It was for the presence of these that the Meadows were chosen for the third venue of the meeting. A surprise was the collapse of the *B. racemosus* population. Only two specimens were found after much searching, whereas thousands had been present in 2002. However, *B. commutatus* (both var. *commutatus* and var. *pubens* Wats.) was as abundant as ever and the differences separating the taxa noted. × *Festulolium loliaceum* (*F. pratensis* × *L. perenne*) (Hybrid Fescue) was an interesting additional find.

The day ended with a short visit to the leader's home where many grasses are cultivated. Those related to field discoveries were noted, together with a few British rarities including five species of *Ceratochloa* (Bromes), *Bromus lepidus* (Slender Soft-brome), *B. pseudosecalinus* (Smith's Brome) (from France), *B. interruptus* (Interrupted Brome), *Festuca longifolia* (Blue Fescue), *F. brevipila* (Hard Fescue), *F. heterophylla* (Various-leaved Fescue) and *Poa chaixii* (Broad-leaved Meadow-grass).

Salthouse (v.c. 27) on the north Norfolk coast was the single venue on the Sunday when up to five hours were devoted to the saltmarsh and shingle floras, (v.cc. 26 and 28 were not visited). Severe flooding has occurred in recent winters when the sea has broken through, resulting in the construction of an enormous protective shingle bank. An impressive display of *Glaucium flavum* (Yellow

Horned-poppy) was colonising its landward side. A population of depauperate *Anisantha diandra* led to a discussion of the dividing line if any between *A. diandra* and *A. rigida* (Ripgut Brome) and whether the latter really is a 'good' species.

An abundance of saltmarsh and shingle grasses was located obligingly near the car park, including *Puccinellia maritima* (Common Saltmarsh-grass), *P. distans* subsp. *distans* (Reflexed Saltmarsh-grass), *P. fasciculata* (Borrer's Saltmarsh-grass), *Hordeum marinum* (Sea Barley), *Catapodium marinum* (Sea Fern-grass), *Elytrigia atherica* (Sea Couch) and *Parapholis strigosa* (Hard-grass). As a consequence the afternoon circular walk became one of consolidation, for no new grasses were found, but *Ruppia* sp. (Tasselweed) in the dykes, *Carex extensa* (Long-bracted Sedge), *Ranunculus sardous* (Hairy Buttercup) and *Trifolium ornithopodioides* (Bird's-Foot Clover) on the shingle provided additional interest, as did the Avocets' nests we carefully skirted.

In all about fifty grass taxa from a variety of habitats were seen and discussed over the weekend, providing participants with a useful basis upon which to pursue further study of this important family.

Thanks are due to Mr Ben Scotting of the Suffolk Wildlife Trust for permission to collect specimens for study at Mellis Common and Wortham Ling and to Mr W.J. Butler of Shelfanger Hall for granting access to Shelfanger Town Meadows. The Society is also grateful to Mrs A. Dentith (Mellis), Mr W.J. Butler (Shelfanger) and Mr J.M. Gwynn (Roydon) for allowing the parking of cars on private land.

ARTHUR COPPING

WYE DALE & CHEE DALE, DERBYSHIRE (v.c. 57) 3rd July

The day was dry and warm but cloudy and 11 members attended the meeting in Wyedale/Cheedale. Near the car park, members were shown a couple of Hieracia — *Hieracium grandidens* and *H. cymbifolium* — and then we set off down the dale following the River Wye into the limestone grassland of Cheedale and then on to the disused railway now very popular with walkers known as the Monsal Trail. The star in Wyedale was *Draba incana* (Hoary Whitlowgrass) and this we found in two sites. It was in full flower but the twisted fruits were not showing, whereas the wavy pods of *Hippocrepis comosa* (Horseshoe Vetch) were looking good. The grasses were at their best with a good many to look at and discuss the different characteristics; they included *Trisetum flavescens* (Yellow Oat-grass), *Helictotrichon pratense* and *H. pubescens* (Meadow Oat-grass and Downy Oat-grass respectively). On a steep banking there was a good patch of *Polemonium caeruleum* (Jacob's-ladder) but the habitat did not deter the photographers amongst us. On scree by the river the skeletons of *Hornungia petraea* (Hutchinsia) could be seen, this having flowered during April. *Geranium sanguineum* (Bloody Crane's-bill) was in profusion on the banks much increased from previous years. *Polystichum setiferum*, *P. aculeatum* (Soft and Hard Shield-fern) and *Gymnocarpium robertianum* (Limestone Fern) were amongst the ferns we saw. On our return *Cirsium heterophyllum* (Melancholy Thistle) was standing majestic by the river's edge. There was a little time left so some members accompanied me to Miller's Dale Station and along the track for *Pyrola minor* (Common Wintergreen). The station platform was an array of colour with so many plants, but in particular *Linaria repens* (Pale Toadflax) was something special to some members, growing out of the stonework. Members expressed their thanks and a good day was had by all.

JULIE CLARK

RUBUS WEEKEND, SOUTH HAMPSHIRE (v.c. 11) 11th-13th July

The fifth time since 1975 that one or other of Hampshire's vice-counties has played host to a BSBI field meeting expressly for the study of brambles, this was the first of these occasions to extend over more than one day. A whole weekend has meanwhile become traditional for the now annual get-togethers of the small group of *Rubus* specialists, but as such a prolonged immersion seemed unlikely to appeal to the majority of those with a less developed interest in the genus, it was decided to devote the Saturday to meeting the needs of the latter more particularly. Southampton Common, a

well-wooded large urban oasis, again suggested itself for that. In the words of the report on the 1976 meeting held there, this was on account of 'its combination of accessibility and richness (in bramble terms it is the Putney Heath of Wessex), and because in a normal year the plants . . . tend to be exceptionally far advanced, affording the maximum opportunity of seeing and learning some of the species right at the start of the season.' This time, however, the Common unfortunately proved to be even more advanced than usual (as in Britain as a whole in 2003). Most species were already past their best and one or two had even shed their petals more or less entirely, thereby rendering them effectively unrecognisable for the novice.

In all, 14 members and 9 guests attended on at least one of the three days. Although the largest contingent was from Hampshire and the Isle of Wight, two of those new to *Rubus* travelled from as far away as Newcastle upon Tyne and Somerset, impressively. One of the guests came to take photographs of representative bramble species for a forthcoming publication, while two others, engaged on a major Lancaster University/Natural History Museum research project, were present, by special invitation, to fill themselves in on how specialists in one of the more esoteric corners of natural history such as this go about passing on their expertise. This must be the first time in the Society's history that one of its meetings has itself been the subject of study, simultaneously.

The weekend opened with the now-customary stroll of an hour or so on the Friday evening, for which a wood on the outskirts of Hiltingbury, between Southampton and Winchester, had been chosen. This holds what are believed to be Britain's westernmost population of *R. erythrops* on the one hand and the largest easternmost one of *R. melanodermis* on the other, nicely exemplifying the overlap in Hampshire of the south-eastern and the south-western *Rubus* florulas, which results in its having a larger number of species than any other county. The dozen enthusiasts who came also saw a representative selection of the woodland brambles of the region and got their eye in on several of its more prominent ones that have yet to qualify for, or at least yet receive, a scientific name in place of a serial number.

Perfect weather continued throughout the succeeding two days. The tour of Southampton Common opened with an introductory talk by the Leader for those more or less new to *Rubus*, after which the south margin and the especially rich south-west corner were covered before a return to our starting-point for lunch (a more conveniently sited tavern having inconsiderately closed for reconversion shortly before the meeting). A mainly rather brisk walk to see as many as possible of the rest of the 50 named species already on record for the Common took up the afternoon. In the event nine of those escaped us (though some had probably been merely ephemeral), but in compensation no fewer than seven additional ones were found, most notably the strongly western *R. briggsianus*, a New Forest rarity, and a regional endemic of heathland, *R. curvispinosus*, incongruously wreathing a grave in the old, overgrown cemetery. The supposedly long-extinct *R. percrispus* was also rediscovered, though, offsetting that, *R. sempernitens* had regretfully to be deleted as apparently an error. Of seven further brambles widespread on the Common but so far without a name, five were encountered and demonstrated as well. The day concluded with a buffet supper in Winchester for those staying on for the following day.

A much reduced party met on the Sunday for a wide sweep by car of a number of select sites in the Forest of Bere, which occupies much of the eastern half of vice-county 11, an area almost wholly neglected by *Rubus* specialists until the last 30 years. Three recent additions to the British list, *R. anglobelgicus*, *R. caesarius* and *R. campaniensis*, were the principal showpieces, but another national rarity, *R. angloserpens*, was also inspected, while attention was drawn at two points to 'Forest of Bere *salteri*', the unnamed member of Series *Sylvatici* whose range neatly delimits the one-time boundary of this now much-fragmented great stretch of oakwood. After that a long drive up to the district west of Alton — and a trespass into vice-county 12 — enabled another outstanding Hampshire rarity, *R. informifolius*, to be seen. Otherwise restricted to the West Midlands, this presumably owes its presence to the attractiveness of this rather isolated plateau of gravel to' birds on passage from there. Though Chawton Park Wood, which, it was alone possible to visit in the time available, has only a single patch (usefully intermixed with *R. scaber*), its adjacent 'twin', Bushyleaze Wood, holds considerably more of it.

Though two or three further sites of interest in that same area were down on the programme as potential candidates for visits, it was by then late afternoon and everyone had had their fill. Just as we were about to go our separate ways, however, a second record for v.c. 12 was spotted in the shape of *R. hindii*. An energetic two days was thus able to come to an end in fitting style.

DAVID ALLEN

SHARESHILL, STAFFORDSHIRE (v.c. 39) 12th & 13th July

A total of fifteen members assembled at a rather insalubrious lay-by on the Saturday morning. Only two were Staffordshire residents, the others having travelled from six other counties. They divided into six groups to record in tetrads: all in SJ90.

Lactuca virosa (Great Lettuce) continues its march northwards through Staffs., being found both near to Shareshill and also in the vicinity of Coven. Another increasing taxon is *Filago minima* (Small Cudweed), found near Essington. It was recorded from three sites prior to 1970, another three during the period 1970–1994 and a further seventeen thereafter. There are many roadworks associated with the construction of the new Toll Motorway and one of these involves diverting the A460 at Laney Green. A disturbed verge there had a new record for v.c. 39 in the form of much *Polygonum rurivagum* (Cornfield Knotgrass) together with a little *Ranunculus sardous* (Hairy Buttercup). *Rosa* × *dumetorum* (*R. canina* × *R obtusifolia*) and *Oenothera cambrica* (Small-flowered Evening-primrose) were alongside the same road. *Brachypodium pinnatum* (Tor-grass) is very rare in this v.c., but was discovered in the adjacent tetrad to the west. *Potentilla recta* (Sulphur Cinquefoil) and *Lepidium latifolium* (Dittander) were particularly good records near Oxley, whilst *L. campestre* (Field Pepperwort) was at a minor road junction close to Featherstone Prison.

The party had reduced in number, to twelve, on the Sunday. Five groups recorded in five further tetrads: three more in SJ90, together with SK00G and SJ91K. The last of these contained a first siting for 73 years of *Bromus secalinus* (Rye Brome) in a field gateway, near Hatherton. E.S. Edees' 1972 *Flora* stated that *Ononis repens* (Common Restharrow) is 'frequent on dry grassy roadsides' in Staffordshire, but this is no longer the case. However, large quantities were on a disused railway line at Pelsall. There is relatively little boat traffic in the canals of the Black Country and surrounding area and this is demonstrated by the richness of their flora. *Alisma lanceolatum* (Narrow-leaved Water-plantain), *Butomus umbellatus* (Flowering-rush), *Berula erecta* (Lesser Water-parsnip), *Lemna gibba* (Fat Duckweed), *Hippuris vulgaris* (Mare's-tail), *Potamogeton crispus*, *P. friesii*, *P. pectinatus* and *P. perfoliatus* (Curled, Flat-stalked, Fennel and Perfoliate Pondweeds) were all west of Walsall. *P. pusillus* (Lesser Pondweed) was in another tetrad near Landywood. Wedge's Mill (SJ90U) had the biggest total of the weekend with 294 taxa, including *P. lucens* (Shining Potamogeton) and another new record for v.c. 39 in *Phalaris paradoxa* (Awned Canary-grass).

This was the fifth of such meetings held in the vice-county in successive years and resulted in 2,350 new post-1994 tetrad records.

JOHN HAWKSFORD

ISLE OF BUTE (v.c. 100) 11th-13th July

Six members met at the Bute Museum on Friday evening, where Angus Hannah introduced them to the Bute flora project (which aims to record the island in 116 districts) and filled in some background on the local climate, geology, history, economy and flora. Two further BSBI members and a local BNHS member joined the party next morning to explore the shoreline of schist south of Ettrick Bay, beginning with a small saltmarsh. As well as the usual things, this had a good colony of *Carex extensa* (Long-bracted Sedge) and some puzzling *Atriplex* taxa (Oraches), among which Michael Braithwaite identified *Atriplex prostrata* × *A. glabriuscula* (later confirmed by J. Akeroyd). It was too early in the season to determine many of the plants. The adjacent foreshore yielded *Carduus crispus* (Welted Thistle), *Ranunculus sceleratus* (Celery-leaved Buttercup), *Catabrosa aquatica* (Whorl-grass), *Festuca arundinacea* (Tall Fescue) and *Sedum acre* (Biting Stonecrop). On the raised beach *Iridetum*

and *Phragmitetum* were interspersed with wet heath and moderately acidic but base-rich bog. The latter contained *Carum verticillatum* (Whorled Caraway), *Veronica scutellata* (Marsh Speedwell), *Scutellaria minor* (Lesser Skullcap), *Drosera rotundifolia* (Round-leaved Sundew), *Pinguicula lusitanica* (Pale Butterwort), *Hypericum elodes* (Marsh St John's-wort), *Eleocharis multicaulis* (Many-stalked Spike-rush), *Eriophorum angustifolium* (Common Cottongrass) and *Carex echinata* (Star Sedge), while less acidic areas had *Oenanthe crocata* (Hemlock Water-dropwort) and *O. lachenalii* (Parsley Water-dropwort), *Potentilla palustris* (Marsh Cinquefoil), *Triglochin palustre* (Marsh Arrow-grass), *Lycopus europaeus* (Gipsywort), *Crepis paludosa* (Marsh Hawk's-beard) and *Carex pulicaris*, *C. hostiana* and *C. dioica* (Flea, Tawny and Dioecious Sedges). Bute's largest wild *Osmunda regalis* (Royal Fern) in wet willow scrub just above the bog was left unvisited after the (temporary) loss of some wellies. On drier sections of the fossil cliff we found *Antennaria dioica* (Mountain Everlasting), *Galium odoratum* (Woodruff), *Pilosella officinarum* (Mouse-ear Hawkweed), *Solidago virgaurea* (Goldenrod) and *Phegopteris connectilis* (Beech Fern). Lunch was taken on the cliff-top, watching Gannets fishing. Michael determined a specimen from the bog as *Carex* × *fulva* (*C. hostiana* × *C. viridula*)(a hybrid sedge). The morning's total was 214 species, not bad for one field and a short strip of shoreline.

The group then drove two miles to Straad to tackle the raised beach from the other end. An Iris bed contained *Berula erecta* (Lesser Water-parsnip, its only known Bute site), *Sparganium erectum* (Branched Bur-reed) and *Epilobium parviflorum* (Hoary Willowherb). We then crossed the only extensive saltmarsh on the island, where *Spergularia media* (Greater Sea-spurrey) and *S. marina* (Lesser Sea-spurrey) grew conveniently together, along with *Salicornia* agg. (Glasswort), *Suaeda maritima* (Annual Sea-blite), *Samolus valerandi* (Brookweed) and *Bolboschoenus maritimus* (Sea Club-rush). A breather taken where rock outcropped among short turf produced the day's most exciting find, a small colony of *Ophioglossum* (Adders-tongue), last recorded on Bute by James Robertson in 1768. Despite the habitat and small stature of the plants, and some arguably paired leaves suggesting *O. azoricum*, it was agreed that the number of sporangia (up to 18) was too large, and *O. vulgatum* was recorded. A ditch on the raised beach held a large population of *Baldellia ranunculoides* (Lesser Water-plantain) and *Eleogiton fluitans* (Floating Club-rush), while *Scutellaria minor* (Lesser Skullcap) was abundant in adjacent wet heath. *Isolepis setacea* (Bristle Club-rush) and *Pimpinella saxifraga* (Burnet-saxifrage) were noted on the fossil cliff. A shortcut to the cars (led by M.B.) through a very muddy field took us past a colony of *Veronica*, which despite pale mauve flowers was judged to be *V. anagallis-aquatica* (Blue Water-speedwell). *V. catenata* (Pink Water-speedwell) is not recorded for the Clyde area.

A visit was then made to the restored Victorian fernery at Ascog, which the owners had kindly agreed to keep open beyond usual hours. The structure itself and the collection of ferns from around the world were admired, as well as the interesting garden. Later, divested of adherent bog, the party reassembled for a convivial meal in a local hotel.

Next morning in pleasant sunshine we met at Dunagoil in the southwest of the island to follow the shoreline northward. Recording began when a dyke was passed south of Barr Point. The basaltic pavement was colourful with *Geranium sanguineum* (Bloody Crane's-bill), *Thymus polytrichus* (Wild Thyme), *Centaurium erythraea* (Common Centaury), and bushes of *Rosa mollis* s.s. (Soft Downy-rose), *R. pimpinellifolia* (Burnet Rose), and *R. rugosa* (Japanese Rose) in both white and cerise. Hollows where peaty soil gathered afforded interesting conjunctions, clumps of *Myrica gale* (Bog-myrtle) and *Molinia caerulea* (Purple Moor-grass) having *Mercurialis perennis* (Dog's Mercury) and *Allium ursinum* (Ramsons) growing in the runnels. Seawards, *Ligusticum scoticum* (Scots Lovage), *Asplenium marinum* (Sea Spleenwort) and *Sagina nodosa* (Knotted Pearlwort) were conspicuous in the crevices, while the rocks above had *Juniperus communis* (Common Juniper), *Umbilicus rupestris* (Navelwort), *Anthyllis vulneraria* (Kidney Vetch), and *Sagina subulata* (Heath Pearlwort). Moister spots had *Orchis mascula* (Early-purple Orchid) in fruit, *Dactylorhiza purpurella* (Northern Marsh-orchid) and *Parnassia palustris* (Grass-of-Parnassus), with *Anagallis tenella* (Bog Pimpernel) adding patches of pink. Noteworthy was *Lathyrus linifolius* (Bitter-vetch), another species not recorded on Bute since 1768. Both rare in the vice-county, *Helictotrichon pratense* (Meadow

Oat-grass) and *Koeleria macrantha* (Crested Hair-grass) were growing in proximity. Lunch was enjoyed at Barr Point, with a splendid backdrop of Arran mountains, and enlivened by an abundance of butterflies.

Round the point, Old Red Sandstone emerged from the overlying basalt to yield a sandy beach at Lubas Bay, backed by a field and small marsh with *Phragmites australis* (Common Reed), *Hypericum tetrapterum* (Square-stalked St John's-wort), *Menyanthes trifoliata* (Bogbean) and *Eleocharis quinqueflora* (Few-flowered Spike-rush). On the beach was a splendid example of *Polygonum oxyspermum* subsp. *raii* (Ray's Knotgrass), along with *Erodium cicutarium* (Common Stork's-bill), *Honckenya peploides* (Sea Sandwort) and *Catabrosa aquatica* (Whorl-grass). From nearby scrub came a fine specimen of *Carex laevigata* (Smooth-stalked Sedge), allowing comparison with *C. binervis* (Green-ribbed Sedge), *C. distans* (Distant Sedge) and *C. hostiana* (Tawny Sedge), all observed earlier. This brought the day's tally to 19 sedges.

Volcanic rock returned below Dunstrone, and *Polygala vulgaris* (Common Milkwort), rare in Bute, was found before recording ceased at the headland. An additional (optional) bog was eschewed, despite a promise of Butterfly-orchids, and return to the cars was by the road, reached not without difficulty by those who followed M.B. up an innocent looking slope of *Molinia* tussocks laced with brambles. Species count for the day was 248, very satisfactory for less than a mile of shore.

Sincere thanks to all who attended an enjoyable and instructive meet, especially Michael Braithwaite who undertook the recorder's job on both days, and Edna Stewart who also recorded on Saturday.

ANGUS HANNAH

NEW FOREST & ADJACENT COAST, S. HANTS (v.c. 11) 19th-20th & 26th-27th July

The prospect of a visit to the New Forest proved so popular that this meeting was oversubscribed, and to avoid disappointments a duplicate was held the following weekend, covering approximately the same ground. 15 members and friends attended the first weekend and a further 10 the second. The first weekend was warm and sunny but the following Saturday started rather drizzly and finished very wet. By then, however, the party had seen most of what was on offer and was in irrepressible good cheer. Their Sunday was mostly fine and warm but the itinerary had to be modified due to the presence of a bird new to Britain, and innumerable 'twitchers', at Lower Pennington.

Each Saturday we met at Beaulieu to see *Eleocharis parvula* (Dwarf Spike-rush) growing round the shore of the Mill Pool; plenty of small plants were located, but most were immature. A quick visit to the church car park yielded *Clinopodium ascendens* (Common Calamint) and *Papaver dubium* subsp. *lecoqii* (Yellow-juiced Poppy) growing on the old walls, *Malva neglecta* (Dwarf Mallow) along the roadside and a few small clumps of *Erodium moschatum* (Musk Stork's-bill), found by Colin Pope on the pony-nibbled verge opposite. The shore of the estuary below the Mill Pool produced a few maritime species, including *Carex extensa* (Long-bracted Sedge).

The main business of each Saturday morning was around Hatchet Pond, the specialities of which resulted in a very late picnic lunch for everyone. Floating in the shallows of the Pond itself were quantities of *Eleocharis acicularis* (Needle Spike-rush) the identity of which was confirmed by nipping through the stem to reveal the three wide gas channels. *Elatine hexandra* (Six-stamened Waterwort), some with flowers and fruits, accompanied it, with rooted *Littorella uniflora* (Shoreweed) beneath.

The smaller, gravel-bottomed ponds nearby contained things of questionable origin, e.g., *Nymphaea alba* (White Water-lily), *Nymphoides peltata* (Fringed Water-lily) and *Pontederia cordata* (Pickerelweed), as well as *Typha angustifolia* (Lesser Bulrush), *Eleocharis palustris* (Common Spike-rush) and *Phragmites australis* (Common Reed). The muddy shores produced *Carex viridula* subsp. *oedocarpa*, nearly over, and the far more interesting subsp. *viridula* (Common & Small-fruited Yellow Sedges), in much fresher condition, with good flowers as well as the characteristically shaped fruits. Here also *Radiola linoides* (Allseed) and *Illecebrum verticillatum* (Coral-necklace) were plentiful. The areas of dry heath were not very species-rich, but we saw several clumps of *Cuscuta epithymum* (Dodder) on Heather.

On the other hand, the boggy flushes running down into the Pond were of great interest and yielded many of the species which people had come from afar to see. There were extensive sheets of *Rhynchospora alba* (White Beak-sedge) in excellent flower, *Eleocharis quinqueflora* amongst the ubiquitous *E. multicaulis* (Few-flowered & Many-stalked Club-rushes), the two common species of *Drosera* (Sundew), *Pinguicula lusitanica* (Pale Butterwort) and flowering *Utricularia minor* (Lesser Bladderwort). Two enormous fertile *Osmunda regalis* (Royal Fern) awaited us up one of the wooded gullies, while there were sheets of fertile *Pilularia globulifera* (Pillwort) and extensive clumps of *Ludwigia palustris* (Hampshire-purslane) close to the open water. Further colour was provided by *Anagallis tenella* (Bog Pimpernel), *Baldellia ranunculoides* (Lesser Water-plantain), *Hypericum elodes* (Marsh St John's-wort) and *Narthecium ossifragum* (Bog Asphodel) and fragrance by *Myrica gale* (Bog-myrtle). One small colony of *Hammarbya paludosa* (Bog Orchid) was located and another found near Crockford Bridge during the first afternoon.

The once-rich small pond on the opposite side of the road was given a cursory glance since it was overrun by *Crassula helmsii* (New Zealand Pigmyweed), now a pest in most ponds in the Forest. *Ludwigia* was battling to contain it and some of the marginals such as *Isolepis cernua* and *I. setacea* (Slender & Bristle Club-rushes) were found to survive. There was a veritable sward of *Galium constrictum* (Slender Marsh-bedstraw) in wet ground nearby and *Thymus pulegioides* (Large Thyme) on a close-cropped verge.

After a very late picnic we moved down the road to another New Forest hot-spot, Crockford Bridge. The old marl-pits, treacherous to the unwary, had *Ranunculus lingua* (Greater Spearwort) and *Typha angustifolia* beside the open water and *Samolus valerandi* (Brookweed) and much else colonising the muddy surrounds. On the second visit, two small colonies of *Sparganium natans* (Least Bur-reed) were seen, in quite deep shade. Yelps of joy attended the discovery of some hundreds of *Cicendia filiformis* (Yellow Centaury) in damp depressions near the car park. The extensive bog to the north-west had an array of plants similar to those at Hatchet Pond but with the addition of *Schoenus nigricans* (Black Bog-rush). On 26th two patches of *Rhynchospora fusca* (Brown Beak-sedge) were located. We went finally to Pilley Pond, where *Mentha pulegium* (Pennyroyal) continues to thrive along with *Illecebrum*, but with the sinister threat to their survival posed by the dreaded *Crassula* which, having filled the shallow pond, was advancing up the shore.

On Sunday 20 July we met and made for the coast. Following a previous *recce* of the area we began at Keyhaven, accompanied by Elizabeth Young, whose knowledge of the local flora was invaluable. Soon we had paid respects to *Carex extensa*, *C. distans* (Distant Sedge), *Alopecurus bulbosus* (Bulbous Foxtail), *Lotus glaber* (Narrow-leaved Bird's-foot-trefoil), *Oenanthe lachenalii* (Parsley Water-dropwort) and *Calystegia sepium* subsp. *roseata* (Pink Hedge Bindweed) in its most easterly locality.

Then we moved on to Lower Pennington. Mercifully, the Mongolian Lesser Sandpiper did not appear until the 22nd, or we should never have found a parking place. A pleasant time was had by all sorting out *Ruppia* spp. (Tasselweeds) fished from the ditches inside the sea wall and piecing together stages in development from young, ensheathed inflorescences to ripe fruits. Much of the vegetation of the fields and sea wall had dried up, but most of the species expected in July were seen and a small, sandy area to seaward of the wall gave us *Atriplex laciniata*, *A. littoralis*, *A.* c.f. *glabriuscula* (Frosted, Grass-leaved & Babington's Orache), *Cakile maritima* (Sea Rocket), *Crambe maritima* (Sea-kale) and *Suaeda maritima* (Annual Sea-blite). At the edge of the salterns, *Centaurium pulchellum* (Lesser Centaury) was much commoner than in the Forest.

Finally, to the saline boating lake at Normandy, where Pete Selby's grapnel uprooted *Zostera marina* (Eelgrass) and brought enough ashore for all to admire before it was returned to the depths. *Ruppia* spp. was here also, and a few more land plants were added to the day's tally before we parted company.

On 27th, we decided to assemble at the west end of Keyhaven and to explore the coastland as far east as the *Calystegia*, which everyone wanted to see. We were joined by the Warden, Pete Durnell, whose knowledge of the historical background of the area was greatly appreciated. At the Hurst Bank end we added several species previously missed, including *Catapodium marinum* (Sea Fern-grass), *Parapholis strigosa* (Hard-grass), *Puccinellia distans* (Reflexed Saltmarsh-grass), masses of *Picris*

hieracioides (Hawkweed Oxtongue) and some flowering *Allium vineale* (Wild Onion). For the afternoon we moved to another productive New Forest locality around Setley. Among the specialities here were *Crassula tillaea* (Mossy Stonecrop), *Plagiobothrys scouleri* (White Forget-me-not) and *Mentha pulegium* (in excellent flower) in depressions on the Plain, and *Hottonia palustris* (Water-violet) in the old marl-pit. Finally, Setley Pond itself was seen to contain a little *Sagittaria latifolia* (Duck-potato), surviving despite previous depredations by cattle.

During the first weekend, 233 taxa were recorded on the first day and 174 on the coast on Sunday. The rain and Sand Plover conspired to prevent new records being achieved the following weekend but much of interest was seen and plenty of additional species were found.

BARRY GOATER

STOP PRESS

MEDICKS

(Lament of an Amateur Botanist on Cyprus)

Medicago, medicago,
How we love to sit and argue
If the pod is smooth or hairy,
Like a tyre-tread says Mary,
Fresh or mouldy, coiled or clustered,
They will only get us flustered.
Medicago, medicago.

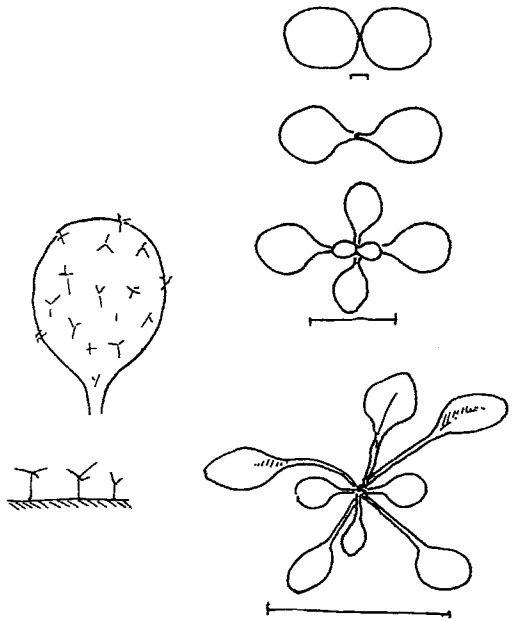
Medicago, medicago,
How to tell them, how should we know?
Illustrations in the flower book
Do not match how our fine plants look;
Blamey, Palaestina, Viney,
Show them far top flat or spiny.
Medicago, medicago.

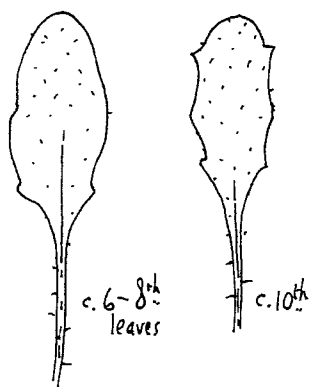
Medicago, medicago,
Why do you perplex us all so?
Minima or littoralis?
(I'm sure I've already seen this)
Yiannis says it's coronata,
But his mind he may change later . . .
Medicago, medicago.

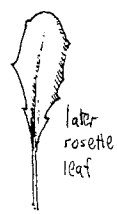
Medicago, medicago,
Call for a complete embargo.
Microscope and Meikle's key
Should determine accurately.
While Sir works for many an hour
We can have a brandy-sour.
Medicago, medicago.

Medicago, medicago,
Sing them out appassionato:-
Orbicularis, circinnata,
Disciformis, scutellata,
Polymorpha, truncatula,
Denticulata and rotata
– we have made a whole cantata –
Intertexta, praecox.

SUE ATKINS, c/o Summerfield Books, Main Street, Brough, Cumbria CA17 4AX







Cots. 2×1·5mm, glabrous

1st true leaves have regular stellate or forked hairs (± a few simple hairs), mainly on upper surface. A few long pointed hairs on petiole.
Cots. persistent, still green with 10+ leaves above them.

Arabidopsis thaliana seedlings del. S. Evans © 2003
(See *BSBI News* **83**: 68 & **90**: 60 for a more detailed explanation of these drawings.)

BOTANICAL CROSSWORD NO. 3

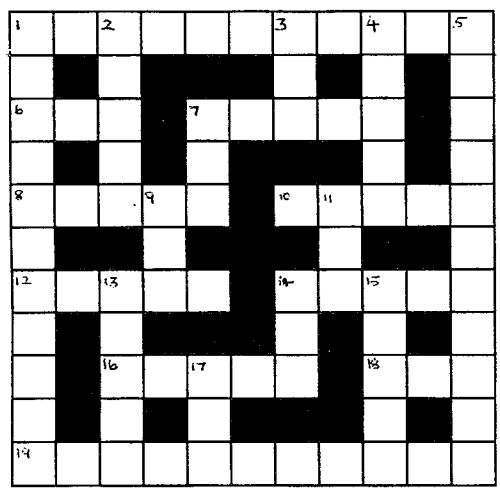
by Cruciada

ACROSS

1. College cartoon character in charge, taking many forms (11)
6. The cat sat on the ground cover (3)
7. Off on a field trip? You'll need a guide to the local terrain . . . (1,1,3)
8. See *14 down*
10. . . . and a guide to the local plants (5)
12. In frock a Scottish daisy (5)
14. Unfold pleat to show showy part of flower (5)
16. A passage to the home of the banyan, e.g. (5)
18. Botanical hitchhiker's northern accent not right (3)
19. As a rule, grip assorted pinks by the sea (11)

DOWN

1. South American plains dweller lavishes care on the lawn, by the sound of it (6, 5)
2. Botanical language by stern account (5)
3. Peculiar island nature reserve (3)
4. Horse (as in horse-chestnut) wallowing in glorious mud (5)
5. Consider these: not of the field but of the valley (11)
7. Eggs discovered as I undo vasculum (3)
9. Berry for bears? (3)
11. General microhabitat, perhaps, on the sheltered side (3)
13. Selborne's luminary being candid (5)
14, *8 ac.* Where e'er you walk, and whenever too, this little grass may be near to you (3,5)
15. Sounding brass in underground foodstore (5)
17. Do this for 15s and victory (3)



[This is another of the contributions 'lost' last year, see Editorial p. 7]

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