

BSBI Recorder

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Newsletter for BSBI County Recorders

February 2005



R.M. Stokes



A.J. Lockton

Debates on the Wild Gladiolus. Is it a native, an archaeophyte or a neophyte? Is it even a discrete taxon, sometimes called *Gladiolus illyricus* ssp. *britannicus*? Left: *Gladiolus illyricus* in the New Forest; right: the same species (apparently) in Spain.

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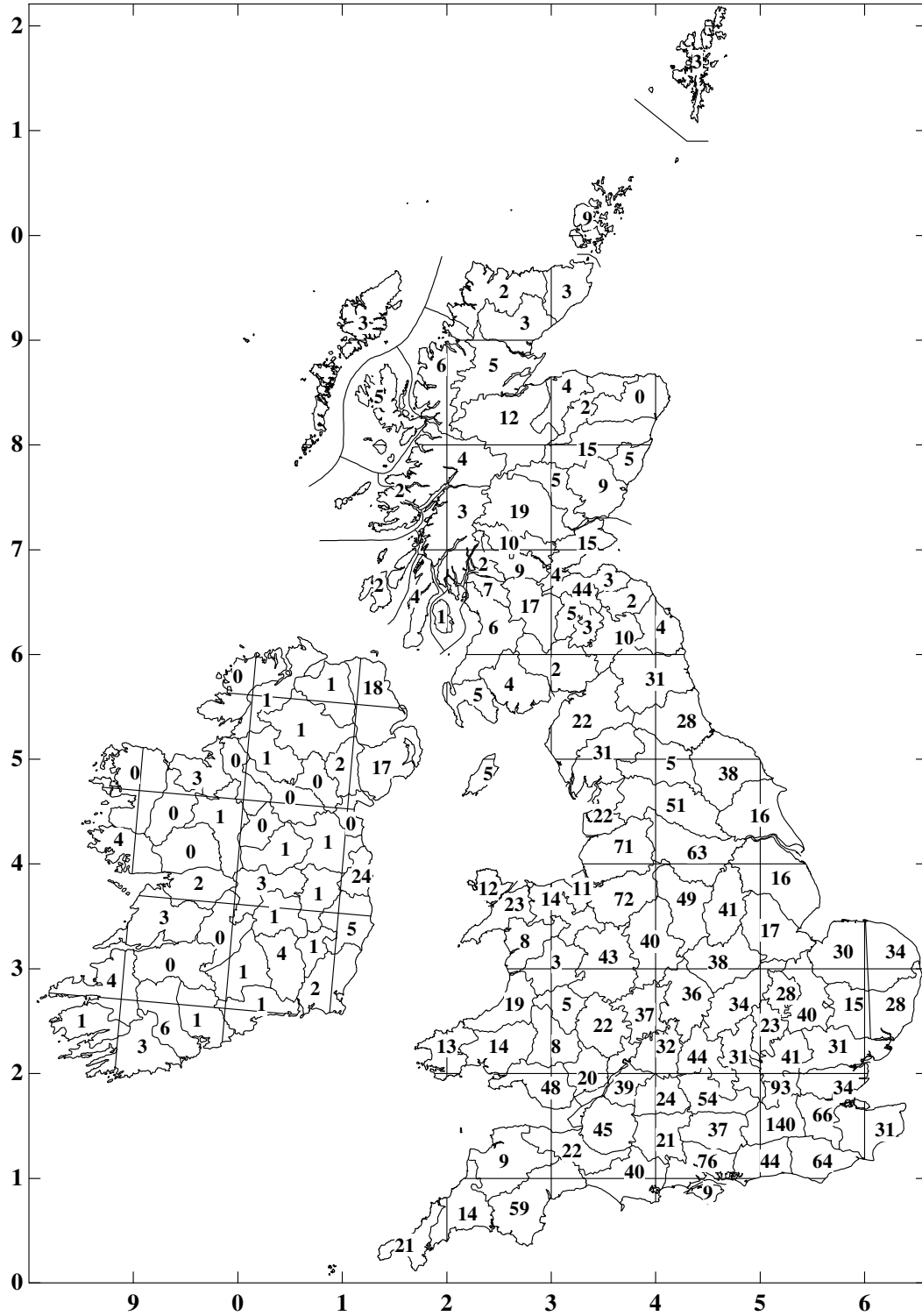
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The Botanical Society of the British Isles

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Number of members in each vice county...

Gwynn Ellis



Summary

Alex Lockton

County Recorders may be surprised by the contents of this newsletter. We are not asking you to do anything in 2005. Honestly! Well, hardly anything... Just get on with recording your counties, and any other interesting projects that you are involved in. There are lots of things we hope to tempt you to join in with, or take advantage of, but there is nothing of any significance that we need you to do. This newsletter reports some of the things that are going on in the society, including a few reports on scientific activities. Please bear in mind that the Science & Research Committee awards ten grants, each of about £500, for small projects like the ones described here, and that these grants are open to v.c. recorders (but, I'm afraid, only for scientific projects, not for general recording expenses).

Here is a summary of key activities for the year:-

- Come along to the Recorders' Conference, to be held in Shrewsbury on the 16th-18th September 2005. We shall be writing presently with booking details and more information about the programme but please pencil this date into your diaries.
- Get computerised with Mapmate. Although the fieldwork part of the Local Change project is now over, Bob Ellis will continue to work for the Society for the whole of 2005, and hopefully will continue in a part-time capacity after that. Part of his responsibility is still to help v.c. recorders with Mapmate, so do take advantage of the offer while it lasts. North of the border, we now have Jim McIntosh to provide support to recorders in both computers and fieldwork.
- Send records in for Watsonia. These detailed, published records are still a good source of top quality data. In our modern times it seems fair to predict that there will be increasing pressure to cease producing this part of the journal, but while it is still here it is a good way to get your recorders' names into print and make a permanent contribution to human knowledge.
- Undertake some rare plant recording, either for your own County Rare Plant Register or for the Threatened Plants Database. County Recorders are welcome to a £500 contribution towards the costs of their CRPR if they can get it done before the end of the year. We will be encouraging the recording of taxa not well covered by the Atlas, including hybrids, subspecies and critical taxa over the next few years.
- Finally, if you're keen, take part in our new Atlas Updating Project. The aim is to correct the existing Atlas maps and to provide a mechanism for adding/updating the 10km scale maps for all species. If you use Mapmate, this could be no effort to you at all. If you have special knowledge of any difficult taxonomic group, you might like to take responsibility for the maps of those species and work with us to produce up-to-date national distribution maps. We will keep you informed of developments...

Resources for County Recorders

David Pearman

- Access to the Vascular Plants Database on the NBN Gateway. This is easy now. You have to register as a user of the NBN (www.searchnbn.net) and then, after you have done that, apply for access to the VPDB. Our administrator is Alex Lockton, who can advise on the registration process. It's quite a good way to find out the details behind a dot in the New Atlas.
- Access to the Local Change data. Do not forget that there is a web site for this, which will produce the lost & found analyses for you, for any tetrad in Britain (not Ireland, of course). It is accessible via our web site.
- The Vice County Census Catalogue is available via the BSBI web site www.bsbi.org.uk. There is a link to it from our Home Page and then you can generate a list for your county or compare the species recorded in any county with those of its neighbours.
- The Records Submission table for *Watsonia* records is also available on the web site, as is the list of Altitudinal Limits and Arthur Chater's booklet on collecting voucher specimens.
- Our draft agreement with Local Records Centres is available as a Word document from me, Bob or Alex – please just ask. The key bottom line is an agreement that it is your (and our) data, to be used and acknowledged as such, and returned to us if computerized. The other vital part is sharing their records: do not sign agreements whereby other people's records are treated as confidential or too valuable to allow you to see. We shall post a finished document on the web site presently.
- Guidelines for v.c. recorders. All new recorders receive this document, but others may have lost theirs or forgotten about it. New copies are available from me, Bob or Alex. Important topics covered are suggestions on data management and procedures for succession within vice counties. An important point to remember is that it is the BSBI, not the retiring recorder, who appoints the successor, and although we will usually follow your advice, it is courteous to ask us first.
- Dealing with consultants. I promised this imminently in 2003 and it is still not ready! My approach is to let the LRCs deal with them. If I do supply information directly, I ask them for money for the BSBI, which means I am not bothered by the tax implications.
- Environmental Information Regulations. There is so much that is unclear at this moment in time. We do not even know if the BSBI is covered by the new regulations, but we think probably not. Our general impression is that it could be a good thing, as we have noticed it is getting more difficult every year to get hold of data that has been paid for at public expense. Although they are EU rules, the situation is different in each country (and do not even apply on the Isle of Man) so when things become clearer we will be able to provide better advice. For now, there seems little reason to worry – no-one has the right to demand access to a v.c. recorder's database.
- As far as resources go, do note that there are still a few grants still available for Global Positioning Systems for v.c. recorders or their active recorders. They are intended for use – it is not an honorarium for retired worthies, so if you do record, you can have one.
- An updated version of our *Guidelines for County Rare Plant Registers* will shortly be available from Bob Ellis. Do get in touch with him if you want a copy.

Atlas Updating Project

David Pearman, Michael Braithwaite, Bob Ellis & Alex Lockton

A useful exercise for Records Committee over the last year has been a review of our ambitions for data management. It started with a development plan written for the BSBI by Trevor James of the NBN, which raised some very important issues about the future direction and role of the society. To complement this, one of us (Michael Braithwaite) submitted an information strategy to Records Committee in the autumn which was universally approved.

The plan is – unsurprisingly, perhaps – to build on the most successful elements of the work of the Society, which are our local projects, local knowledge and the vice county recorder network. The society should act as a forum, energising and directing such projects and providing support in the form of taxonomic referees and checklists. To use the jargon, the BSBI is committed to a ‘bottom-up model’ of ‘curiosity-led’ scientific investigation.

To this end Mapmate has so far proved to be a great success. Increasing numbers of recorders are using it with good effect, and products such as County Rare Plant Registers are beginning to appear. The real test of any computer program is that people should be able to produce something worthwhile from it, and the forthcoming Berwickshire Rare Plant Register is perhaps the first solid proof that Mapmate really can deliver the goods.

Another achievement has been the Local Change project, and many members will be aware of the LC web site, which allows almost instant feedback to the recorders of their progress. It was set up by Pete Selby and Mark Yeates in 2003, and has been operated efficiently by Bob Ellis (with some help from Martin Rand) since then. Although LC is only a sample of a small proportion of tetrads, it has been a real test of the software and of new ways of recording. Debates have raged about the true value of the data collected during the Monitoring Scheme and Local Change, and we really will not know the answer until the current data has been analysed. But the immediate test of Local Change is how widely it has been adopted, and we are enormously grateful to everyone who has participated, especially those who have sent in data using Mapmate.

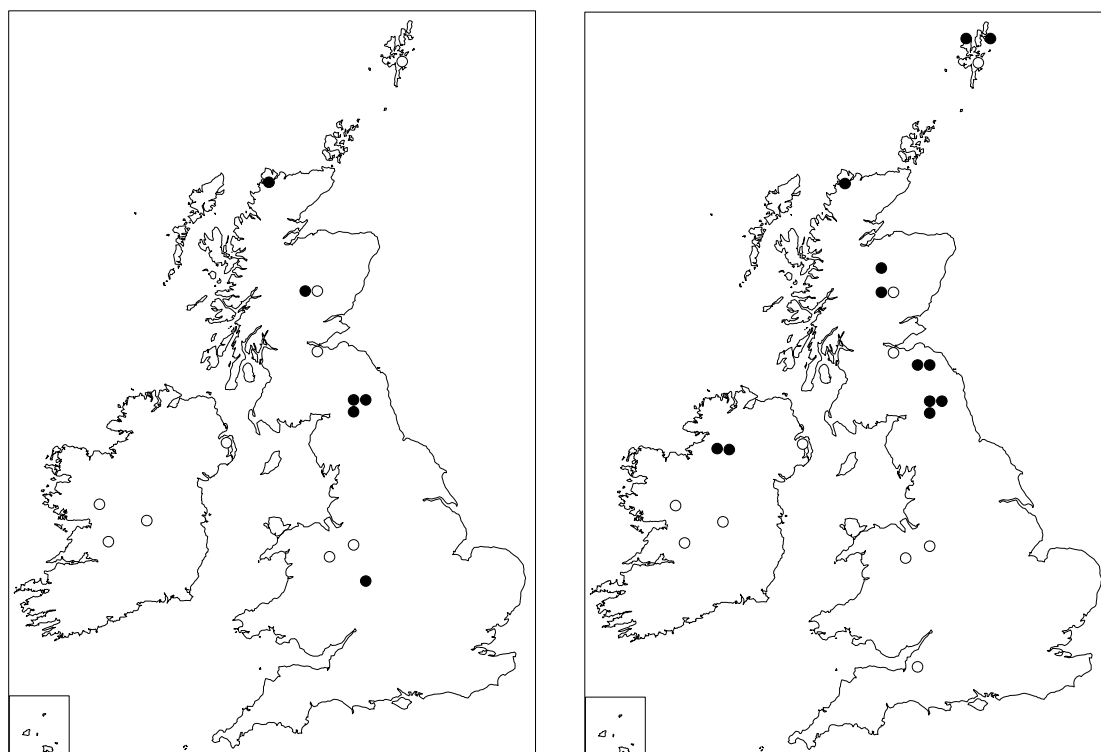
The next step is even more ambitious. The plan is to build on the Local Change project to launch a full Atlas Updating Project, giving post-2000 hectad maps of all species in Britain & Ireland. This is the primary purpose of any natural history society – to give a good and up-to-date overview of the distribution of species, and we feel that we are beginning to get slightly out of date, five years after the Atlas.

What we propose to do is to launch a new project along the following lines:-

- To create new, post-2000 hectad maps of all taxa in Britain & Ireland.
- To identify erroneous records and remove spurious dots from the maps.
- To make the new, corrected & updated maps available over the internet.
- To try to keep fairly even coverage, so the maps do not appear to show enormous declines in the abundance or range of species.

County recorders will be urged to send in their data on Mapmate, from which we will extract new hectad records. In return, the recorders will be able to see the distribution maps as they develop, giving more opportunity to spot errors or be alerted to new taxa spreading in their region. Those who use programs other than Mapmate will also be supported, but the updating process might not be so straightforward.

Northern Deergrass *Trichophorum cespitosum* subsp. *cespitosum*



Left: the Atlas 2000 map; **right:** the same map revised for 2004, with new records and the correction of one error. Note the dot that has gone from Wolverhampton and there are new ones appearing in the Somerset Levels, Scottish Borders, Easterness, Shetland and Ireland. Having access to updated maps will help v.c. recorders to be aware of new taxa recorded in their region.

One important long-term consequence of this proposal is that we will be handing over responsibility for each county to the county recorders, if they can handle it. Obviously we won't delete existing databases, and we will continue to compile central databases on threatened plants, critical taxa, and so forth, but the primary responsibility for getting the maps right will – if this process works – pass to the county recorders, and they will be charged with keeping full and accurate details of the records. It is only the 10km dot maps that will be made available nationally, through our web site and through the NBN Gateway. In some ways this sounds like a retrograde step, but given the vast amount of data now in existence, the curatorial role has to be divided up amongst many people in order to break it down into manageable pieces, and this is the only workable way to do it.

What should county recorders do?

Get computerised. We would like each v.c. recorder ultimately to be able to manage all the data for their county, whether it comes from BSBI surveys or from other organisations. They can then check all records and come up with accurate hectad maps of all species. This is, inevitably, an ongoing task, so there is nothing urgent or laborious to do in the immediate future. We will, however, need comprehensive coverage of Britain & Ireland, so we will be asking each v.c. recorder whether they are going to be in a position over the next few years to accomplish this task or not. For those who can't, we will have to make arrangements to get them help with computerisation.

New County Records

Mike Porter

Three years ago I took on the role of helping Gwynn Ellis to compile and edit Plant Records for Watsonia. This is one of many voluntary jobs in the Society, and it certainly makes one appreciate just how much is done by volunteers just for the ‘fun’ of it. My aim was to learn the ropes by helping Gwynn for a few years and then to take over completely when he retired from the job. However, on becoming Membership Secretary, Gwynn decided to stop, and I took charge rather sooner than expected. Compiling Plant Records is an extremely time-consuming task, which I nevertheless find absorbing and rewarding. It also keeps me up to date with botanical developments. I have always enjoyed visiting different parts of the British Isles and love the variety of landscapes and flora to be found in such a small area. Dealing with records from diverse parts of the country – from the shores of Eigg to the streets of Cambridge in the space of five minutes – gives me particular delight, a delight I felt when reading Plant Records in the past and which I am sure many people share. Equally, of course, it is only one side of Plant Records, the other being the necessity of keeping records up to date in as accurate and complete a way as possible.

One of the most difficult parts of the job, apart from the problem of avoiding mistakes in the compilation of the records – Kent numbers, grid references, finders’ initials, place names, reading recorders’ handwriting – is getting people to contribute. We never get records from more than about a quarter of all counties in any edition, and some counties have hardly ever sent in any. In Wales, Scotland and Ireland, of course, there are alternative publications for such records, which doubles the amount of work for the county recorders, and I can see why some are reluctant to send the records in twice. For Welsh VCRs this problem does not exist as Gwynn, having gathered together all the Welsh records, compiles them in a form which is compatible with the Plant Records database so that adding them to my list is simplicity itself. Regrettably, it is still not possible to extract automatically any new records from the Mapmate Hub, but even if it were, I doubt that they would be ready for publication without a good deal of checking first.

The system we currently use is to compile the data in an Excel table which is precisely formatted to the requirements for Watsonia (see below). There are various new features with which people might not be familiar. Firstly, you have to give a reason for inclusion (A-R in the table).

- A First records of all taxa (species, subspecies and hybrids) included in the VCCC, designated as native, archaeophyte, neophyte or casual.
- B First records since 1970 of the taxa above.
- C Records demonstrating the rediscovery of all taxa published as extinct in the VCCC or subsequently.
- D Newly reported definite extinctions.
- E Deletions from the VCCC (e.g. through the discovery of errors, the redetermination of specimens etc.) NB – only those errors affecting VCCC entry.
- R New 10km square records for Rare and Scarce plants, defined as those species in the New Atlas mapped in the British Isles in 100 10km squares or fewer. (See BSBI News 95, January 2004, 36-43).

Secondly, we need the Kent Number. For those who have long since lost track of the updates issued from Leicester, a good plan is to download the current checklist from the web site (www.bsbi.org.uk). This gives you the Kent numbers for everything, including new aliens. However, if there are problems, leave this section blank and I will endeavour to fill in the details.

Statuses are a source of endless controversy, so please just do your best with them. I would rather have your decision than have to make one myself – you have the local knowledge. The options open to you are native, archaeophyte, neophyte and casual. The same options are given at national and vice county level.

We need a locality name. Grid references should now be given to six-figures, i.e. AB123456. I don't require anything more accurate than that for publication. It would be nice not to receive coarser grid references for these important records but I realise that this is sometimes unavoidable.

Altitude is optional, though useful with upland species, but habitat is often of key importance in re-finding a plant as well as being of considerable intrinsic interest, so please provide this if possible. It should perhaps be obligatory to collect a voucher specimen for all records that are significant enough for publication, but this may not always be possible (for example, if you did not know about the record until too late; or if there are very few plants present). Also many herbaria are no longer able to take specimens – so there may be nowhere to store them. Please talk to Alex Lockton or Bob Ellis if you need help with herbaria, but do not send specimens to me as I am not in a position to store them or validate them (except *Carex* and *Calamagrostis* which I am always happy to receive for determination!).

-- Part of the Record Submission Table for Watsonia --

BSBI RECORD SUBMISSION FORM				
Rename this form for your county (e.g. borsetshire2005.xls) and send to catchall@mikesporter.co.uk				
A	First record of any new taxon to be included in the VCCC, designated as native, ar			
B	First record since 1970 of the taxa above			
C	Rediscovery of taxon published as extinct in VCCC (or subsequently)			
D	Newly reported definite extinction (not simply "not seen for ten years")			
E	Deletion from VCCC (through discovery of error, redetermination etc.)			
R	New 10km square for any Rare or Scarce species			
Reason	Kent number	Taxon	Status	V.C.Status
B	155/1.1	Typha latifolia	Native	Neophyte

At the moment, all records are being published in Watsonia promptly, i.e. within a year of my receiving them. Some county recorders have asked to have all new 10km records published, but this would be impossible. However, there are plans afoot to put these straight onto a new web site (note the article on the Atlas Updating Project above).

Please contact me if you would like a copy of the Records Submission Table. I can email it to you or you can download it from the BSBI web site. The best way to get in touch with me is by email (catchall@mikesporter.co.uk) but I don't mind being contacted by phone (016973 43086), preferably not before 10 am. My postal address is 5 West Avenue, Wigton, Cumbria CA7 9LG. I am happy to receive pink cards or any other form of record so long as it contains sufficient detail.

Please try to send me your records for 2004 (or for earlier years if they have not yet been published) in one form or another over the next month or two so that our database is kept up to date and Plant Records continues to provide a balanced picture of the changing flora of the British Isles. For my part I will do my utmost to compile and publish all suitable records within a year of receiving them. Please don't hesitate to get in touch if there are any problems.

Local Change

Bob Ellis

First and most important – a big thank you to all. The majority of the data is now on the BSBI hub and by the time you receive this, I hope it will all be here. If you have any outstanding data do please get it to me, one way or the other, no later than 11th February 2005.

Local Assessments and Checking the Data

(i) MapMate

If you have synchronised with the hub using MapMate, and if I haven't already done so, I will shortly be sending a summary of the data for your vice-county as it appears on the hub. I would be grateful if you would quickly check of the figures to make sure all the data has come through successfully.

If you have not already done so, Local Assessments should be submitted on spreadsheets.

These can be produced using the 'LC Record Card' or 'LC Lost and Found' query in MapMate. The method was described in Michael Braithwaite's article in the last Recorders Newsletter. The procedure for creating an assessment spreadsheet is repeated here:

- Use the MapMate User Query 'LC Record Card for a <2km square>' to generate a species list for the tetrad with 'Gains' and 'Losses'
- Copy to a spreadsheet
- Sort to bring the 'Gains' and 'Losses' together and discard the other taxa
- Add columns for 'Standard Reason' and 'Comment' (see page 12 of booklet)
- Annotate columns with your assessment of change

(ii) Data received on spreadsheet, by other electronic means or received on field cards etc. and entered here.

I will send Loss and Gain summaries for each tetrad. Any inconsistencies in the data should be apparent from these. Simply fill in the additional columns and return to me by post.

Ideally, I would like to receive these by the end of March 2005.

Route Maps

I would be grateful to receive copies of route maps. I will scan these and archive them, but do please keep copies yourselves. I would like to receive these before September 2005.

Case Studies

We would like to include some case studies of individual tetrads in the final report. If you would be willing to contribute one of these please let me know and I will let you have more details about what is envisaged.

Expenses

There is an allowance for recorder expenses in the budget for the Local Change. Please do submit a claim. The sort of things you might include are travel; internet set-up costs for transmitting data; photocopying; postage; any specific costs such as boat trips to islands. Claims up to £50 do not require vouchers, if exceptionally claims exceed this, the amount needs to be justified. Please submit claims relating to Local Change to the Treasurer by 28th February 2005 at the latest.

Annual Reports

David Pearman

We trialled these in 2003 and again in 2004. The vast majority of recorders complete them, and it has been really helpful to Records Committee and our officers, both paid and unpaid, in just getting a feel for what is going on at the grass-roots level. Some v.c. recorders send in their newsletters and the like, and they are fascinating reading – there is so much going on. Others (quite a few) remind us how few botanists there are in their patch. We do appreciate comments about how we can help and, as you can read below, most of these requests have been (fortuitously, perhaps...) fulfilled.

We have not had the time to remind those who did not submit reports to do so, but Records Committee re-affirmed that they would like us to. So please take a few minutes – even if there is little or nothing to report – to tell us that. We want to hear from and keep in touch with our volunteer network, especially in a changing time of more LRCs, more consultants, and more government initiatives and rules.

This year we are increasing the circulation of Recorder to start to include referees, who we would like to be more involved with the activities of the society and in recording the distribution of difficult taxa, and we would be very pleased to receive feedback forms from them as well. You should find a form and an SAE enclosed with the newsletter, or you can download it from the web site and email it to us.

County Roundup

Alex Lockton

As before, I have tried to summarise and extract items of topical interest, rather than list everything that everyone has done. I hope you find it readable...

In his report for v.c. 1, **West Cornwall**, Colin French describes his efforts to create a new version of Erica, his own software for botanical recording. The field of computer programs is as open as ever, and there is nothing that could be described as perfect, so it is not surprising that he is persisting with his own system. Mapmate has been a great success for many, and is the only software that the BSBI will be marketing in the near future, but it has its limitations. We don't have any objection to people writing their own software, or using any other system they like, as long as they can produce useful output.

Roger Smith and Bob Hodgson, in **Devon** (v.cc 3 & 4) both report on negotiations with the county records centre, which is another situation familiar to many recorders. As with the choice of computers, it is difficult to give advice that will apply to everyone. There are some local circumstances which are very

agreeable, and there is no reason not to go along with them. However, the overall situation seems to be that some LRCs, as they are at the moment, do not represent a very reliable long-term solution for storage or management of biological data, and they generally do not have sufficiently skilled staff or financial security. We would strongly recommend that any v.c. recorder should make sure they have a computer system of their own, with all their data on it. Otherwise they might find themselves unable to retrieve their own data if the funding dries up or the staff change.

In **Somerset**, Paul & Ian Green are slowly handing over the recording to new people, now that they have both left the county. Steve Parker has become joint recorder for v.c. 5 and Ian is still looking for someone to help with v.c. 6. Steve works for English Nature, which I think is a first, although in Scotland it is becoming quite common for Agency staff to take on recorderships. I have heard that some landowners find this relationship provocative, and think it is just another way for the government to get onto private land.

Sharon Pilkington has taken on the recordership for the whole of **Wiltshire**, v.cc. 7 & 8. This is an enormous task, which she is tackling by creating a network of recorders and working with existing organisations. Fortunately – and I hope Sharon will forgive me for this – she is a brilliant computer nerd as well as an excellent field botanist, and I am confident she will be up to the task. It was nice to see that Jenny Ford, the county ecologist who won the BSBI award for best botany student a couple of years ago, is also involved.

To my mind, this is the best possible way to organise locally. Let the v.c. recorder collect and manage the data – which is what recorders do best – and, in return for the support of the councils, make the data available to a skilled and knowledgeable county ecologist. After all, it is interpretation and presentation of the data that the councils need, not ownership.

Having moved to Cornwall, David Pearman is in the process of handing over the recordership of **Dorset** (v.c. 9) to Bryan Edwards. Together they produced a County Rare Plants Register in 2004. Following the basic data-dump format, it lists a lot of six-figure grid references, and is highly praised by the government people. However, I am not convinced that these things really are used as much as people imagine. To my mind, the real significance of these RPRs is that, for the first time, people who are not recorders are getting to see what biological data looks like. It is enormously thrilling to have in your hands all the rare plant records for a county, and it is easy to imagine that with this information you are somehow more in control of the environment. But knowing where a plant is and being able to help conserve it are very different things. Peter Rhind, in a recent issue of *British Wildlife* (16(2), 107, Dec. 2004), put forward a powerful argument against knowing and interfering too much. Leave some wilderness, he argues, and it is a good point. Perhaps site managers should not be told where rarities are, because the temptation to garden for them is too strong. Habitat management is what they should concentrate on. The rarities tell you whether this has been successful or not.

On the **Isle of Wight** (v.c. 10), Colin Pope's report naturally concentrates on the publication of his new Flora. Martin Rand and Tony Mundell, in **Hampshire** (v.cc. 11 & 12), lament Pete Selby's untimely death, but he left an amazingly well organised county. There are lots of people with copies of *Mapmate*, all working closely together to collect huge numbers of records. As in Wiltshire, the county recorders and the LRC seem to have come to an agreement to cooperate rather than compete with each other, and it works well.

Alan Knapp and Paul Harmes sent in quite botanical reports for **Sussex** (v.cc. 13 & 14). The trouble with these is that one county's rarity (e.g. *Potamogeton berchtoldii*) is another one's weed, so I can't extract much gossip. Eric Philp's report on **Kent** (v.cc. 15 & 16) is all about Local Change, with just the comment 'IT problems,' with which many will sympathise.

Ann Sankey's newsletters for **Surrey** (v.c. 17), however, do give me the opportunity to raise some more widespread issues. On the subject of relations between government and botanical societies, it is remarkable to see how much is done by some of these local groups. It is fashionable these days to work out the economic value of non-financial assets such as dolphins, which turn out to be more valuable to tourism and science than the fish they consume is to chip shops. In the same way we can work out what the value of a Flora Group is to a community. It provides social cohesion; worthwhile activities for the citizens; real scientific value; and, of course, protection to the environment. It has been calculated that the BSBI completes £5 million worth of field work each year. If you compare the person-days of healthy activity that a Flora Group undertakes with the cost of organising such a scheme through your local museum or council, then an active group like the Surrey Flora Committee is a significant social good.

As an example, this winter I was asked to find a supply of leaves of Ragwort *Senecio jacobaea* for a researcher investigating alkaloids in honey, so I turned to Ann Sankey, who immediately knew where to go. No-one in government, academia or industry could have done that. I wouldn't suggest that

have really appreciated the work Richard has put in as Pres., coming to so many meetings and generally being a force of cohesion for the society. It is interesting that we are moving away from appointing presidents as an honorary acknowledgement of a long and distinguished career, and more towards it being a working post.

A Flora of **Cardiganshire** (v.c. 46) is rapidly coming to fruition from Arthur Chater, who has also had a packed schedule of field meetings, training events and such like. 'The Flora will now be taking precedence,' he writes. Wendy McCarthy, in **Carmarthenshire** (v.c. 49) seems to have been busy recording rare plants for Plantlife, and appealed for training in Mapmate, which we responded to by organising a weekend in November, which will hopefully become an annual event.

Jean Green ran monthly field meetings in **Denbighshire** (v.c. 50). Ian Bonner reported lots of monitoring for Plantlife on **Anglesey** (v.c. 52) and is up to date on Local Change.

The **Lincolnshire** (v.cc. 53 & 54) recorders, Weston, Kirby & Pool, have been creating a huge database on Recorder 3, with funding from the Lottery. It now has 500,000 records and they are starting to input the detailed rare plant records. I would endorse their approach: bash all the records in and then set about checking and refining the database, which is a process that takes years. Michael Jeeves, in **Leicestershire** (v.c. 55), has produced a new edition of his rare plant register, and in **Derbyshire** (v.c. 57) Alan Willmot has completed the field recording stage of his planned tetrad Flora. Graeme Kay, in **Cheshire** (v.c. 58) reports that he is busy enough just doing Local Change for now.

I hear plenty of rumours about the forthcoming Flora of **South Lancashire** (v.c. 59), for which field recording should also have been completed in 2004. Dave Earl apparently distributes a disk with distribution maps to all his recorders each year, which I think is a first. I'd like to see a copy, please. He also notes the discovery of *Rorippa islandica* in the county, with a comment that it was probably introduced by Canada geese. It seems to be turning up all over the place now – a real success story for a plant that

was well within the Nationally Scarce category in the New Atlas.

Eric Greenwood was yet another to produce a rare plants register, for **West Lancashire** (v.c. 60). He has also written a paper on the vegetation of the Lancaster Canal, which I for one am looking forward to seeing. Michael Jeeves emailed me last year to say that the 'success' of the Montgomery Canal restoration was being used as justification for work on the Ashby Canal SSSI in Leicestershire, but the trouble with this is that the work on the Monty has been spectacularly unsuccessful. The problem is that the BSBI, and English Nature, are organised by county, whereas the canal people have a national perspective, and it seems that they can get away with saying whatever they like. As each county only has one or two canals, there isn't a lot of opportunity for our people to learn the lesson by experience, so we need to make the evidence more widely available. Hopefully Eric's work will be the first of these, but I would really like to know why no-one has ever written up the experience of the Basingstoke Canal. We can often learn as much from failures as from successes.

Geoffrey Wilmore reports satisfactory progress in **S.W. Yorks** (v.c. 63), but mentions conflicts of interests with his commercial activities. This is something that a lot of recorders have to deal with, but it seems easy enough to resolve if you keep things clearly separate. Deborah Millward (**N.W. Yorks**, v.c. 65) describes how her various interests, which include, rather impressively, being an appointee of a Secretary of State, complement each other rather well, and allow access to sites and data that would otherwise be unavailable. Phyl Abbott has a very full programme of surveys and meetings in **Mid-west Yorks** (v.c. 64) and is involved in the conservation of *Arenaria norvegica*.

The organisation of recording in **Northumberland** (v.cc 67 & 68) is quite remarkable. Quentin Groom now lives in Belgium, and organises the computerisation and survey work from there. George Swan has splendid paper records and unparalleled knowledge. I had a note from Prof. Swan about how some new hawkweed had been

recorded in the county without reference to an ancient specimen at the Hancock Museum that obviously no-one else knew about. It is astonishing how much material there is in museums, and how little it is valued by conservationists. There is an urgent need now to access this material and get it all catalogued; but the problem remains that there isn't really a good enough computer program to do it.

Geoffrey Halliday (**Cumbria**, v.cc. 69 & 70) laments the lack of a 10km square updating scheme, and I am pleased to be able to say his wish is being granted; please refer to the relevant article elsewhere in this newsletter. We did not receive a report from Larch Garrad, but I did get a charming report from Linda Moore, Wildlife & Conservation Officer on the **Isle of Man** (v.c. 70). One of the complexities of the BSBI is the number of different countries we have to cover: not everyone knows this, but Man is not in the European Union, so international wildlife laws have no application there. The island has its own legislation instead. It also has a constant force ten gale, I understand. The government's ecologists – Linda and her colleague Elizabeth Charter – had spent some time this year looking (unsuccessfully) for *Fumaria purpurea* for me, for which I am duly grateful. Please keep trying. An interesting development there is the start of a process to designate county habitat indicator species, which I feel is the natural next step after a Rare Plant Register. So far, only Dorset, Hampshire and Shropshire seem to have anything approaching an adequate CHIS list.

Scotland

The BSBI can now welcome Jim McIntosh as our first Scottish Officer. This is probably the biggest financial investment the Society has ever made, and it has come about largely as consequence of a successful fund-raising initiative by Michael Braithwaite. Because it is only part grant-funded, Jim's role is a fairly open one, with opportunities to develop interesting initiatives north of the border.

Chris Miles (**Dumfriess.**, v.c 72) reports on a whole range of activities, from monitoring rarities to planting *Woodsia ilvensis*. David Hawker (**Kirkcudbrights.**, v.c. 73) has a

similarly conservation-oriented focus. I suspect that recording north of the border is far more conservation-led than it is in England, where we tend to get more amateurs and academics than people employed in the conservation sector. It will be interesting to see if and how this distinction affects recording practice.

Keith Watson reported that the only Local Change square in **Renfrewshire** (v.c. 76) was kindly done for him by Ian Green. He laments the lack of support he receives from the BSBI, so we are pleased to report that your wish is granted! Meet Jim McIntosh...

Peter Mcpherson is concentrating on writing his Flora of **Lanarkshire**, v.c. 77. Rod Corner reported on the discovery of *Hierochloe odorata* in **Selkirks**. (v.c. 79) and on Local Change work in **Roxburghshire** (v.c. 80). He has been working closely with his LRC to get data computerised. Michael Braithwaite mentions the discovery of *Rorippa islandica* in **Berwickshire** (v.c. 81) and has nearly completed his county Rare Plant Register. Jackie Muscott considers an RPR to be pointless for **West Lothian** (v.c. 84) because it is shared by three local authorities, so has been concentrating on Local Change instead. It is a fair point, often made, that vice counties do not always seem very relevant to changing political constituencies. But it could be argued that local authorities are not all that relevant to botany, either, so you could counter that it makes no sense to cater specifically for them. The vice county I live in includes four districts, two boroughs, a unitary authority, one county and parts of three others. Several of our best sites overlap the border, so the management is jointly conducted under different legislative systems. And yet no-one seems to have any problem whatsoever with us saying 'this plant is rare,' and they all accept our system of vice counties perfectly happily.

George Ballantyne reports that he works closely with his LRC in **Fife & Kinross** (v.c. 85), recording rare plants for them. Neale Taylor worryingly reported no progress whatsoever with Local Change in **West Perth** (v.c. 87), but he had managed to resurvey *Lychnis viscaria* for the local BAP. He laments the change to Mapmate and asks

whether he can continue to use Biobase. The answer is yes, of course. Martin Robinson, by contrast, seems to be delighted with Mapmate for use in **East Perth** (v.c. 89) and is busy compiling a rare plant register. This will include 200 species, which seems to be about the same number as you would find in any county- one of the main reasons for sticking to the v.c. system, which does at least provide some sort of geographical comparability between areas.

Barbara Hogarth is concerned about the arrival of *Crassula helmsii* in **Angus** (v.c. 90). Interestingly, this is the only mention of alien invaders in all the reports we received. No-one has yet managed to find any evidence for *Crassula* causing harm, although stories of damage caused by efforts to control it are becoming commonplace. Please monitor carefully, and try to report factually on any changes that occur. There are loads of other things happening in the county, including a CRPR, plenty of botanical discoveries, and identification courses that Barbara runs at Dundee Botanic Gardens.

David Welch, in **Kincardine & North Aberdeen** (v.cc. 91 & 93) is another professional in the conservation sector, and scrutinises planning applications for the local equivalent of Wildlife Sites – called, rather curiously, SINS. In this capacity he managed to save an area of good quality grassland from afforestation. It would be a really interesting study to find out whether all the knowledge we have of wildlife these days really does affect the way development occurs. Is it not curious that no-one asks these questions? As far as I am aware, there is no empirical evidence at all – it is still down to individuals to fight for their local sites and, too often, I suspect, they are only temporary victories.

In **Banffshire** (v.c. 94), the county has been under-recorded for many years, and essentially Andy Amphlett is starting from scratch. He plans a checklist, followed by an RPR and then, perhaps, a Flora, which would be the first for a century or so. This may sound like an uphill struggle, but it must be quite fun to have so much unknown territory to cover. In neighbouring **Moray** (v.c. 95) Ian Green found thousands of plants of

Gagea lutea. Now that is a curious plant, well worth a comprehensive study. It is one of the few species that is widespread and rare; completely inexplicably so, to my mind.

Margaret Barron has a huge amount of territory to cover in **Easternness** (v.c. 96) – 14 LC tetrads. ‘A quiet year,’ she writes. **Westernness** (v.c. 97) is nearly as big, but seemingly with even more tetrads. Ian Strachan and Ian Bonner’s report is mostly about monitoring rarities for conservation organisations. Alison Rutherford reports that botany is of little interest to the people of **Dumbarton** (v.c. 99), which seems very sad.

There are apparently 300 rare species in the **Clyde Islands** (v.c. 100), according to Angus Hannah’s report, but that includes aliens and under-recorded taxa. Sounds like it will approach the average of about 200 species to include in the RPR. There are still many parts of the county for which there are no records ever, so the production of a checklist for Bute, amongst other areas, is still a priority.

Pat & Dave Batty report on the rediscovery of *Mertensia maritima* in the place in **Kintyre** (v.c. 101) whence it was thought to have been lost. This is a wonderful plant, ecologically speaking, because it loves storms and high tides that ‘damage’ coastal shingle, and it nearly always reappears in places from which it has been lost. There is no way of know that it will come back, though, and it makes conservationists very nervous when it disappears again – as it inevitably does. The Battys have also been monitoring *Dactylorhiza lapponica*. Lynne Farrell mentions the finding of *Spiranthes romanzoffiana* on Coll, in v.c. 103 (**Mid Ebudes**).

A new edition of *The Botanist in Skye* by Catriona Murray is apparently in the pipeline for the **North Ebudes** (v.c. 104), where Stephen Bungard found *Saussurea alpina*, new to Raasay. In **East Ross**, Brian & Barbara Ballinger are beginning to settle in as the new recorders, but (as of early 2004) had little to report yet. Pat Evans has been undertaking Site Condition Monitoring for SNH in West Sutherland (v.c. 108) and is working on rare plants as a follow-up to the wonderful Flora of Assynt.

Ken Butler, in **Caithness** (v.c. 109), also reports lots of conservation activities, and lists a large number of new hybrids for the county. He also asks for two things: any data we hold for the county, plus acknowledgement of anything sent to us. Both of those wishes are easy enough to grant, but your best bet is to use email if you possibly can. Please remember that, as coordinator, I receive approximately 10,000 records every day of the year, and have done for the last six years. Please keep them coming, but send me an email if you want to discuss it. Sorry if that sounds rude, but multiply everything I do by 150 v.c. recorders and countless other people who produce or want botanical data, and even simple tasks become laborious.

I always think that Paul Smith and Richard Pankhurst have undoubtedly the hardest county to record, with the **Outer Hebrides** (v.c. 110). There are no active members resident on the islands. Of their fifteen LC tetrads, just three were not visited in 2003, and these were 'very difficult to reach, requiring boats and good weather.' It is astonishing what turns up, though. Stuart Taylor, of the RSPB, noticed thousands of plants of *Ophioglossum azoricum* at Rhenigidale in 2004 – surely one of the most visited parts of the county. Elaine Bullard reports that Local Change is progressing well in **Orkney** (v.c. 111).

Surprisingly, perhaps, Walter Scott, in **Shetland** (v.c. 112), echoes the Scottish fixation on conservation. He did not partake in Local Change because he feels there is too much surveying and databasing, and too little action. It is always difficult to disagree with anyone who wants to reduce bureaucracy and get on with making things happen, but south of the border people are much more sceptical about uninformed conservation action, because they've seen so much of it in the past. I was astonished to see *Crataegus monogyna* in Shetland planted and fenced off by conservationists in the hope of creating some scrub. They will regret it, I'm sure. Anyhow, Local Change was organised for us by Paul Harvey at the LRC, so the county will not be excluded.

Ireland

It is good to see more reports from Irish recorders than last year. A bone of contention in recent years has been the availability of data for the Irish counties. This problem has now been solved, and I can send all data that we have to any v.c. recorder who wants it. There is, of course, a secondary problem that is created by this, because most data sets are not quite what one would expect. They are, in fact, poor. Most databases contain endless duplicates and errors and phenomenal amounts of incomplete information. A typical record for Ireland, that appears as a dot on the maps in the Atlas, might contain no more information than the species name and a 10km square – and that might well have been worked out using the old grid reference system, so will quite possibly be wrong. Once you get the data, you have only just started...

Nevertheless, I was delighted to get a phone call from Declan Doogue (**Co. Kildare** v.c. H19) after I sent him his Atlas data set. I'm still waiting for the 'what is this rubbish?' call that usually follows, but perhaps he is too polite. A request, from Caroline Mhic Daeid, in **South Kerry** (v.c. H1) and David Nash (**North Tipperary**, v.c. H10) was to find out whether Mapmate can be used in Ireland (yes) and with an Apple Mac (don't know, yet). But Bob Ellis can supply MM for free to any recorder in Ireland, so please do give it a try.

Alan Hill reported some interesting new discoveries in **Co. Monahan** (v.c. H32), mostly good habitat plants like *Elatine hexandra*, but also terrible invasive aliens like *Lemna minuta*. This latter has generally escaped attention from the exterminators but, although it can become very abundant in eutrophic waters, it seems to settle into a semi-natural situation quite well. Ian McNeill also reports some first county records for **Tyrone** (v.c. H36) and is working towards a county Flora. J.W.D. Semple and N. McKee report on the discovery of *Spiranthes romanzoffiana* on the Giant's Causeway in **Co. Antrim** (v.c. H39) and their plans for a Rare Plant Register.

Debates on the nativity of Wild Gladiolus

Geoff Toone

Mrs Phillipps of Shanklin, on the Isle of Wight, found a single plant of 'Wild gladiolus' on July 7th 1855, in a 'wild tract of copse and heath, called the Apse or America woods,' a first British record; it was not until later that this came to the attention of botanists generally when Alexander More published the record (More 1862). By then the plant had been found in quantity in the New Forest (1856).

- By 1862 Borrer had written to Babington saying he thought it 'indigenous' (Babington 1863).
- Also in 1862 More had come down on the side of native status with his report of the IW record, putting a convincing case.
- Babington (1863) also put the case for native status – area and spread of sites (therefore arrival distant in time), in geographically separate areas (Hants & IW), contiguous distribution along the Atlantic seaboard and not known to him from gardens.
- Boswell-Syme in the same year thinks it a native, for no given reason apart from 'it looks it' (Boswell-Syme 1863).
- Mansell-Pleydell, in his Flora of Dorset (1874) talks about its 'undoubted natural habitat in the New Forest.'
- Townsend (1904), perhaps significantly, sits on the fence but he notes opinions from the literature and mentions the lone dissenting voice, H.C. Watson, and his suggestion that every site might 'be associated with planted trees or shrubs.' Under 'Excluded species' he comments that *Erica vagans* and *Simethis bicolor* could have come to Bournemouth with young fir trees from the Landes area of France, adding '*Gladiolus illyricus* might also have come from thence.' E. F. Linton thinks *S. bicolor* may have come in with young plants of *Pinus pinaster* and it seems likely that these tree imports, dating from c. 1800, had introduced other species of less note known to them both. Townsend notes contra this, 'Mr Marshall's belief is that these are practically always raised by nurserymen from seed.'
- Coincidence mapping of Glads with *P. pinaster* based on 12 records of the latter for v.c. 11 shows the pine spurning any contact with our gaudy species. However, during the period of the first century of records very few botanists recorded planted trees and there is very little data. There is one old record of *P. pinaster* from the Island, at Alum Chine very distant from the Glad sites. It is said to survive and even self-seed in the Forest and Surrey.

The history of site discoveries is sparse and unlocalised over the rest of the 19th C with Townsend gathering records from the published papers and, with the assistance of Marquand, naming four fairly contiguous general areas of record. During that time it was found near Ensbury (v.c. 9) [pub1874] and again in the Isle of Wight (v.c. 10) in 1872 and 1897, from a new area within the same watershed, two sites within a few hundred metres of each other.

It was not until last century, a hundred years after its discovery, that well localised records were made in the Forest and not until 1971 that recording was done early in the year, in May rather than June/July, when the plants could be located before the Bracken concealed them. Since then many sites have been added and a distribution covering three general areas with outliers has become clear. This is mostly thanks to the painstaking work of the New Forest Study Group. All recent (post 1897) records are for v.c. 11 and the sites cover 7 hectares.

The one study we have of this taxon was made in 1987 by Jonathan Stokes as part of an ecology MSc at London University. He studied 11 sites and took 1m quadrats. He found no really constant association apart from bracken, though he mentions bluebell & wood anemone as intuitive ones. The Twinspan analysis is inconclusive. For NVC purposes the quadrats should perhaps have been larger.

Stokes comments – ‘Whatever the species’ origin, Hamilton (pers. comm. 1987) is of the opinion that *G. illyricus* in Britain is sufficiently different from its European counterparts to warrant its designation as the separate subspecies *britannicus*. This split is based upon the genetical structure of the various populations, and the significant differences in floral morphology, e.g. lip shape, size etc. In the British population $2n = 90$, whilst in Europe $2n = 60$ (Tutin 1980) [although this is an error, the reverse is correct]. The only population that resembled the English colonies was found on Belle Isle in Brittany, but these were recently destroyed during the construction of a dam, although specimens are held at Kew (S. Everett pers. comm. 1987).’

We have been unable to locate details of an unpublished study of *G. illyricus* done in the 1960's and 70's by Dr A.P. Hamilton, but from his published oeuvre he appears to have made chromosome counts and collected morphological data both from v.c. 11 and the Continent (Hamilton 1968). He speculates about the origin of *G. byzantinus*, Mill. – ‘...two main possibilities as to its origin are likely. (1) from tetraploid *G. illyricus* via an unreduced gamete (pollen or egg) and (2) from a hybrid between *G. illyricus* and *G. byzantinus*’ (Hamilton 1976). He points out the high sterility of our plant as opposed to fertile populations in North Africa and that our *byzantinus* is hexaploid ($2n = 90$) and that from Africa octoploid. Surprisingly Hamilton (1967) thinks *G. illyricus* was collected to extinction at the earliest sites (in which case what happened to the material? This does not seem to be justified by herbarium holdings).

We appear to have no experimental growth info for the UK *G. illyricus*. It was cultivated at Cambridge Botanic Gardens in the '80's from French material, but is apparently no longer there; it was frost hardy in their experience (pers. comm. P. Atkinson, 2003). There appears by all accounts to be very high cormlet production with groups of offsets showing as juveniles in May but undetectable by anthesis, which is of only about 2% as flowering adults. Those that flower produce a mean of between 3 and 4 heads with capsules averaging 17 seeds. Pollination, by the Large Skipper (*Ochlodes venata*) and occasional other insects, seems effective but no information about selfing is available. Unfortunately these stats rely on Stokes's data and the sample sizes do not permit highly confident statements. It is clear, however, that this is a fecund species within what will probably turn out to be a very specialist habitat.

Grazers in the Forest avoid the capsules though they will eat the leaves early in the year before the Bracken closes off their view. We do not know whether birds will eat the seeds and have no information about small mammals or insects. It is possible that the NF populations survive only in bracken because of the grazing of plants in more open areas; first records date from 5 years after a major cull of deer authorised by Act of Parliament.

The practice of Bracken cutting was common in the New Forest until the mid 20th C; scythed patches provided winter bedding for animals and it was also used as fuel. As a means of spread this is suggestive, though inconclusive without more data. Vera Scott, who has gathered many of the best records with the New Forest Study Group says they have diminished since the cessation of bracken cutting in about the '60s. She also comments that hard frosts help. *G. illyricus* can however persist in very dense bracken [$> 2m$] and it is doubtful that bracken cutting can claim continuity over the last 8,000 years.

We have as yet no known means of dispersal apart from gradual site migration, but consider Stokes's comment – ‘Human interest also extended to planting Gladioli; and one site (C), originally considered to be natural, was subsequently found to have been planted from seed in

1944 by the owner of the neighbouring house. (R. Grove-White, pers. comms. 1987)'; it is doubtful that the example is unique.

The original sites were New Forest Enclosures and plantations and many first records from them were also their last. There is no obvious reason for the plant's disappearance in these areas. There is also no evidence, so far, apart from the first UK record, of the species being known locally before these early records, which is mildly surprising.

Cytological and morphological differences between *Gladiolus illyricus* here and on the Continent remain inexplicable without further genetic investigation. With Mediterranean/ Atlantic floristics it appears to hybridise with *G. communis* ssp. *byzantinus* within its core range in S. Spain producing an evenly-graded range of intermediates (Lockton, pers. comm., 2004). Hamilton's speculation is that it might have arisen here *de novo*, as a native, whilst the lateness of the first record could be attributed to its sequestered habitat. The scarcity of that habitat in other areas, like the Dorset heaths, is not entirely explained by the anachronistic management of the New Forest when one considers the plant's persistence and fecundity and that of bracken.

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Studies on *Fumaria purpurea* in Orkney

John Crossley

This survey was carried out to gather detailed information on the habitat and autecology of Purple Ramping-fumitory *Fumaria purpurea*, a scarce annual plant endemic to the British Isles, and to make some recommendations for positive conservation. In Scotland it is most commonly found as an arable weed. Numerous recent records for the plant in the Orkney Islands, and a good local knowledge of the plant and its likely habitats, made this an ideal location for the study.

Some 52 sites were visited and surveyed. They were in two main groups. One comprised fields owned and managed by the RSPB on their island reserve of Egilsay, where a variety of arable crops have been grown in recent years to provide cover for corncrakes and a food source for wintering farmland birds. Another group comprised fields on Orkney Mainland used for growing mixed crops of cereals, brassicas and other species, some as part of another RSPB initiative, others as one of the management options available to farmers participating in the Scottish Executive's agri-environment programme.

Fumaria purpurea was found at 17 of the sites in Egilsay and Orkney Mainland. Information collected included quadrat data for National Vegetation Classification (NVC) and calculation of Ellenberg values, species lists for all fields, type of crop and details of management and cropping history, and soil samples.

The conclusion of the NVC analysis is that almost all of the vegetation containing *F. purpurea* in Orkney can be placed in the OV4 *Chrysanthemum segetum-Spergula arvensis* community, which is in accordance with the results of the BSBI Arable Weed Survey (Lockton 2002). It is a common community of both cereal and root crops on light, fertile, acidic soils. Some fields exhibited a transition between OV4 and a group of NVC communities typical of somewhat heavier and less acidic soils, in particular the OV10 *Poa annua-Senecio vulgaris* community. However, there are consistent and distinctive characteristics to the Orkney vegetation that distinguish it from both these communities: in particular it appears to be unique for the presence of several fumitory species, two of these occurring at high frequency and abundance values, and the constancy of *Viola tricolor* ssp. *tricolor*. The type of vegetation in these arable fields in Orkney could legitimately be described as a distinctive variety of OV4.

F. purpurea was also found at one site growing vigorously in vegetation that could be placed in the OV13 *Stellaria media-Capsella bursa-pastoris* community, typical of fertile, well-drained, loamy and less acidic soils, though this vegetation too was transitional to OV4.

Analysis of vegetation from fields where *F. purpurea* was not recorded found some slight differences from those where it was recorded – a tip in the balance towards communities typical of heavier, less free-draining soils.

Ellenberg values for the lists of associated species were calculated as L (light) = 7, F (moisture) = 5.2, R (reaction) = 6.3 and N (fertility) = 6. The scores given by Hill *et al.* (1999) for *Fumaria purpurea* are L = 7, F = 4, R = 6 and N = 5.

The plant was found growing with a variety of crops including barley, oats, kale, swedes and mixtures of these, around field margins and further into fields, scattered through the crop where light levels were sufficient, and in gaps among denser crops.

A seed-bank life of at least 25 years can be inferred from the plant's appearance in fields cultivated after 25 years in permanent grass.

Species associated with *Fumaria purpurea* in arable fields in Orkney

All records by J.E. Crossley, 2004.

Species	Site No.												
	06	07	08	09	10	11	12	13	14	15	16	17	18
<i>Cerastium fontanum</i>	+	+	+	+	+	+	+	+	+	+	+	+	+
<i>Fumaria purpurea</i>	+	+	+	+	+	+	+	+	+	+	+	+	+
<i>Stellaria media</i>	+	+	+	+	+	+	+	+	+	+	+	+	+
<i>Elytrigia repens</i>	+	+	+	+	+	+	+	+	+	+	+	+	-
<i>Fumaria officinalis</i>	+	+	+	+	-	+	+	+	+	+	+	+	+
<i>Ranunculus repens</i>	+	+	+	+	+	+	-	+	+	+	+	+	+
<i>Capsella bursa-pastoris</i>	+	+	+	+	+	+	-	+	+	+	+	-	+
<i>Poa annua</i>	+	+	+	-	+	+	-	+	+	+	+	+	+
<i>Bellis perennis</i>	+	+	+	+	-	+	+	-	+	+	+	+	-
<i>Fumaria muralis</i>	+	+	+	-	+	+	+	+	+	-	+	-	+
<i>Galeopsis tetrahit</i>	+	+	-	-	-	+	+	+	+	+	+	+	+
<i>Matricaria discoidea</i>	+	+	+	+	+	+	-	-	+	+	+	-	+
<i>Polygonum boreale</i>	+	+	-	+	+	+	-	+	+	+	+	+	-
<i>Rumex obtusifolius</i>	-	+	-	+	+	+	+	+	+	+	+	+	-
<i>Viola tricolor</i>	+	+	+	-	-	-	+	+	+	+	+	+	+
<i>Cerastium glomeratum</i>	-	-	+	+	+	+	+	-	+	-	+	+	+
<i>Raphanus raphanistrum</i>	+	+	+	-	-	+	-	+	+	+	+	-	+
<i>Sonchus asper</i>	+	+	-	+	+	-	-	+	+	+	+	+	-
<i>Holcus lanatus</i>	+	+	-	+	+	-	-	+	+	-	+	+	-
<i>Spergula arvensis</i>	+	+	-	+	+	+	+	-	+	-	+	-	-
<i>Taraxacum officinale</i> agg.	+	+	-	+	+	+	-	-	+	+	+	-	-
<i>Alopecurus geniculatus</i>	+	+	+	-	+	-	+	-	+	-	-	+	-
<i>Euphorbia helioscopia</i>	+	+	-	+	+	-	-	+	+	-	-	-	+
<i>Lamium purpureum</i>	+	+	+	-	-	-	-	-	+	+	+	+	-
<i>Montia fontana</i>	+	+	+	+	-	+	-	-	-	-	+	-	-
<i>Polygonum aviculare</i>	+	+	+	-	-	-	-	+	-	-	+	+	-
<i>Rumex acetosa</i>	+	+	+	-	-	+	-	-	+	-	-	+	-
<i>Rumex crispus</i>	-	+	-	-	+	+	-	-	+	-	-	+	-
<i>Lolium perenne</i>	-	+	+	-	-	-	-	-	-	-	-	+	+
<i>Persicaria maculosa</i>	-	-	-	+	+	-	-	-	-	-	+	+	-
<i>Senecio vulgaris</i>	-	-	-	-	-	+	-	-	-	+	+	+	-
<i>Vicia cracca</i>	+	+	-	-	+	-	-	-	-	-	+	-	-
<i>Cirsium arvense</i>	-	-	-	-	-	+	-	-	+	+	-	-	-
<i>Fumaria capreolata</i>	-	+	+	-	-	-	-	-	+	-	-	-	-
<i>Myosotis discolor</i>	-	+	-	-	-	-	-	-	+	-	-	+	-
<i>Plantago lanceolata</i>	-	+	-	+	-	-	-	-	-	+	-	-	-
<i>Trifolium repens</i>	+	+	-	+	-	-	-	-	-	-	-	-	-
<i>Tripleurospermum inodorum</i>	+	+	-	-	-	+	-	-	-	-	-	-	-
<i>Veronica serpyllifolia</i>	+	-	-	-	-	-	+	-	-	-	-	+	-
<i>Agrostis capillaris</i>	+	-	-	-	-	-	-	-	+	-	-	-	-
<i>Agrostis stolonifera</i>	+	-	-	-	-	-	-	-	+	-	-	-	-
<i>Chenopodium album</i>	-	-	-	-	-	-	-	-	+	-	-	+	-
<i>Chrysanthemum segetum</i>	-	-	-	-	-	-	-	-	-	+	-	+	-
<i>Cirsium vulgare</i>	-	+	-	-	-	-	-	-	-	-	+	-	-
<i>Galeopsis bifida</i>	-	-	-	-	-	-	-	-	+	-	-	+	-
<i>Leontodon autumnalis</i>	+	-	+	-	-	-	-	-	-	-	-	-	-
<i>Poa trivialis</i>	+	-	-	-	-	-	-	-	-	-	+	-	-
<i>Senecio x ostenfeldii</i>	-	-	-	+	+	-	-	-	-	-	-	-	-
<i>Sinapis arvensis</i>	+	+	-	-	-	-	-	-	-	-	-	-	-
<i>Veronica arvensis</i>	-	-	-	-	-	-	-	-	-	+	+	-	-
<i>Anchusa arvensis</i>	-	+	-	-	-	-	-	-	-	-	-	-	-
<i>Aphanes australis</i>	-	-	-	-	-	-	-	-	-	-	-	+	-
<i>Atriplex patula</i>	-	-	-	+	-	-	-	-	-	-	-	-	-

<i>Cardamine hirsuta</i>	-	+	-	-	-	-	-	-	-	-	-	-	-
<i>Dactylis glomerata</i>	-	-	-	-	-	-	-	-	+	-	-	-	-
<i>Galium aparine</i>	-	-	-	-	-	-	-	-	-	+	-	-	-
<i>Heracleum sphondylium</i>	-	-	-	-	-	-	-	-	-	+	-	-	-
<i>Myosotis arvensis</i>	-	+	-	-	-	-	-	-	-	-	-	-	-
<i>Phleum pratense</i>	-	-	-	-	-	-	-	-	-	-	-	+	-
<i>Plantago major</i>	-	-	-	-	-	-	-	-	-	-	-	+	-
<i>Ranunculus acris</i>	-	+	-	-	-	-	-	-	-	-	-	-	-
<i>Rumex acetosella</i>	+	-	-	-	-	-	-	-	-	-	-	-	-
<i>Sagina procumbens</i>	-	+	-	-	-	-	-	-	-	-	-	-	-
<i>Sonchus oleraceus</i>	-	-	-	-	-	-	-	-	-	-	+	-	-
<i>Stachys palustris</i>	-	-	-	-	-	-	-	-	-	-	-	+	-
<i>Vicia sepium</i>	-	-	-	-	-	-	-	-	+	-	-	-	-
Total	37	42	22	23	22	24	14	18	35	25	31	32	15

Key to sites

15706	Curcoland, Egilsay	HY4727
15707	Onziebust, Egilsay	HY4728
15708	Whitelett, Egilsay	HY4728
15709	Cuttpool, Deerness	HY5805
15710	Skail, Deerness	HY5806
15711	Quoypettie, Deerness	HY5706
15712	Horrie, Toab	HY5104
15713	Tingwall, Evie	HY4022
15714	Quoyblackie, Evie	HY4022
15715	Ring of Stenness	HY3012
15716	Ring of Brodgar	HY2913
15717	Gerwin, Orphir	HY3304
15718	Skelbister, Orphir	HY3304

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Acknowledgements

This work was supported by a grant from the BSBI's Science & Research Committee and by the RPSB.

Progress on the *Sorbus* Handbook

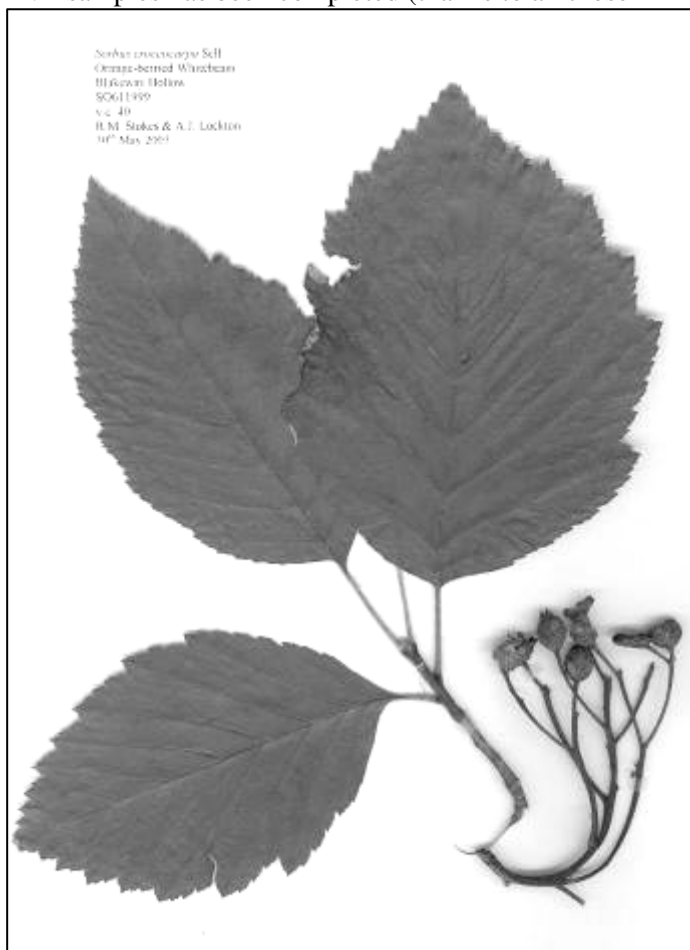
Tim Rich, National Museum of Wales

I have been making good progress on the *Sorbus* BSBI Handbook, aided by an excellent fruiting year in 2004 and lots of help from friends and colleagues, and the nimble fingers of my daughters extracting seeds from berries. Much of the field work collecting flowering and fruiting material and DNA samples has been completed (thanks to all those who have guided me to sites), with progress on description of new species, typification, pollen fertility studies, cytology, flavonoid thin layer chromatography and fascinating DNA results from chloroplasts and AFLPS, much of which ties in together. We have also been lucky enough to get a big Leverhulme grant to look at reproductive biology of *Sorbus* in the Avon Gorge in relation to evolution of the endemics (with 16 taxa, the Avon Gorge must be the richest *Sorbus* site in Europe and possibly the world...), which has been a big side-track but incredibly exciting.

Many vice-county recorders will be aware from my frequent enquiries that we are compiling up a detailed database of the distribution and population sizes of many of the endemics with Alex and the TPDB. So far we have done the endemics except for *S. porrigentiformis* and *S.*

eminens (due to severe taxonomic problems), and the idea is to put all the data into an interactive compact disc with photographs etc. to go with the handbook. We have been extracting data from herbaria (Peta Hayes is currently databasing the entire BM collection for us) and have a significant amount of new or revised information which will be circulated before the project is finished for double-checking.

We will be updating the *New Atlas* and its compact disc. We need to do something about the patchy map of *S. aria*, related to the way data were sent in as either *sensu stricto* or *sensu lato*. David Cann has done a huge amount of field work in England on *S. devoniensis*, and we hope to chase up the Irish sites in 2005. The *S. hibernica* map needs replacing completely. The *S. hybrida* map is suspect as I have seen only one correctly-named herbarium specimen (it is grown here, but does it escape?). I also have two records only for genuine *S. intermedia* x *aucuparia*, which is not *S. pinnatifida* (*S. 'pinnatifida'* is *S. x thuringiaca* 'fastigiata' which as far as I can tell accounts for many of the *S. x thuringiaca* records). Some progress has also been made on the aliens *S. croceocarpa* and *S. latifolia* *sensu stricto* (vouchers for the latter are rather few and far between). Needless to say, I'll be happy to look at any vouchers.



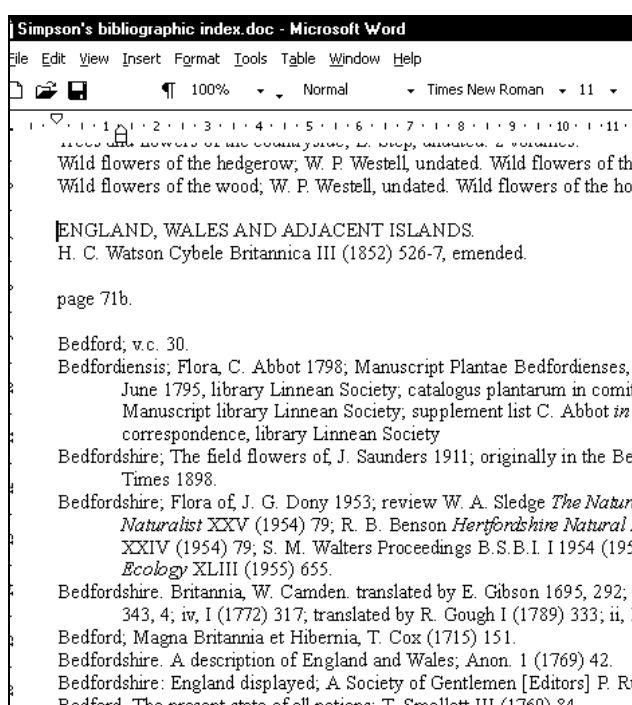
Simpson's Bibliographical Index

Tim Rich, National Museum of Wales

On 17 November 1986, Rod Stern gave me Cyril West's pristine copy of N. D. Simpson's *Bibliographical Index of the British flora*. Pretty soon I realised its importance as one of the most amazing books on British and Irish botany ever published - the key to our botanical literature up to c. 1960, and most of it largely organised by vice-county.

The *Bibliographical Index* rapidly became a favourite of mine, and fairly soon it was obvious that computerising it would provide an answer to the minor drawbacks of the tiny 9 point font size, highly abbreviated text and difficulty searching comprehensively on a taxonomic basis. Indeed, a database compiled of the combination of Simpson and *B. S. B. I. Abstracts* (which followed on from where Simpson had left off) formed the basis for my original 1987 proposal for what is now the B.S.B.I. Database.

-- Simpson's *Index* --



In January 2004 I began scanning the *Bibliographical Index* at home with a view to making the data accessible at least in simple text form in the short term. The process took nearly a year of early (often very early) mornings and journeys to work on the Cardiff buses (that's one good way of using time spent stuck in traffic jams!). Each page was scanned, the text recognised optically and checked, pasted into Word, formatted, abbreviations expanded using macros and global replacements, printed and checked again, and corrections incorporated double-checking against the original. An overall editorial check was then carried out. It is not perfect by any means and I have little doubt that I have introduced further errors, but I now have instant access to nearly 34,000 references covering about 750 years of British and Irish botanical literature.

After the copyright issues have been resolved, I hope it will be made available electronically to all either on the web or as a CD; in the meantime I may be able to help with specific searches.

Violets are blue

Clare Coleman (clare@ptyxis.com)

Or mauve, amethyst, lilac and a myriad of shades between if you have been staring at them for days, measuring their petals! As part of the field work in preparation for the planned *Violas* handbook, John and I spent a week in May 2004 on the Isles of Scilly, collecting taxonomic and ecological data on *Viola kitaibeliana*, Dwarf Pansy.

V. kitaibeliana is a tiny annual of short coastal turf, restricted to the Isles of Scilly and the Channel Islands in the British Isles, approaching the northernmost limit of its European range. It is an RDB species and most of its sites are threatened by coastal erosion or invasion by coarse vegetation (Parslow in Wigginton 1999).

The *Violas* handbook is a joint venture between us, Mike Porter and Michael Foley. None of us has produced a handbook before and, unlike most handbooks, which are usually the work of one or two individuals, we expect to develop a team working on the book as we progress. None of us are *Viola* experts either – yet! Dwarf Pansy is the subject of our sample account for BSBI's Publications Committee.

The findings from our ecological work on the Isles of Scilly are a good example of how useful gathering *fresh* data can be, even for well-studied plants like this *Viola*.

We collected vascular plant, bryophyte and lichen data from 14 quadrats on Bryher, Tean and Tresco, following the National Vegetation Classification (NVC) methodology (Rodwell 2000). The largest populations of *Viola kitaibeliana* in Scilly are on Bryher and Tean and occur in similar vegetation. Typically this is very short vegetation, between 2 and 8cm high, with impoverished soil of almost pure sand and limited areas of bare ground. Rabbits are absent from both islands and there is no grazing by domestic stock, therefore the salt-laden winds, soil conditions and human trampling help to maintain the short sward. Lichens and bryophytes are particularly significant in this type of community. A conspicuous element of the vegetation was the high diversity and frequency of winter annuals, while perennial vascular plants were generally sparse. The patches of vegetation surveyed with *Viola kitaibeliana* were different in character to the main SD8 *Festuca rubra-Galium verum* fixed dune grassland community that the *Viola* has been associated with in previous studies (Dargie 1990; Randall 2004). The high proportion of winter annuals in this vegetation shows stronger affinities (supported by TWINSPAN analysis) to the maritime annual communities SD19 *Phleum arenarium-Arenaria serpyllifolia* dune annual community or MC5c *Armeria maritima-Cerastium diffusum* maritime therophyte community, *Aira praecox* sub-community.

We concluded that we had identified the micro-habitat in which *Viola kitaibeliana* occurs on Bryher and Tean, which may inform management of the sites for its survival. In particular, association with winter annuals, which are classified as stress-tolerant ruderals (Grime 1974, 2001), indicates that the *Viola* may survive when subject to extreme stress such as inundation by storms because of its overall life strategy. The population expansion that occurred on Bryher after the storms in 1987 has been attributed to disturbance of its seed-bank resource (Randall 2004); but the seed-bank forms only part of the plant's life strategy and the need for regular disturbance is paramount for ruderal species (Grime 2001). Our findings are being incorporated into Rosemary Parslow's forthcoming New Naturalist book on the Isles of Scilly.

This is only a small fraction of the work involved in producing a BSBI handbook but it illustrates how, as field botanists and taxonomists, we can use our observations to further ecological knowledge.

There are a number of ways in which you could assist with the *Violas* handbook. For example, we would be interested in:

- unusual *Viola* records from your vice county, for example, taxa well beyond their usual range; any particularly puzzling forms etc.;
- hybrid *Viola* records from your vice county;
- any quadrat data (which must include bryophytes and lichens if present) for any *Viola* taxon but particularly the uncommon species not included in the NVC;
- good quality colour photographs of *Viola* taxa that you may have taken.

We hope that the *Violas* project will spearhead a new generation in BSBI mini-handbooks, aiming to be attractive and accessible, as well as including the taxonomic content expected by the serious botanist. These mini-handbooks could help promote accurate plant identification among ecologists and those working or volunteering in the conservation sector. To do this, we need to make the content reflect the interests and requirements of these sectors. For the *Violas* mini-handbook, we plan to complement the traditional taxonomic brief with, for example, sections on each taxon's life history, habitat and ecological associations, conservation status, vegetative identification and even a little 'popular' content such as medicinal, social and economic uses, cultural history and plantlore. The main thrust of the handbook will be taxonomic but presented with some attractive wrappings, including colour photographs!

Acknowledgements

We are grateful to Geoff Fenton, Rosemary Parslow, Roland Randall, Dave Mawer (warden for the Isles of Scilly Wildlife Trust) and Alex Lockton for providing records of *Viola kitaibeliana* on the Isles of Scilly and to Alex for suggesting we carry out a TWINSPAN analysis of our data.

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Scottish News

Jim McIntosh

I am really looking forward to meeting as many Scottish vice-county recorders as I can. I am particularly keen to find out how your BSBI work is going and how I can help you. But, remember I'm a relatively new v.c. Recorder myself and it will probably be me looking for help! However, I hope I can help with the projects detailed below and with computer, e-mail and MapMate problems.

County Rare Plant Registers

As I said in my recent letter to Scottish v.c. Recorders, now that the dust is beginning to settle after Local Change, this is a good time to begin to think of projects which will be fun and worthwhile for 2005/6 and beyond. One such project is the County Rare Plant Project. This is a great opportunity to look at some of the most interesting and significant species in the vice-counties, and compile detailed records of them systematically.

We have detailed guidance on the drafting of Rare Plant Registers. If you would like a copy of the latest guidance please get in touch with Bob Ellis or myself (Scottish v.c. Recorders).

SNH has sent me its Rare Plant *Database* dated 1995 and its database of detailed species records found during the recent Site Condition Monitoring of SSSIs. These, together with the data which Bob can extract from the BRC Vascular Plant Database of National Rare & Scarce species etc for your Vice-County will be a useful starting point for a Rare Plant Register. Please get in touch with me if you would like to have the SNH data that I hold for your v.c.

Vice County Checklists

If you do not feel up to tackling a Rare Plant Register yet, a worthwhile, and somewhat less ambitious project might be the production of a v.c. Checklist, where a checklist or full flora do not already exist. The basic starting information is already available from the VCCC page of the BSBI website in the form of species and status lists. That information could be

electronically extracted, reformatted (perhaps into an A5 pamphlet format) and species annotations added, if desired. An introduction could be written, and an attractive cover designed incorporating the BSBI logo and v.c. Recorder name. The Checklist could then be published. I would be delighted to help any Scottish v.c. Recorders with this task. Please get in touch.

Help with Computers

On the issue of uncomputerised Scottish v.c. Recorders, if you do not have a computer, but would like to take the plunge, I would be very happy to help with buying advice. I am very keen that as many v.c. Recorders as possible have computers and e-mail as it makes handling records and communication much easier (honest!). I could help you apply for SNH grant-aid to help with the costs of purchasing a computer for recording purposes. Whilst there is no guarantee of success, it would be worth trying! I can also help to install a new computer, and to set up a new or existing computer with internet and e-mail access, etc.

I can also provide first line help with the installation and set-up of MapMate (but Bob's your man for ongoing MapMate support and anything other than basic Mapmate queries). Please let me know if you would like to transfer your existing electronic records into MapMate, in order to begin to use that as your primary database, and I can arrange help to do this.

Site Condition Monitoring

Last year BSBI volunteer surveyors were involved in Common Standard Monitoring (called Site Condition Monitoring in Scotland) of some 12 SSSIs in Scotland which were notified for their notable vascular plants. The work entailed trying to find previously recorded or new populations of Nationally Rare & Scarce species, and some UKBAP species such as Juniper, in those SSSIs. Details of the populations found were recorded, maps drawn, forms filled and photographs taken. No mean task when you are surveying huge and remote sites such as

Ben Heasgarnich, which includes several entire mountain tops.

Unfortunately the work did not get underway until rather late in the season, and then it was almost immediately delayed by atrociously wet summer weather. Consequently, there is some work left to do, and SNH has asked that we complete outstanding work in 2005 if possible. I am currently receiving the survey reports from surveyors for their 2004 work.

I am waiting to hear whether there might be any additional work. I have suggested that we may be able to offer our botanical expertise in cases where SNH or their contractors had failed to relocate species. Where this happens, the automatic result is that the site is classed as 'unfavourable'. In many cases BSBI members will be more experienced than SNH or indeed the contract staff and may succeed where they failed. I will then prepare a program of Site Condition Monitoring work for BSBI volunteers and myself in 2005. If you have not already been involved and would like to be, please get in touch. Regardless of whether you become directly involved, I will ensure that Vice-County Recorders are kept informed of Site Condition Monitoring work going on in their patches.

Other than the work which BSBI will be undertaking in 2005, generally there will be little monitoring work done in 2005, as SNH proposes to take a year's break to take stock at the end of this first 6 year cycle of monitoring work and to decide its approach in future.

Vice-County Recorders' Annual Reports

Please do compile an Annual Report. It is a good opportunity to review and communicate progress in the VC. It was suggested at the Scottish Annual Meeting that Vice-County Recorders' Annual Reports should be included in the Scottish Newsletter. I think this is a good idea, but a short article *based on* the Annual Report would be better. Members would be very interested to find out what is going on in the Vice-Counties. They will, I'm sure, be particularly interested to find out what's been happening in their local v.c. A short section on your plans for the coming year would be a great opportunity to engage local members

and perhaps encourage them to help their hard-pressed v.c. Recorder!

I think v.c. Recorders would be best placed to write such an article for the Scottish Newsletter rather than me cobbling something together from Annual Reports. If you would like to do this, please send your article (with a word limit of 500, say) directly to Peter Macpherson by no later than the end of February, preferably on a floppy.

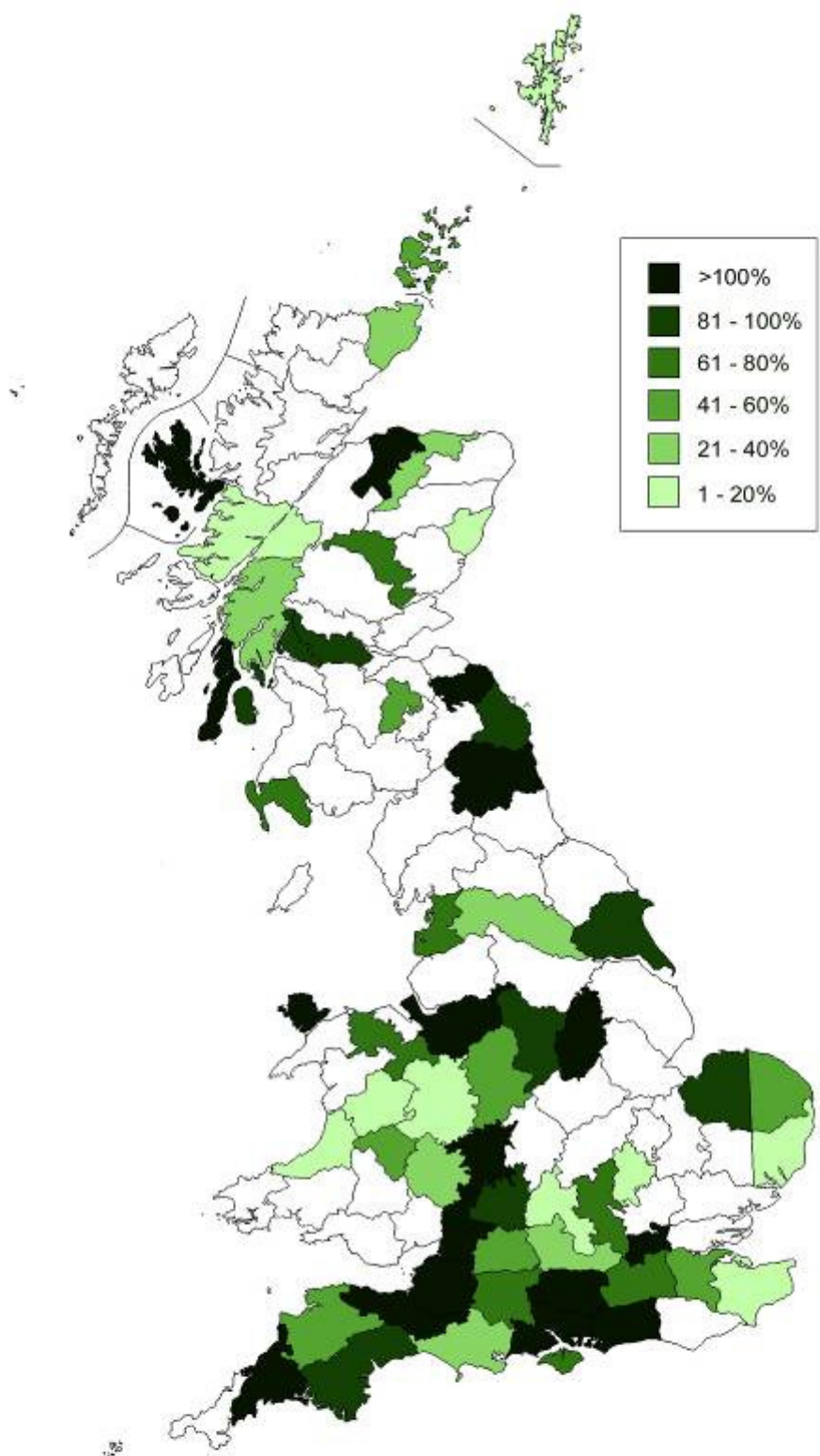
New County Records

Please contribute new v.c. Records which update the Vice-County Census Catalogue (2003) to Watsonia. See Mike Porter's article elsewhere in this edition of Recorder. Now that only first Vice-county records are eligible for Watsonia, I thought it would be interesting to include first and second v.c. records in the Scottish Newsletter.

To simplify matters you could send me a copy of the Record Submission Table you send Mike Porter, with second records added to the bottom using the same format. Enter 'S' for second in the Reason column. If you would like to do this please forward this to me by mid-February at the latest, so I can collate and forward to Peter Macpherson by his print deadline. But remember the priority is to get records to Watsonia.

Vice-County Recorder Assistants

On that issue of help for v.c. Recorders, you may like to consider recruiting an assistant to help you with your work. This suggestion was aired at the recent Scottish Annual Meeting, and I think it makes a lot of sense, particularly if you recruit someone who has complementary skills and abilities to your own. This kind of arrangement is already in use and works well in a number of vice-counties including my own, vc88 Mid-Perths. Looking at the longer term, it is also a way of 'grooming' a potentially suitable successor. If there are no suitable candidates in the local area then you could consider recruiting an assistant from further south, perhaps by writing an advert for the BSBI News. Botanists who live remotely could help in a variety of ways, by spending time during their summer holidays surveying in the v.c. or helping to computerise records, for example.



BSBI Local Change

Data received at the hub by 10/02/04
Expressed as a percentage of monitoring scheme data