

# Flora of Cumbria Recording Group

## Newsletter no. 1: 25 March 2017

### Annual Meeting, Plumgarths 11 March 2017

Mike Porter greeted the thirty-eight people present, with a special welcome to the nine who were new to the group.

After 'apologies for absence', Mike paid tribute to Margaret Gregory, who had died at the age of 97 the previous autumn. Margaret was responsible for a vast number of records in the far north of Cumbria and with her fellow recorder, the late Jean Parker, produced a book giving a detailed account of the flora of the Spadeadam MOD site. She continued botanising into her late-eighties, and as well as being a very good botanist was an excellent and unfailingly enthusiastic companion in the field.

Jeremy Roberts took over at this point, giving a presentation showing some of the interesting botanical records made during 2016. The most significant of these were *Callitriche palustris* (new to England), *Senecio inaequidens* (new to Cumberland), *Galeopsis angustifolia* (first record since 1992 for this Critically Endangered species), *Oenanthe aquatica* (second record for Cumbria), and new sites for some national or local rarities, *Limosella aquatica*, *Ribes spicatum*, *Orthilia secunda*, *Vicia orobus*, *Euphrasia micrantha*, *Juncus filiformis* and *Trichophorum cespitosum* s.s.

Some illustrations are included at the end of this report.

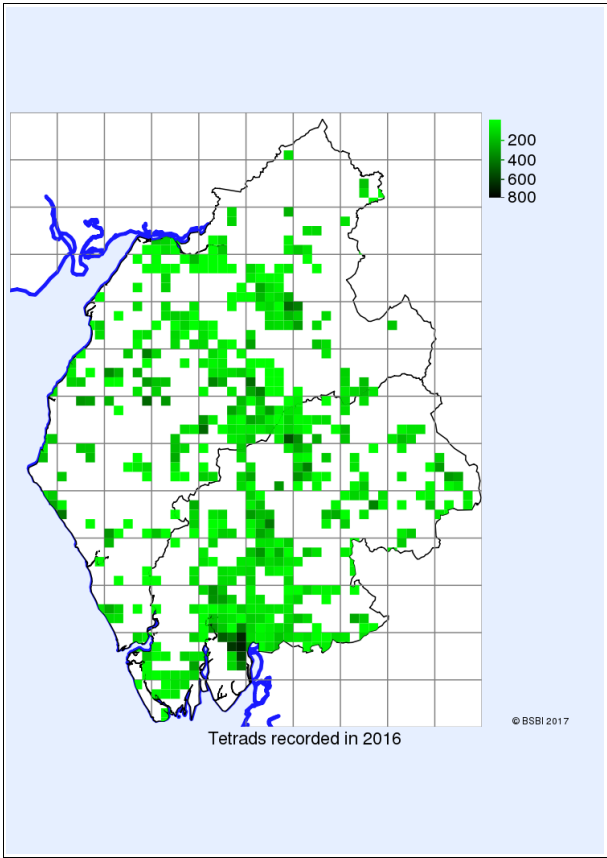
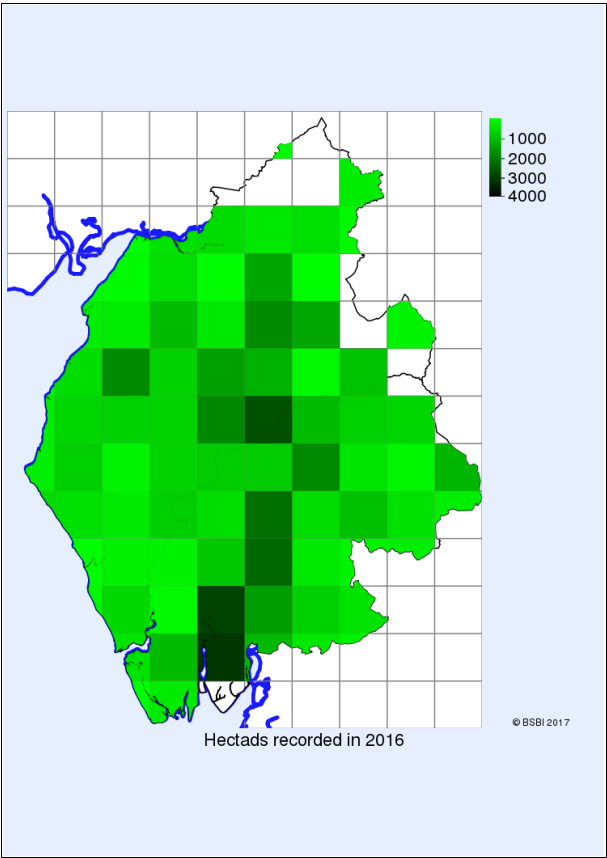
It was now Phill Brown's turn, to describe the progress made in recording during 2016, and explain the strategy for the remaining three seasons, 2017–2019, of the BSBI's *Atlas 2020* project.

First it was highlighted that we had a productive year's recording in 2016. A total of **57,058** new records were added to the database. Records were received from 111 recorders. Twenty-nine of these recorders submitted more than 500 records and thirteen submitted more than 1,000. There were twenty recorders who spent more than ten days in the field.

The BSBI Annual Summer Meeting was held in Cumberland in May 2016 and contributed an impressive 7,551 records. FoC field meetings added 5,096 (see table below), and FoC members and others joined in Cumbria Biodiversity Data Centre field meetings to contribute a further 1,266 plant records. However, as ever, most of the records were gathered by individuals working alone, in pairs, or small groups, and at their own initiative. Well done to all.

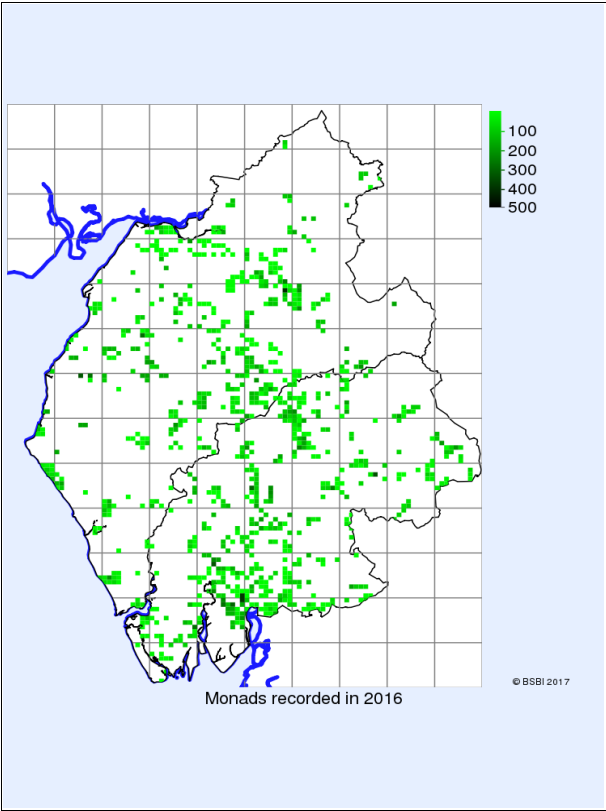
SD38 Newby Bridge – 30th May	1021
NY43 Greystoke – 21st June	1178
NY24 Wigton and NY25 Kirkbride – 13th July	561
NY20 Scafell (Blea Tarn area) – 4th August	433
NY45 Carlisle (east) and NY44 Southwaite – 26th August	1073
NY63 Cross Fell (Blencarn area) – 12th September	830

The following maps were shown to illustrate the 2016 coverage of records in VC69 and 70:



Hectads recorded in 2016

Tetrads recorded in 2016



Monads recorded in 2016

Although 57,000 records in one year sounds impressive, how good was it comparatively? A table was shown which demonstrates that we were 'mid-table' in the "Premier League" of VCs last year. [The thought was expressed – not altogether seriously – that we should be able to add our two sets of VC records together (as they make up a single county) which would place us in the top three... It should be noted that VC recorders send their records to the database at different times, and that we have added nearly 2000 extra records for 2016 in VC69 since the meeting, so the table-positions are not yet fixed.]

Attention then turned to the subject of records held for the *Atlas 2020* date-class.

At the start of 2016 we had c. 142,000 post-1999 records in our database. This consisted of c. 80,000 records from Geoffrey Halliday, of which c. 45,000 are at hectad level, c. 30,000 are tetrad records collected from other recorders (many from Margaret Gregory, whose archive had been passed to Helen Brown), and some from Stephen Ward and others who had begun to send their current records via PLB. The balance was PLB's VC70 records from a small area in the north-east.

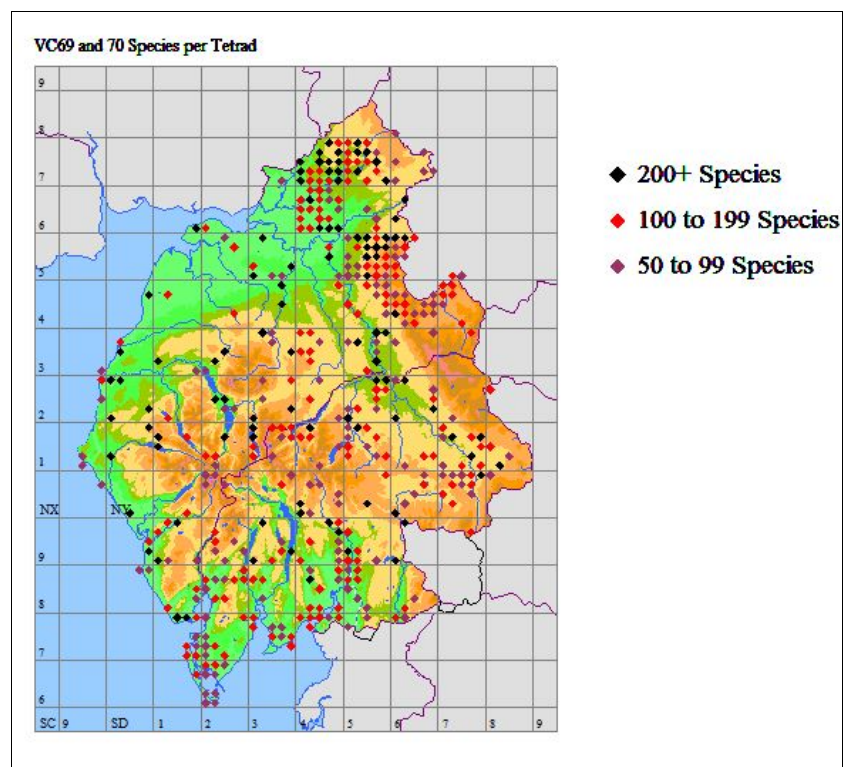
The drive to collect the post-1999 records has proven to be very successful. In all, this has added c. 94,000 records to the database, and there is a large backlog that is steadily being worked through. We now have 263,208 in the database.

Some time in late summer we finally passed all the records to BSBI Distribution Database (referred to as the 'DDb'), and now updates occur every week or two.

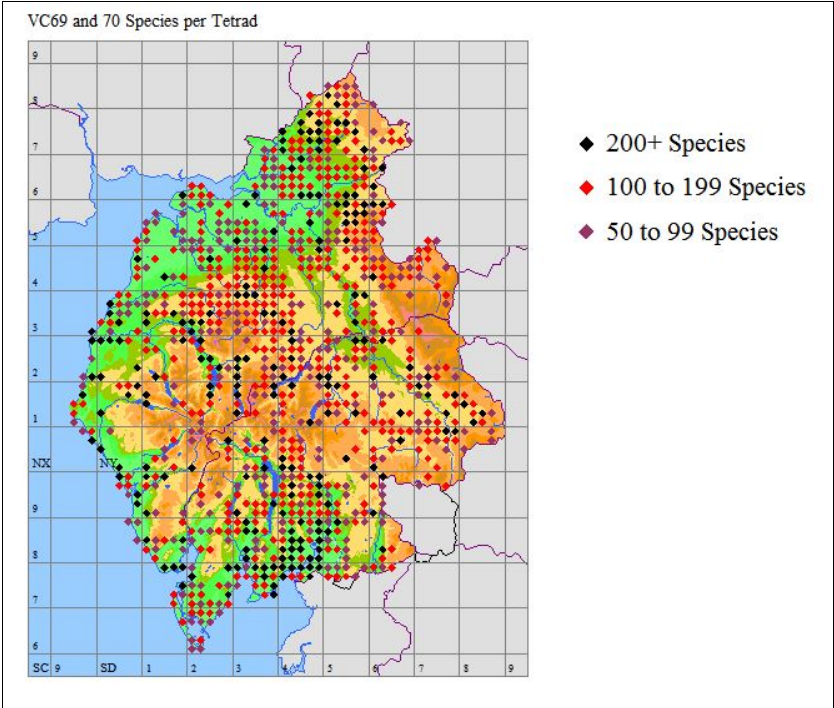
It was noted that so far in 2017 we have added c. 21,000 records to the DDb. Of these, 4,213 are this year's records (numbers updated since the meeting).

The following maps were used to illustrate the progress made over the last year:

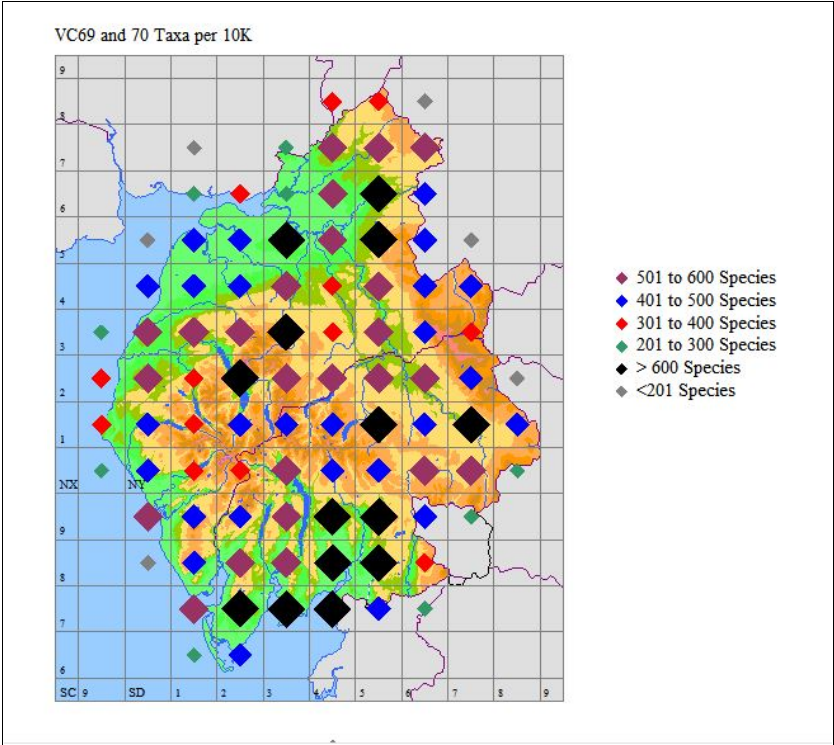
#### **Tetrad map at 17 January 2016**



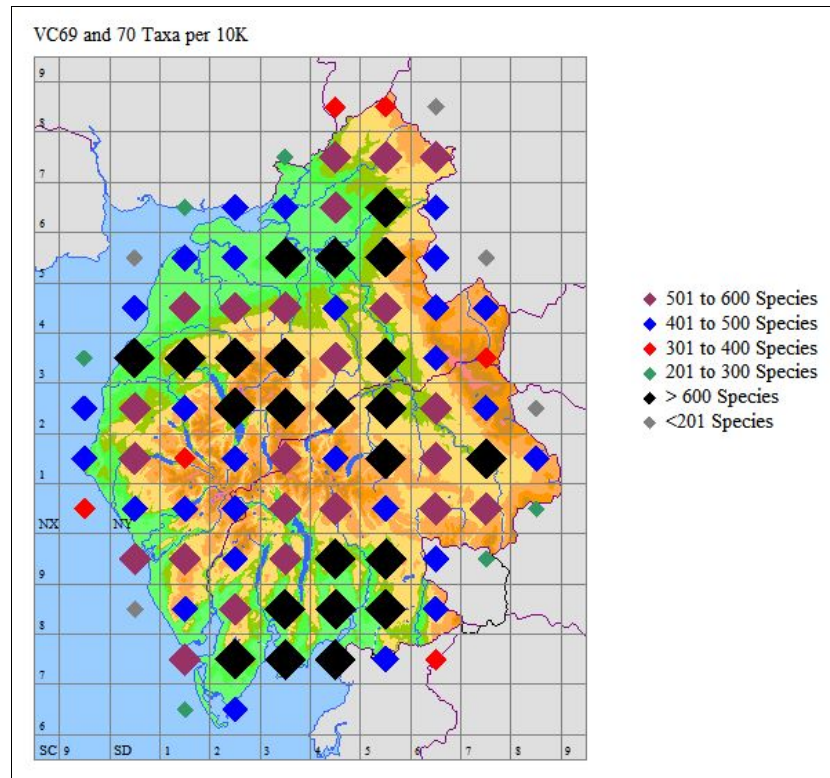
Tetrad map at 24 March 2017



Hectad map at 16 May 2016



## Hectad map at 24 March 2017



The subject of recording for the 2020 atlas in the remaining three seasons was then addressed. We were urgently in need of a strategy. The difficulty of forming one last year was noted: put simply, without the tetrad data up-to-date we could not know which tetrads to target. Over the last year, adding in data – whilst not yet giving a complete picture – has clarified the position a little. A strategy began to form, involving targeting poorly-recorded squares and concentrating attention upon those within the less well-recorded hectads... all somewhat *ad hoc*, and not addressing the BSBI statistical requirement of having five well-recorded tetrads per hectad nationally.

BSBI member Andy Amphlett developed a spreadsheet which analyses a VC's position as regards the *Atlas 2020* recording requirements. A simplified online version of the spreadsheet was demonstrated. It was clear that few tetrads and hectads in VC69 and 70 are flagged-up as meeting the target of 'Well Recorded'; indeed, we are a long way short. So what makes a well-recorded hectad? A hectad would be regarded as well-recorded if it included **five** well-recorded tetrads (*pro rata* for hectads straddling VC boundaries or the coast). We are told that 'five tetrads per hectad' gives better statistical equivalence between vice-counties nation-wide.

To count as well-recorded, a tetrad should have the following criteria;

- 1/ An all-time list of greater than 100 species.
- 2/ There should be at least two recorder-visits to each tetrad at different times of the year (upland tetrads may have just one well-timed visit).
- 3/ Most importantly, at least 75% of the species known in that tetrad should be recorded within the *Atlas 2020* date-class (i.e. post-1999). So if 400 species have ever been recorded in a tetrad, to be well-recorded 300 must be re-found, or found within the 2020 date-class.

The analysis provided by Amphlett's spreadsheet has enabled us to consider again the task of meeting *Atlas 2020* targets.

At first sight the task looks insurmountable. However, it is reassuring that the requirements are flexible, and can be tailored for each VC's situation.

We have a particular 'difficulty' in Cumbria, due to the county being so well-recorded for *A Flora of Cumbria*, published shortly before the *Atlas 2020* date class commenced. Why does having a well-recorded county make our task more difficult? The answer is, of course, that it would be easier to find 75% of species in a poorly-recorded tetrad than 75% in a well-recorded one. (The extreme example would be that if you record in a previously-**un**recorded tetrad then you are bound to get 100% of all known records!)

Because of this difficulty and because we have not yet completed the task of entering past tetrad records, we have decided (after discussion with Peter Stroh of BSBI) that for now it would be reasonable to lower the threshold for a well-recorded tetrad to **60%**. Note that it may be possible to **raise** this threshold as past and current records are entered.

So where does this leave us?

To complete the task of five well-recorded tetrads per hectad we need to raise **171** tetrads to above the 60% threshold. That is 57 tetrads per year for the next three years. If twenty recorders each devote 'only' three days per year to the target tetrads this task looks attainable.

It makes sense to target tetrads that are already close to the 60% level, as these will require less intensive work than would poorly-recorded tetrads. It may appear counter-intuitive that to make VC69 and 70 well-recorded we are going to turn our efforts to fairly well-recorded tetrads rather than poorly-recorded ones but it will be the most efficient way of achieving the target of five well-recorded tetrads per hectad.

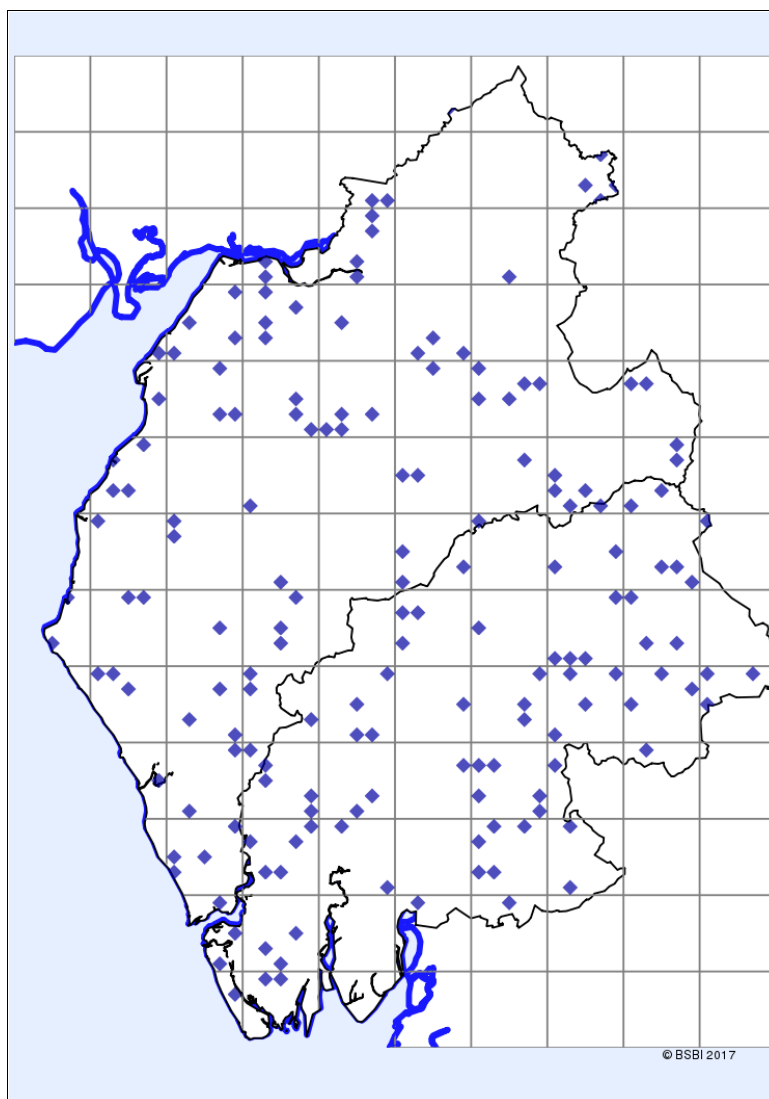
On this basis, and taking into account accessibility and interest, the list of 171 '**Target Tetrads**' has been drawn up. The **list is available on the website** and we aim to constantly update it as tetrads become 'Well Recorded'. It is hoped that recorders will refer to this list to find the tetrads that still need attention.

The map of Target Tetrads is overleaf.

There is an important point here: there is no expectation or need for recorders to completely abandon their normal recording activities, but it is hoped that at least some of their recording efforts will be directed to the Target Tetrads. There is the subsidiary aim to record in unrecorded squares which is hoped will not be forgotten.



## The Target Tetrads



Phill then drew attention to the new ['Atlas 2020': strategy](#) page on the [Cumbria Botany](#) website. It is reproduced in its updated form below.

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### **'Atlas 2020': strategy**

Five well-recorded tetrads (2km × 2km squares) per hectad (10km × 10km) are required to give adequate statistical coverage for the BSBI 'Atlas 2020' project.

To count as 'well-recorded' a tetrad should have at least 75% of its known species recorded within the period 2000 to 2019.

The percentage target is flexible, however, and may be adjusted to meet local circumstances. The thorough work done for *A Flora of Cumbria*, published shortly before the Atlas period, means that in vice-counties 69 (i.e. Westmorland) and 70 (Cumberland) it is harder to reach the 75% target than it would

be in a previously poorly-recorded vice-county (\*). Also until recently the emphasis was on getting *hectads* well-recorded, so many records at *tetrad* level are missing. For now the target percentage has been reduced to 60%. If we have a good season this year it may be possible to raise this.

We have many tetrads recorded in the 2020 date-class that only narrowly fail to meet the 60% target. These are to be our '**target tetrads**'. It makes sense to target these fairly well-recorded tetrads where one visit may raise a tetrad to "well-recorded" rather than to work on poorly-recorded tetrads where several visits each could be needed.

To complete the task of five tetrads per hectad we have a list of **171** tetrads that need to be targeted, or **57** per year for the next three years.

We have at least twenty active recorders in Cumbria who spend at least ten days in the field in a typical season. If each of these were to divert three days' effort per year to the target tetrads the goal may be achievable.

It is certainly **not** necessary for everyone to abandon their normal recording activities: all these endeavours produce useful records. Also it may not have escaped your notice that we have significant areas where there are few or no records (see below); it would be very useful to devote a little time to these. An hour or two in an un-recorded tetrad could easily yield fifty species, which would 'put a new dot on the map'.

**NB:** Although we are here discussing *tetrads* rather than *monads* (1km × 1km squares), we still prefer recording at the level of monad (or better), and indeed last year the vast majority of records submitted were at monad level. However, for the foreseeable future analyses of botanical data nationwide will necessarily be at tetrad level; there are not enough previous monad records to allow much analysis at this resolution.

### Where are the Target Tetrads?

The link ... [Atlas 2020 recording](#) ... will open a folder that contains the following:

A file called [Target Tetrads](#) contains the list of target tetrads as outlined above. When you have recorded in one of these tetrads **you can add in** your name, the recording date and the number of records made. This will **indicate to others** which tetrads have been worked. [Before putting in your details you may need to click on "EDIT IN EXCEL" in the middle of the bar above the worksheet.]

Then please send the records to PLB as soon as possible! If, when the records are entered, the tetrad becomes 'Well Recorded' the tetrad will be marked as such so others can see that there is no further need to record there.

When you look at this spreadsheet you will notice that several have already become "Well Recorded", either as a result of a recording visit or because of entering past records to the database.

You will also notice that some tetrads are marked as "MEETING PLANNED"; these have a FoC meeting planned this year so you may wish not to choose them for a visit.

The situation could be quite fluid with hopefully more and more tetrads becoming "well recorded" as old and new records are added, so do keep checking to see which tetrads still need attention.

If you feel that looking at spreadsheets is far too irksome feel free to phone or email PLB for information on which tetrads you could attack.

A file called [Target Tetrads Information](#) contains some additional information about each tetrad for those who may be interested.

A folder called [Desiderata](#) contains two folders, one for VC69 and one for VC70, that have desiderata lists for all 171 target tetrads.

A file called [Target Tetrads Map](#) shows the location of all the target tetrads.

A file called [Tetrad Records Map](#) shows the present state (at 20-03-2017) of post-1999 records in VC69/70, and may be used to locate 'where the holes are' if you should fancy filling them.

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On behalf of the group, Mike wished to thank Phill for his prodigious inputs with the task of data-entry during his first year as 'VCR i/c Data', keeping abreast of current recording efforts from around the county, whilst entering large piles of earlier data-sets, making numerous contacts with many in the group offering help and advice on data-sets and data-entry, and contacts also with the wider botanical community, and liaising with the BSBI and other bodies.

There were plaudits (including, and indeed especially, from the other two-thirds of the VCRs, who would otherwise be somewhat adrift...) for his application of hard-earned skills with the dread spreadsheet, for his always-willing involvement, and for taking such good care of "that side of things".

Further matters, including our website and Facebook pages, adopted hectads, field meetings for 2017 (see the last page of this report), and data protection issues involved in the distribution of our membership list, were dealt with before the official part of the meeting closed just before lunch.

The group wishes to express our thanks, as each year, to Peter Bullard and CWT for the provision of the room, facilities, and refreshments.

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## Members list

Members 'data-slips' have now been received from almost everyone, and an **updated members list** is included with this mailing.

The latest version of the '**Hectad Adopters**' map is also included. Please let Jeremy know of any errors or amendments. Some hectads remain unadopted: contact Jeremy if you would like to discuss taking one of these on. [What do hectad adopters do?? - broadly, what they want and can manage under the time-constraints we all have! They would aim to concentrate on recording in 'their' hectad, and focus upon both the 'Target Tetrads' and any obvious 'holes' in the coverage map for their areas (where – as Phill reminds us – a quite short visit, even 'in passing', can get 'dots on maps' for that tetrad/monad for many species). They aim to gain familiarity with the hectad, and may be able to assist other members with queries, advice, etc.]

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**Please visit and make use of the *Cumbria Botany* website:**

<http://cumbriabotany.co.uk>

These titles are some of the available pages:

- *Landscapes and Flora of Cumbria – an introduction to the county*
- *News & Comment* (awaiting input from you!)
- *Just what should we record?*
- *Grabbing grid-references*
- *Input your data*
- *Recording in the field*
- *Look out for...* (a series of Cumbrian-focussed identification articles, currently eight in number, on topics including separation of native and introduced Bluebells, *Scilla*, *Prunus*, *Ribes*, *Viola*, *Circaea*, *Crepis mollis*, and the Lesser Celandine subspecies; it is hoped to expand this series over future seasons)

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A more specific website is JR's site, dealing with a few awkward (but fascinating!) topics: spike-rushes *Eleocharis*; deergrasses *Trichophorum*; the identification of *Viola rupestris* (a rare Cumbrian native), and the separation of filmy-ferns *Hymenophyllum*: two species and the Cumbrian endemic hybrid between them: [JR's New Botany Pages](#)

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### Grab a Grid Reference Duo

There are a number of superb websites which greatly assist and simplify matters such as obtaining grid-references, checking the accuracy of grid-references, seeing exact boundaries of hectads (10 x 10 km O.S. squares), tetrads (2 x 2 km squares) and monads (1 x 1 km squares); checking where vice-county boundaries lie, and many other useful facilities.

One with a simple 'learning curve' is **Grab a Grid Reference Duo**, at:

<http://www.bnhs.co.uk/focuson/grabagridref/html/OSv4.htm>

... and a useful PDF **guide** to its operation is included with this mailing.

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Helen Brown writes:

*Dear Flora of Cumbria Group members,*

*You will be pleased to hear that I have sent off a cheque for £82 to the Cumbria Wildlife Trust as a result of members' donations for Jean's books at the meeting at Plumgarths on 11th March.*

*Many thanks for your generosity; Jean's family will be very pleased.*

*Best wishes,*

*Helen*

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Some of the 2016 'finds' are illustrated:

**Narrow-fruited Water-starwort *Callitriche palustris*, Haweswater, July (new to England, PLB & FJR; photo FJR)**





**Serrated Wintergreen *Orthilia secunda***, at a new site, The Benn, Thirlmere (Andy McLay, February; photo FJR, July. See also next page)

**Red Hemp-nettle *Galeopsis angustifolia***, Scout Scar, first county record since 1992 (Peter Shaw)



**Narrow-leaved Ragwort *Senecio inaequidens***, Bolton Wood Lane, Wigton, new to VC70 in September, and also by Junction 38, M6, new to VC 69 (both, MSP)





**Coralroot Orchid *Corallorhiza trifida*, Hay Bridge Nature Reserve, a new site for this very local species, May (Maurice Jones; photo June, PLB). A remarkable 2016 find! Seventeen flowering plants were located initially, on 28th May. Further searches revealed sixty plants.**



**Serrated Wintergreen *Orthilia secunda*, The Benn**

## Field Meetings 2017

**All meetings start at 10.00 am**

**May 20th (Saturday):** NY00 (Gosforth) – Leader Mike Porter. **Meeting-place:** car park on A595 at NY049.051.

**June 19th (Monday):** SD39 (Grizedale) – Leader Mike Porter. **Meeting-place:** Blind Lane Carpark, Force Mills, S of Satterthwaite, Grizedale, SD343.912 (**NB:** slightly altered GR from that previously announced).

**July 4th (Tuesday):** NY43 (east side; Hutton-in-the-Forest) – Leader Jeremy Roberts. **Meeting-place:** Hutton-in-the-Forest, by permission of Lord Inglewood. Meet in the visitors car-park, NY460.358.

**July 19th (Wednesday):** NY50 (High Borrowdale) – Leader Phill Brown. **Meeting-place:** lay-by on E side A6, at top of Shap Fells, NY554.062.

**August 3rd (Thursday):** NY62 (Bolton) – Leader Mike Porter. **Meeting-place:** N-S road on E side of triangle in middle of village of Bolton, NY6379.2324.

**August 25th (Friday) :** NY73 (South Tyne to Moorhouse) – Leader Phill Brown. **Meeting-place:** in centre of Garrigill, NY7448.4155. **Weather dependent; rough and exposed ground.**

**September 9th (Saturday):** NY44 (west side; Southwaite) – Leader Jeremy Roberts. **Meeting-place:** layby on E side of A6 by Wragmire Moss, NY4510.4916.

**Cumbria Biodiversity Data Centre recording day dates are as follows:**

June 13th (Tuesday)

June 24th (Saturday)

July 18th (Tuesday)

August 19th (Saturday)

[Venues are not yet available.]