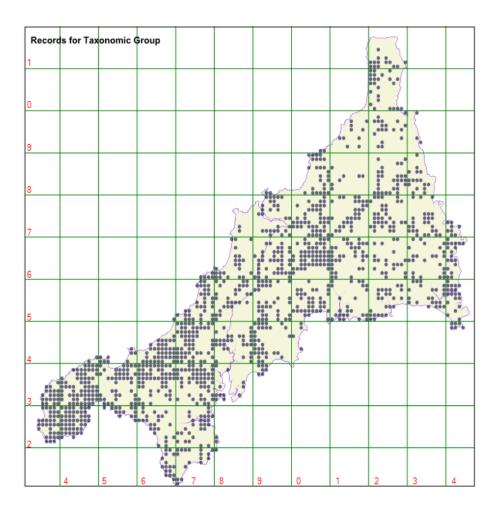
A summary of England VCR reports, 2016

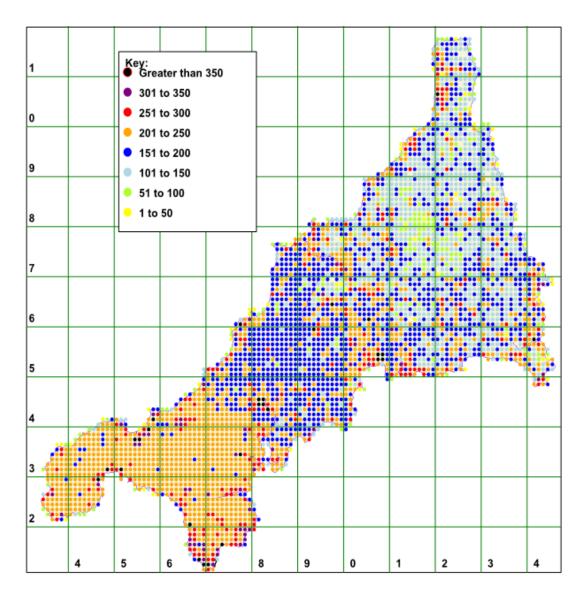
VC1&2 (East & West Cornwall; Scilly): Ian Bennallick, Colin French, Rosemary Parslow

On 31/12/2016 there were 1,984,441 flowering plant and fern records in the ERICA database. During 2016 101,000 plant records had been added (VC1 – 27,878 records made in 2016 covering 1,105 taxa and VC2 – 42,906 records made in 2016 covering 1,164 taxa). The remainder of the records were for previous years and included many thousands extracted from National Trust reports. The map below shows where recording took place in 2016.



The next map shows the number of species recorded since 1999 per 1km square and the current state of our systematic survey of Cornwall in order to publish the next *Flora of Cornwall*. Our focus in 2016 was directed more towards East Cornwall (VC2) where many squares remain under-recorded, hence the greater number of records made in VC2 during 2016. We intend to complete two more field seasons before publishing the *Flora of Cornwall*. Of the 3,962 1km squares to be surveyed only 26 remain to be visited.

Early this spring we should reach the remarkable milestone of having 2 million flowering plant and fern records for Cornwall.



The table below shows the new species that were added to the Cornish list in 2016. Those marked with an * came from a late 18th century herbarium and were probably garden plants, consequently those particular records are of little value. The star in 2016 was the discovery of Gymnadenia borealis x Dactylorhiza praetermissa which is new to science. It was discovered by Barry Tattersall on Crousa Downs, Lizard near to both parents.

Species	Common name	Family	Neophyte
Amaranthus paniculatus *	Bloody Amaranth	Amaranthaceae	NEOPHYTE
Aspalanthus albens *	White Spanish Broom	Fabaceae	NEOPHYTE
Chenopodium suecicum *	Swedish Goosefoot	Chenopodiaceae	NEOPHYTE
Cyclamen indicum *	Ceylon Cyclamen	Primulaceae	NEOPHYTE

Erodium x variabile	Hybrid Stork's-bill	Geraniaceae	NEOPHYTE
Geranium dalmaticum	Dalmatian Crane's-bill	Geraniaceae	NEOPHYTE
Heuchera x brizoides	Coral Bells	Saxifragaceae	NEOPHYTE
Hypericum hircinum subsp. campessedesii		Clusiaceae	NEOPHYTE
Impatiens balsamina *	Garden Balsam	Balsaminaceae	NEOPHYTE
Nectaroscordum siculum	Honey Garlic	Amaryllidaceae	NEOPHYTE
Ornithogalum pyrenaicum	Spiked Star-of- Bethlehem	Liliaceae	NEOPHYTE
Rosa filipes	Chinese Rambling Rose	Rosaceae	NEOPHYTE
Euphrasia confusa x arctica subsp. borealis	A hybrid Eyebright	Scrophulariaceae	NATIVE
Gymnadenia borealis x Dactylorhiza praetermissa	Hybrid Orchid	Orchidaceae	NATIVE
Mucuna urens	Red Hamburger Bean	Fabaceae	DRIFT SEED
Pangium edule	Football Fruit	Achariaceae	DRIFT SEED

VC4 (North Devon): Bob Hodgson

The most exciting news for 2016 was the publication after 11 years work, largely due to the efforts of Roger Smith, of *The New Flora of Devon*. This was successfully launched at County Hall in Exeter on 14th December.

Progress with Atlas 2020

Every tetrad in the VC has had at least one visit since 2000. In the next three years it is intended to increase record numbers by visiting tetrads where there has been only one visit- either spring or summer. It is intended that the Braunton area and Exmoor will have full coverage at a monad level. A number of meetings are planned with the Botany section of the Devonshire Association in the VC and the North Devon botany group will continue regular informal meetings for recording purposes. Mary Breeds continues her evening botanical walks at Braunton Burrows in the summer. Site condition monitoring in Devon is carried out by the Devon Biodiversity Records Centre and their records are included in the BSBI database.

VC6 (North Somerset): Helena Crouch & Liz McDonnell

In 2016, over 52,000 records were made in VC6, input to MapMate and sent to the BSBI; 15,000 were made by John Poingdestre, who surveyed 100 monads in VC6 during 2016. A number of active groups as well as individuals contribute records: Somerset Rare Plants Group (SRPG), Somerset Botany Group (SBG), Cam Valley Wildlife Group (CVWG) and Bristol Naturalists' Society (BNS). Thousands of records were made on field meetings:

- SRPG held 8 all-day field meetings in VC6, three of them joint with BNS
- SBG met every Tuesday morning from April to September, with 17 surveys in VC6
- CVWG went out recording every Wednesday evening for 23 weeks through the summer
- BNS held 4 field meetings in VC6 in addition to those joint with SRPG

Both CVWG and SRPG participated in the BSBI New Year Plant Hunt. In April, Somerset hosted the BSBI Dandelion Workshop, but all credit for that goes to Simon Leach (VC5). The final morning was hosted in VC6 though. SRPG held 3 indoor meetings early in 2016, with talks by members - my Somerset Euphrasia presentation is on the SRPG website. The blue species/monad map which I produced using MapMate changed dramatically during 2016; however we now have a far superior "map" produced by Val Graham, following the model developed by Brian Pitkin in Surrey. This is an Excel spreadsheet designed to look like a map, showing the number of species recorded in each monad since 2000, with a second "map" for the number of records in each monad. These can be seen on the SRPG website at: http://www.somersetrareplantsgroup.org.uk/recording-in-somerset/

In August, SRPG (specifically Liz McDonnell and Simon Leach) organised an Identification Workshop in VC6 entitled "Get to Grips with Daisies". This was very well attended, particularly by our younger members. In December, Simon Leach and I organised a regional VCR workshop for 14 south-west recorders on using the DDb, led by Pete Stroh. This was hosted in Taunton at the Quaker Meeting House, which seemed a good accessible venue for all, so we hope that SW VCR Workshops might become a regular event. VC6 also hosted a weekend meeting of the British Pteridological Society, for whom I led walks for 3 days. This added some good records to the DDb.

I had a small contract (20 days of fieldwork) from NE in 2016 to carry out a Rare Plant Survey of the Cheddar Complex SSSI. I recorded a suite of species at every 8-fig grid reference at which they occurred – the DDb is now saturated with records for *Euphrasia anglica* above Cheddar Gorge! I was very fortunate that Tim Rich helped me record the rare Hieracia of the gorge, which now have detailed updated records for Atlas 2020.

A number of new VC records were made in 2016, including four natives: *Dryopteris affinis* subsp. *paleaceolobata*, identified during the BPS meeting, *Luzula forsteri* (Southern Wood-rush) found by Liz and Ro FitzGerald during a survey of private land, *Calystegia* x *howittiorum* (*C. pulchra* x *silvatica*) and *Euphrasia arctica* x *confusa*. Nine aliens were found new to VC6: *Aloe aristata* (Lace Aloe) growing in a street, the second site for Britain, *Cymbalaria pallida* (Italian Toadflax), *Eclipta prostrata* (False Daisy), only the second post-1930 record for Britain, *Lonicera henryi* (Henry's Honeysuckle), *Mahonia japonica* (Japanese Mahonia), *Miscanthus sinensis* (Chinese Silver-grass),

Silene vulgaris subsp. *macrocarpa, Symphoricarpos* x *chenaultii* (Pink Snowberry) and *Verbena hastata* (American Vervain).

Two thrilling records for VC6 were the reappearances of species believed to be extinct in Somerset. Liz McDonnell and Clive Lovatt found *Fallopia dumetorum* (Copse Bindweed) scrambling over bracken at Nailsea: the last record for this was in 1836. John Poingdestre found *Chenopodium glaucum* (Oak-leaved Goosefoot) in the corner of a maize field near Pilton, last seen in Somerset in 1938.

Progress with the Rare Plant Register is slow. I keep the list of qualifying species on the SRPG website up-to-date, and have written 25% of the accounts. Two SRPG members are now helping with drafting accounts, so I hope to be able to report much more progress next year.

A small team, mostly SRPG members, have been working on the Taunton herbarium. Until about two years ago, when we started photographing sheets for Herbaria@Home, very few people knew about the herbarium or went in to use it. To help get the information out to a wider audience, the SRPG has received a small grant from the Somerset Archaeological and Natural History Society to help with expenses for digitising the collection for H@H. The digitisation part of the project has been completed and photos of 8000+ sheets are ready to go to H@H.

The work that we have already done on the digitisation has spawned other work on the herbarium and we are just about to embark on a major taxonomic reorganisation of the collection, from Dandy to Stace. We have received professional advice on herbarium organisation from Tim Rich and have made a visit to the NMW Herbarium at Cardiff. We are currently mounting the large numbers of Dandelion specimens collected during the 2016 BSBI/SRPG Taraxacum Field Meeting and will be incorporating them into the reorganised collection. The Taunton herbarium is now used and worked on and will be of enormous use to us in Somerset when it is also available online and catalogued by H@H. This has been a major piece of botanical work in Somerset (both vc5 and vc6) over the last two years.

VC7&8 (North & South Wiltshire): Sharon Pilkington & Richard Aisbitt

It was another busy year with the recording focus once again on generating records for Atlas 2020. More than 30,000 records were made and sent to the DDb. Two successful recording meetings in neglected parts of VC7 were held by the Wiltshire Botanical Society, helping to plug gaps in recording coverage. Elsewhere, initiatives by individual recorders helped to improve recording coverage in NW Wiltshire and on Salisbury Plain. The society also hosted an interesting range of walks and field meetings across the county and beyond, which were well attended.

There were many significant new finds in Wiltshire but one in particular stands out. *Vulpia unilateralis* (NCR) was found by Paul Stanley in highly disturbed chalky ground on the edge of the cross-country driving area on Salisbury Plain. Its well-heeled associates included *Minuartia hybrida*, *Cerastium pumilum* and *Filago pyramidalis* (which was also found here new to VC8 in 2013).

On a sadder note, Wiltshire lost two of its veteran botanists in 2016. Ann Hutchinson, BSBI VCR for VC8 from 1976 to 2003 and Beatrice Gillam, pivotal in the compilation and writing of the 1993 Wiltshire Flora, both passed away. Jean Wall, who was also very active in collecting records for the flora, has also just passed away (January 2017) after a long illness.

VC9 (Dorset): Robin Walls

We are nearing the end of the recording period for the BSBI's Atlas 2020 project. It is clear that the centre and north of Dorset are where we have most monads (1km grid squares) with no records (fig.1). We will be organising some recording days up there this year. As is often the case, the richest areas of the county have received the most attention: Purbeck and the coastal squares. Due to boundary changes there are two areas that are also being covered by other vice-counties. Bournemouth and Christchurch are in S.Hants, vc11 and Hampshire are being more intensely surveyed than Dorset. The dotted extension to vc9 in the west is now in the counties of Devon and Somerset. The recently published Flora of Devon has covered their part and I understand Somerset botanists are recording the northernmost parish.

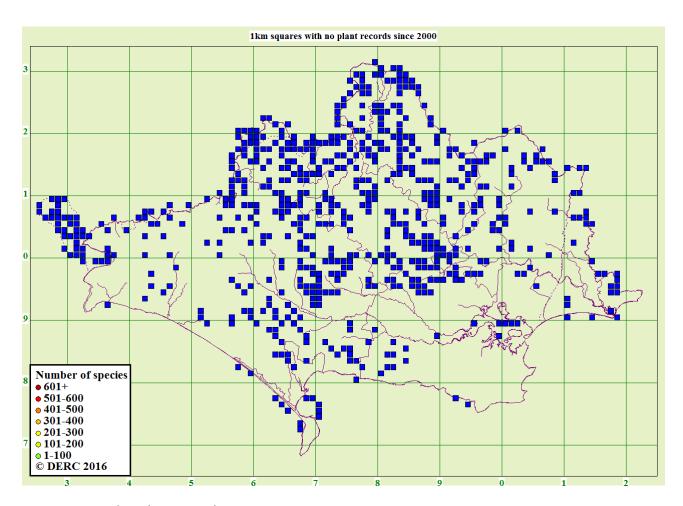


Figure 1. Monads with no records since 2000.

Some interesting finds in 2016

More sites for *Bolboschoenus laticarpus*, the clubrush recently recognised as present in Britain as distinct from the sea clubrush, were found by Fred Rumsey and Helena Crouch on the R.Cale in the upper Stour catchment. These finds complement the first definite identification of the species by

Andrew Branson in 2014 and reinforce my view that any stand of *Bolboschoenus* in fresh water should be studied.

Charles Whitworth has found a new site for little robin, *Geranium purpureum*, more inland on the NW side of Weymouth than the better known sites along the old railway line. On a water sampling day around the National Trust land around Golden Cap we came across the scarcer of our two small clubrushes, *Isolepis cernua*, again at a more inland site than is typical.

The Jersey cudweed, *Gnaphalium luteo-album*, is dubiously native in Dorset, but it is legally protected. Well known on a fenced off munitions waste tip at Holton Heath and more recently discovered along the track near the station, it has now been found further up Station Rd. by Mandy Marler. This may be a re-discovery because Lynne Farrell had told me she had seen it in this area many years ago. I failed to find any three years ago when advising Wessex Water on its conservation during their work on the sewer installation. Like the two species in the previous paragraph, this is not a maritime species as such, but it does like to be where it can smell the sea.

Carolyn Steele and I searched several sites for *Cicendia filiformis* (and *Pilularia globulifera*) for PondNet, with limited success. It is a plant that has good and bad years, so it is not safe to make any deductions from a single survey. This is not an easy plant to find, but well worth the effort since it is classed as Vulnerable (Red list for England, 2014) and declining. It one of the suite of species specialising on winter-wet hollows (typically wheel ruts) on heathland. Often found with *Radiola linoides* which is also vulnerable but more frequent and conspicuous.

A rush that can easily be overlooked in stands of jointed rush is the blunt-flowered rush, *Juncus subnodulosus*. As a component of fens, in our county it often indicates more base-rich water which, in a heathland environment, should trigger a search for other scarce plants. Jim White found a stand near Scotland Farm with *Schoenus nigricans*, another species of similar significance, although more conspicuous and probably commoner in our area.

On the Atlas 2020 recording day at Ashmore we were delighted to find a small patch of *Saxifraga granulata* in the churchyard. Particularly pleasing was that it had clearly been recognised as worth conserving because the mower had carefully avoided the patch. Meadow saxifrage may have been more widespread formerly, but we now seem to be down to only five areas in the county where it may be found in small groups. Unlike many of the other plants mentioned above, this is a 'proper' flower, very attractive and easily spotted in May.

Heath lobelia

The good news for *Lobelia urens* is that the developers taking on the after use of the large quarry at Crossways, Habitat First, are keen to restore substantial areas to prime habitats. The main function of the site is as holiday accommodation – rather luxurious by the sound of it – and they want the houses set in quiet, attractive countryside. The idea of looking after scarce species has gone down well and as it is only a few fields away from the heath lobelia site this would be an ideal one to start with. After a walk over we have a site in mind and Habitat First have started preparation by clearing the gorse and will so a basic grass mix soon.

The less good news is that on a late visit to Hurst Heath last year I found the entire seed crop had been eaten off! Presumably deer are responsible. Somehow or other we will have to prevent a

repeat this year if the project is to get off to a good start. Anyone got a spare roll of netting to put over the main stand in August? We are also trying to arrange a work party for late winter to clear back some of the regrowth of *Molinia*.

Sugar Hill

The arboretum near Wareham is looking a lot more inviting after our working party with the Forestry Commission volunteers in January. Much of the brash and fallen timber has been cleared into piles to decay or be removed and some of the weedier trees have been felled, making the wood more open and easier to walk around. Importantly, all the specimen trees have been numbered and Ted Pratt has located them all and recorded the ten figure grid reference. FC's Matt Parrott has named them and given us the list (contact Ted or me if you would like a copy). By the summer we hope the FC will have made name plates, at least one per species, which we will attach to the trees. This could not be a better resource for anyone wanting to improve their conifer identification skills.

Guide to winter twigs

John Poland, author with Eric Clement of the Vegetative Key, has been writing a key to twigs for the last four years. It will be the most comprehensive so far since it covers over 350 species and he intends to have it available in time for next winter. He asked me to do a "few drawings" to illustrate the main features of twigs and buds. After foolishly agreeing, this has turned into drawing nearly all the species in the key! This has kept me out of mischief through the last three winters and now I am preparing the final drawings.

Orchids and foreigners!

My most exciting find of 2016 was the result of stopping on the way back from a meeting that had finished early in a poorly recorded square in N.Dorset. There was a lay-by, a broad scruffy verge and some woodland that looked accessible and would yield a reasonable starter list for the Atlas 2020 project.

Having recorded those, I still had twenty minutes spare so I walked back down the road to a cutting in the hope of some calcicolous grassland species. As I later found out, was created in 1993-4 so it had not developed one of the usual calcicolous communities. Nevertheless there was an open sward of *Carex flacca, Leontodon hispidus* and bryophytes in which I recorded a handful of other downland species, including some *Ophrys* leaf rosettes. To my surprise, one of these had some flowers. The weather was getting a little blustery and it was now well time I left, so with my slightly smart phone I took a few pictures.

At home I could not place the orchid - a bit like *O. apifera*, which does not flower this early, but a hybrid might. The only *Ophrys* out at the end of April in Dorset is the early spider orchid, *O. sphegodes*, which is found miles away to the south, along the coast. I sent my fuzzy pictures to a few friends and the orchid referees for ideas. To summarise a lot of emails over the next few days, the referees came up with something even more exotic: *Ophrys insectifera x scolopax (O. x nelsonii)*. Two knowledgeable botanists who visited the site thought the non-flowering rosettes were probably *O. insectifera*. This is rare in Dorset, adding to the interest but in need of confirmation, so we returned in June. The early *Ophrys* had gone over and did not look like setting seed, but there was an array of *O. insectifera* and *O. x pietzschii* (the hybrid with *O.apifera*). Some assiduous counting by

Fred Rumsey and Helena Crouch, who know a similar site in Somerset, totalled 130 fly orchids, 42 bee-fly hybrids and a single bee orchid, making this by far the best fly orchid site in Dorset without the additional interest of the hybrids and a few more common orchid species.

The results of DNA work on the putative *O.x nelsonii* is still awaited at the time of writing. Meanwhile we can ponder the origin of a mainly S. European taxon on a Dorset roadside. Many road cuttings have been coated with a nutrient rich soil and sown with robust grasses. Our county ecologist, Phil Sterling, has long had a policy of avoiding this sort of restoration, preferring to sow a basic grass mix thinly on the mineral soil. This has paid off handsomely here and in other places, notably the Weymouth Relief Rd, New Rd on Portland and the W.Stafford bypass.

VC10 (Isle of Wight): Colin Pope

Everything is on course for completing our coverage for Atlas 2020 and our Botany Group (run as a section of the Isle of Wight Natural History & Archaeological Society) remains active (monthly field meetings from April to October and an indoor winter meeting, plus New Year count) and supported (average of 10-15 participants on field meetings; at least twice that number at our indoor meeting). I receive records from around 10 active local recorders and a number of visiting botanists plus other scattered reports. I publish an annual report in the Society's flagship publication, Wight Studies, of interesting finds. We are thinking about developing a web presence in 2017.

VC11 (South Hampshire): Martin Rand

We're making good progress with the "square bashing" for Atlas 2020. There are just two hectads that don't have at least 20% of their tetrads with 80% of total species recorded since 2000. Two national meetings have been organised in 2017 for the interesting coastal part-hectad. Other work will concentrate on aiming for up to 40% of tetrad coverage at 80% plus for all hectads, and tackling the four remaining tetrads that fall well below the mark. Increasingly the focus will switch to chasing up individual taxa and records - under- or suspect over-recording, dodgy records.

The Flora Group continues to run workshops on requested plant groups, and I ran sessions on *Euphorbia* and *Chenopodium / Atriplex*. With a generous grant from the Wild Flower Society, we now have a dissecting microscope with built-in digital camera that enables fine detail to be projected at good resolution.

Among memorable days in the field was a 4-day session with Roger Maskew looking at *Rosa*, which got us lots of new records, confirmation of some old ones, and much enlightenment for the participants. I was also pleased to visit the *Carex* x *elytroides* found by Mike Rowe the previous year the first Hampshire record for over 100 years, apparently. Most bizarre find was the alien *Orontium aquaticum* - apparently the third record in the wild in Britain. As it's patently invasive in a site of high conservation importance, steps are under way to eliminate it.

VC12 (North Hampshire): Tony Mundell

Some years ago as part of the website at www.hantsplants.org.uk Martin Rand constructed an automated facility for assessing the priority for survey for each separate tetrad in both VC11 and VC12. These priorities are updated at the start of each recording year. Information given for each tetrad includes the total number of taxa ever recorded, and the number since 2000. We aim to get

as many tetrads as possible in each hectad up to at least 80% refound (and with a minimum of 180 taxa ever recorded for all whole tetrads). This software draws attention to any tetrads not meeting the 180 taxa requirement (called 'Low species counts) and also highlights those tetrads between 75% and 79% refound (called 'Easy Wins').

All the VC12 tetrads assessed as 'Top' or 'High' priority were finally polished off in 2016 and I personally surveyed 48 tetrads myself, often in the company of the 'Hectad Guardian' that I had appointed. 18,900 VC12 records were added in 2016. This is significantly less than the previous four years which all exceeded 30,000 extra records but this is because I am now often using customised recording sheets for each tetrad that automatically omit all taxa already recorded since 2000.

The Hampshire Rare Plant Register was published as a book in 2011 and is now available as a free download from our 'hantsplants' website. Updates published there have been started, but with two wildlife holidays abroad this winter there is still much to be done on this. At least in 2016 I did eventually finish the task of entering all the old records from one of the major sources of old paper records that I inherited – Lady Anne Brewis' large card index.

The Hants Flora Group's newsletter, issued twice every year, gives details of outings that Martin Rand or I lead (separate from the Atlas 2020 surveys noted above) and includes lists of the most important botanical finds every 6 months.

I have always really enjoyed 'square bashing' (hence my 48 survey outings in 2016) and I nearly always find some plant to excite me and make my day. I still need to get to grips with using the DDb, especially for validation but I have quite a few competing interests for my time. The validation will be done in time for Atlas 2020.

VC13 and 14 (West & East Sussex): Mike Shaw, Paul Harmes, Matthew Berry

Recording

This year the main focus of recording has been a survey of the flora in Sussex churchyards and cemeteries, many of which are an important source of biodiversity in a county under pressure from housing and infrastructure development. Its aim was to audit these plots, identify the most important and interesting, and to liaise with those concerned with their management in order to encourage good practice for the preservation and enhancement of their plant communities. Over 100 churchyards and cemeteries were previously surveyed between 1980 and 1991 and it will be interesting to compare results from that with the new study which has covered 152 sites and generated some 16,000 records to date.

Along with this survey the SBRS has run a full programme of field meetings, and the addition of more mid-week meetings has proved popular in encouraging attendances. In the wake of post-Flora 'square-bashing' the emphasis has moved towards recording in more botanically rich sites, but some meetings have been used to carry out specially requested surveys. Several members thoroughly enjoyed a guided tour of the Millennium Seedbank at Wakehurst Place this summer.

Interesting finds in West Sussex have included a refind of *Leersia oryzoides* at Waltham Broooks, last recorded from here over 30 years ago; the first Sussex record for *Lemna turionifera* at Amberley

Wild Brooks; a new site for *Hordeum marinum* at Medmerry, the RSPB reserve on the Selsey peninsula; and the first VC13 record since 1992 for *Trifolium resupinatum* in Littlehampton.

In East Sussex many of the new and interesting records are aliens from the Eastbourne area, largely the result of Matthew Berry's endeavours. They include several *Alliums*: *A. cristophii*, *A. nigrum* and A. *trifoliatum*, which Matthew feels is often mis-recorded as *A. subhirsutum* but can be separated by its yellow (not pink) anthers and longer pedicels. Also two new sites for Centaurium scilloides, a find of *Chenopodium giganteum*, *Clarkia amoena*, *Cyperus involucratus*, *Ceanothus thyrsiflorus* var. *repens* and *Teucrium hircanicum*, the last two being new to Sussex. Of native species we had the first sighting since 2009 of X *Dactylodenia evansii* at its sole site in Ashdown Forest, and *Viola* x *intersita* at Scotney Castle, a new VCR and second Sussex record.

New Sussex Flora

Work towards the new Flora is progressing well and we are now in discussions with a publisher with the aim of having the book ready for early 2018. This winter will be spent preparing the final drafts of the species accounts and introductory chapters before they go out for proof reading. Other tasks include production of a gazetteer and bibliography, selecting photographs to include and backgrounds for distribution maps. It continues to surprise just how much work goes into preparing a work like this.

General

We continue to work closely with our local Biodiversity Records Centre (BRC) with whom we have an ongoing mutual arrangement to share records. Mike continues to act as verifier for iRecord in West Sussex and it is possible there may be a volunteer to take on the role in East Sussex in 2017.

2016 saw a migration to a brand new SBRS website. This was designed by Roger Shaw, Mike's son, and Brad Scott, a SBRS member who now enthusiastically runs the site. It has a much more modern feel to it than the old one, with links to Facebook, Twitter and Flickr, and we believe it has played a large part in the recruitment of more new members to the society in 2016 than in the last several years as a whole.

The SBRS has experienced other changes in 2016, not least with the sad death of our secretary Rita Hemsley. On a brighter note David Streeter has agreed to become our new president. Two committee members, Arthur Hoare and Howard Matcham have decided to stand down after many years of sterling service to the society. Arthur was an assistant county recorder and remains on the Flora committee; Howard was the Sussex Bryophyte recorder for many years and is now studying freshwater algae. He was recently elected FLS and this year won their prestigious H. H. Bloomer award to acknowledge his 'important contribution to botanical knowledge.' The citation further stated that his work on African and Chilean bryophytes had resulted in new records for both continents; new species to science in bryology and mycology and new British and European records in bryology, mycology and phycology.

VC15&16 (East & West Kent): Geoffrey Kitchener (joint with Sue Buckingham for VC15)

Our 2016 recording is reported in full in Kent Botany 2016 (online, Kent webpage). The county recording group held 16 field meetings, from Crystal Palace to Dungeness, all reported in the group newsletter (also online).

Some 50,000 records have been made for 2016, including 1,500 for the rare plant register (which has been developed further and which, in draft, so far covers plants from A to M). Recording priorities were revised so that Atlas 2020 needs are given equal ranking with achieving good coverage for the current date class (these are of course closely aligned, anyway).

A reconstruction of Francis Rose's missing MS Flora of Kent was produced. He had worked at the Flora, on and off, for decades, but it could not be found following his death in 2006.

Eight NCRs were made for each vice county. Records included: the discovery of *Carex* x *prolixa* in vc15 and *Carex* x *subgracilis* in vc16; *Lotus angustissimus*, feared locally extinct, was re-found in quantity; and gametophytes of *Trichomanes speciosum* were found in Kent for the first time, in several Wealden sandrock outcrops.

VC17 (Surrey): Ann Sankey

Atlas 2020 — we are continuing active recording in monads, targeting especially monads which are under-recorded since 2000. Some even have none or very few records ever. Many of the under-recorded monads are around the edges of the VC but not necessarily. Recording has taken place during the 15 official field meetings, during 12 informal meetings and by a small core number of members recording on their own or in small groups. Although the analysis of taxa added is not yet available, we appear to have made good progress in monad recording and thus with our hectad data.

New Year Plant Hunt – about 10 brave souls took part in this for the first time, on a really cold and wet day. Other members recorded individually over the four days and a very respectable number of species were found in flower.

Surrey Rare Plant Register – we are really making an effort to get the RPR out this year. The species accounts have been edited and updated but it is the record tables which are very time-consuming, in part because we are aiming for hard copy publication initially.

Conservation – there is a group of members who help practically to manage sites for some of our rare species. We also do our best to oppose inappropriate planning matters. I sit on the Biodiversity Working Group and SNCI selection meetings.

Progress with data-basing records – although we are more or less up to date with adding 2016 records to MM, progress with adding the older individual species records has slowed and a new effort must be made next autumn and winter. Nevertheless, we appear to have added at least 68,200 records in 2016.

VC18 & 19 (South & North Essex): Ken Adams

Our database now stands at 736,600 records, around 60,000 having been added in 2016. During the year we concentrated on the NE of the county, (and now have 14 members in our new Tendring Group started in April) re-recording 10km squares but keeping the records at monad level. We have also been concentrating on monad mapping Foulness Island and Shoeburyness MOD sites (50 monads) now having access passes for three years up until 2018. These have never been surveyed in detail before, and we received a grant of £1,000 from contractors Volka Stevin to eventually produce a plant Atlas of this important area in 2018. We have also been targeting hectads elsewhere in the county that have been poorly recorded. We covered all but two monads for TL40 over the last two years and covered around 50% of TL50 in 2016. Considerable progress has also been made in covering the Vc18 hectads TQ38 and TQ48.

Our new Essex Botanical Society formed in February 2015 to attempt to reach out via our Essex Botany News Letter to people who have an interest in plants, but not sufficiently so to join a paid membership natural history society, is paying dividends. We now have 163 members signed up to receive it twice a year. Similarly our three local monad bashing groups (Tuesday, Weds and Thurs) are progressing well and we now have 6 people trained up well enough, and enthused enough to monad bash on their own, with a once week pub meeting to I.D. queries. Our member Marion Miller has made tremendous strides this year inputting our historical records (at least 20,000). We have also been fortunate in receiving several biggish donations towards Atlas 2020 and the 3rd Flora of Essex, including £1,000 from the Essex County Council. Jonathan Shanklin has been helping us out along our northern border, and also arranged another joint meeting with the Cambs. group this time in the Heydon area. Essex Botany (called a Newsletter as they are except from VAT) being A4, on glossy paper, and in full colour is proving to be the ideal format for my picture keys to difficult genera and lookalikes, and I now have the gear to take stacked images down the microscope, and for example, hope to tackle vegetative Geranium I.D. using the leaf stalk hairs in a future issue. For our latest Essex monad coverage see the map:

http://www.kenadams.org.uk/esb/mapmate__recording.htm

VC20 (Hertfordshire): Trevor James & Ian Denholm

Six organised field meetings for the Herts Flora Group were again carried out this year, aimed at Atlas 2020 field coverage. These ranged from derelict land and old common land on the fringe of London near Barnet to river valley grasslands in the Ver Valley and industrial wasteland and urbanfringe wetlands near Hitchin in the north of the County. Members of the Group also carried out field days separately around the Hitchin area, and around St Albans etc.

Sample coverage for the Atlas is being carried out, having had a complete County survey published in 2009. To date we have good coverage of around 100 complete tetrads out of a total for the County of under 500, with many more having had partial surveys. All complete or substantial parthectads in the County have had at least 2 detailed tetrad re-surveys, several with as many as 7.

A growing problem in the County is a reduction in the available manpower of competent botanists. We are now down to about 6, but even some of these are engaged with other matters, particularly doing site surveys for the Wildlife Trust, which, although we obtain the data, are limited in scope.

Highlights of the year included the re-finding of *Orchis militaris* in the County for the first time since the early 20th century – at a ruderal site by an old gravel pit! (published in BSBI News). Other finds were not spectacular this year, but did include a ruderal site for *Salix repens* (otherwise considered extinct in the County), a re-finding of the increasingly rare *Silene noctiflora* in two localities, and a massive colony of *Lithospermum arvense* (possibly sown?).

A new development is the promotion of Ian Denholm as 'Assistant Recorder', duties yet to be agreed in detail. This is welcome, given my own health problems, which will entail major surgery this spring, and a resultant inactivity for much of the early part of the year at least.

The key issue is data entry, for which plans are in place to deal with a backlog of some 8 years' data into Recorder 6. After that, Herts should have at least reasonably up-to-date data for most species, although re-recording all of the County's rare species is not going to be feasible for the short Atlas 2020 timescale.

VC21 (Middlesex): Mark Spencer

This year has been largely occupied with rationalising large sets of historic data and sending those to the local BRC (GIGL) for compilation with other records from the Greater London area (and the London Natural History Society's polygon) prior to sending the data to the BSBI in advance of the deadline for the next atlas. I have also been working on submitting post 2010 data to GIGL as well. Some 'square-bashing' under the auspices of the LNHS on behalf of the planned flora of the London area has also been undertaken.

VC22 (Berkshire): Mick Crawley

Coverage of post-2000 monads is all but complete. We have recent data from all but about 60 of Berkshires 1 km squares (these all dominated by intensive arable land). The depressing trend of finding fewer and fewer native plant species (especially those of nutrient-poor habitats) continues as a result of eutrophication (atmospheric inputs coupled with agricultural fertilizer drift). The trend towards growing Opium Poppy as a commercial crop continues, producing extraordinary swathes of colour in enormous fields. Apparently growers are getting yields of about 15kg of morphine per hectare.

VC23 (Oxfordshire): David Morris

Progress with the Atlas is going okay. Coverage is improving, for which I am grateful to Jon Shanklin, in addition to locals. Encouraging more botanists from without the VC to record here would be marvellous. However, coverage is not everything and the emphasis on square bashing leaves the refind rate and tetrad totals modest across most of the county. Some groups are poorly covered – e.g. salt adventives, native look-alike shrubs, hybrids.

The RPR is nearing publication, the project being run by members of the Oxfordshire Flora Group (OFG). I ran about half a dozen recording meetings this year (before becoming VCR) through OFG. The former VCR, Sue Helm, leads one most months. Several of my meetings involved visits to SSSI, LWS or nature reserves.

I have set up a blog. I hope (1) that I can keep up with it, and (2) that sufficient people will read it (especially young people) that it will be an encouragement to local recording activity. Interest in local recording does seem to be growing.

New County Records: *Dittrichia graveolens*, A34, Oxford. The same plants were seen in 2012 by Paul Stanley but the record was never submitted to BSBI. *Polystichum tsus-simense*, det. F. Rumsey, in Oxford. Other notables included *Rosa agrestis*, Pyrton Hill, Paul Stanley & Eric Clement; 1st VC record since 1979, last at Pyrton 1897, Druce; a new site for *Carex pulicaris*, Wendlebury Meads; second extant population in the VC; and a new hectad for *Scandix pecten-veneris*, Islip; rare in VC.

VC24 (Buckinghamshire): Roy Maycock & Andy McVeigh

On the whole recording for Atlas 2020 continues well and all parts of the vice-county have been covered. A new Recorder (AM) has made a great difference to the quality and quantity of records for the south of the county. The field meeting in June was enjoyable, with most of the attendees were from the VC. The local Record Centre has been able to continue reviewing the quality of sites recorded in the past – many from surveys undertaken in the 1985-95 period. Up to date records are available to us.

VC29 (Cambridgeshire): Alan Leslie & Jonathan Shanklin

At the time of writing approximately 17460 records have been entered or imported into MapMate for 2016. All tetrads have now had at least one visit. According to the DDb another 84 tetrads require follow-up visits to reach 75% refind rates. It should be possible to visit all of these over the next couple of years.

An RPR and Scarce Plant List have been compiled now that the majority of records are in the DDb. These are on the vc29 web page.

It is intention to finish the work on a new Flora of Cambridgeshire this year. Almost all the taxonomic accounts have now been written, although most of the Monocots have yet to be checked against material in the University Herbarium (**CGE**).

JS can now create site/tetrad specific record cards which are a big aid to recording. These are compiled from MapMate species lists using a computer program to flag date class, rare plant and unrecorded common plants. JS gave some training to Ecology Solutions and is commissioned to do three more sessions in 2017. JS is validating records from the local records centre (CPERC), and will give them the vc29 records in return. The Cambridge Flora Group held seven meetings in 2016. A BSBI national meeting was held at Kingfishers Bridge.

Erophila glabrescens (NCR in the DDb) was found at several sites – it had probably been overlooked previously. Taraxacum palustre was found at Soham Wet Horse Fen, its second extant location in the county. Dianthus armeria was found at a couple of sites; at one site it seemed introduced, but its status at the other is uncertain. Juncus acutus (NCR) was found at the edge of a balancing pond near Cambourne. Scirpus sylvaticus (possibly NCR) was found in a dry ditch on the West Cambridge site, a location which has produced a large number of casuals. Iberis amara has turned up at several more sites where it has never been seen before, and there is some suspicion that a "phantom sower" is at work introducing rare plants. Other unusual aliens have included Lepidium virginicum on

a grave in Grantchester, *Sporobolus indicus* (NCR) on a roadside near Great Chesterford. *Silene unifora* has been added to our list of native maritime invaders along main roads.

VC30 (Bedfordshire): John Wakely

Atlas 2020 coverage is slow. Of 22 county hectads the percentage of taxa recorded for the previous Atlas but not refound since 2000 varies from 29-55%. Six field meetings were held in 2016, the focus being education rather than data collection. The Flora group, formed two years ago for Atlas 2020 recording, has some inexperienced members who are learning their trade, but also some competent botanists who require more encouragement to record. There is a small core group actively recording and weekly recording meetings in the less-surveyed hectads are planned for 2017. An initiative to encourage Beds Natural History Society members to record arable weeds through Adnoto was limited, the only records received being from Flora group members already actively recording.

NCRs: Trifolium ornithopodioides; Myrrhis odorata; Erigeron acris X Conyza sumatrensis; Epilobium tetragonum ssp tournefortii.

VC31 (Huntingdonshire): David Broughton

The VC is starting to achieve good coverage so my focus has been on consolidating work done to date, and targeting under-visited hectads and habitats. The Flora of Fenland project is proceeding in parallel with records flowing both ways and some interesting finds being made. The Huntingdonshire Fauna & Flora Society is also busy recording and mapping orchids, so this is helping with the update of records and building on knowledge of current distribution. 'Weedy' orchid species of dry grassland habitats are expanding rapidly relative to historic distributions, while many of the woodland species are still present at historic sites but are now much less abundant and often hard to find. The RPR will be updated in 2017 to reflect the large number of new records, and new recently discovered native species will be added.

A number of NCRs were added, including the undesirable first finds of *Hydrocotyle ranunculoides* in one of our main rivers. More positively, the rare pondweed *Potamogeton compressus* continues to spread along Fenland drains, a remarkable and seemingly rapid turnaround of fortunes for this species. I continued my recently started blog through 2016 (see VC webpage), allowing records and news to be shared more widely and regularly.

VC32 (Northamptonshire): Rob Wilson

Recording for Atlas 2020 is well on schedule, and in 2016 we concentrated on checking older records of rare plants, everyone involved in this finding that many had since disappeared although all of the data has not been sent in yet and a proper analysis cannot yet be made. There are still areas to be recorded for the Atlas and these will hopefully be cleared up well before the final date. Many records are still outstanding however but these are coming in slowly.

The Flora continues to be updated on the computer where it exists as a dtp file which can be saved as a pdf to add to the website in due course. The checklist exists as a Word document which is continuously updated and should be added to the web site soon. The RPR has now been reworked and includes historical dot maps of the rare plants. This will need updated as 2016 data is received and will be added to the web site when it is in a complete enough state. During the year I have also

produced a provisional 'flora' of charophytes, again including maps of all historical records and a list, by species, of all known records.

I have arranged data exchange with both the Cambridge and Peterborough Environmental Record Centre and the Northamptonshire Biological Record Centre. I already receive records from the former and should shortly receive records from the latter. I also check all botanical records for both of these organisations and comment on any dubious or unlikely finds.

VC33 & 34 (East & West Gloucestershire): Clive Lovatt

Introduction and recording networks

Two years ago the long-standing VCRs for Gloucestershire, Clare and Mark Kitchen stood down. I took over as VCR for West Gloucestershire VC34 but there is at present no BSBI VCR for VC33 East Gloucestershire. There are few other MapMate users in the Bristol/ Gloucestershire area although we have some recorders who send in casual records, short lists, or, cards.

Nonetheless, the Kitchens remain as plant recorders for the Gloucestershire Naturalists' Society for whom they write an annual report of new plant records. Their recording is undiminished and they remain as the county MapMate hub and they submit files to BSBI regularly. 12,240 VC34 records were submitted for 2016 (VC33, 6,582). Both I and the Kitchens have access to the 'my county' DDb pages provided by BSBI for VC33 and VC34. Both of us reside in VC34 and there is more recording done there. At present I am mainly working the area east of Severn and north of Bristol, often with Liz McDonnell, joint VCR for N Somerset. West of Severn has been well covered by the Kitchens since 2000 although I have made a number of forays there with them, particularly catching up on urban and waste ground species.

We both visit VC33 from time to time, although the 'industrial scale arable' of the Cotswold plateau, with limited public access or roadside stopping places, can seem unwelcoming and uninteresting. I added the roadside halophytes *Sagina maritima* (Cheltenham) and *Atriplex littoralis* (Ashchurch, Tewkesbury) to VC33.

There is a Gloucestershire Plant Group run by the Kitchens as a section of the Gloucestershire Naturalists Society and there are meetings at least once a month which attract about a dozen people. Generally they are to follow up on special species (e.g. *Chrysosplenium alternifolium*) or places (Minchinhampton Common near Stroud). On one visit to the estuary near Oldbury Nuclear Power Station we saw *Artemisia maritima* doing well and (with John Martin of Natural England) identified *Vicia lutea*, which had been known to, but not identified by, one of the party.

In 2016 I ran five 'Gloucestershire Pot Luck' meetings through the Bristol Naturalists Society (BNS), mainly focussed on BSBI 'White tetrads' i.e. those with less than 50 post 2000 species on record on the 'heat maps' most usefully prepared by Andy Amphlett for BSBI. These produced on average 200 species per tetrad and though numbers were rarely enough for two groups, helped to cover the ground and interest some new people in recording. On one we refound a few sprigs of *Molinia caerulea* where the Kitchens had seen it 20 years earlier, on a green lane bounding a now disappeared common (Yate Lower Common). Willowherbs have been somewhat under-recorded recently and after a workshop at the Somerset Rare Plants Group (SRPG) we have been able to record *roseum*, *obscurum* and *lanceolatum* more frequently.

BNS also has monthly winter meetings, several of which have been members' evenings for identification and recording. SRPG meetings are also useful and included (November 2016) a DDb training meeting with Pete Stroh of BSBI.

Highlights of 2016

Polycarpon tetraphyllum (Rupert Higgins) and Euphorbia maculata (CML), both as Bristol street weeds were new to VC34. Also new was Erigeron acer x Conyza sumatrensis hybrid (approved by Paul Green and Alan Leslie) from the platform at Avonmouth Station (all Hb CML). Fumaria bastardii turned up at a second roadside site near Avonmouth as well. Pak Choi (Brassica rapa ssp chinensis) has been identified from its leave several times in Bristol in recent years and it was flowering in a gutter near Temple Meads station in late 2016. Poa annua f. purpurea is frequent at the Hidcote National Trust Gardens (VC33). These last two don't seem to be on the DDb.

Plans for 2017

Now that I have retired I am able to devote more time to VCR duties so 2017 should end up being more focussed. I and the Kitchens have organised and publicised a program of a dozen recording meetings through GNS and a few more will come through the Bristol Nats. These include some VC33 meetings and two days training in ID of grasses.

We are also involved in the Forest of Dean 'foresters' forest' program http://www.forestersforest.uk/ and recently met FC and NE and Gloucester Record Centre staff to discuss this year's activities (subject to grant renewal).

Using the 'my county' data we intend to focus on re-finding species not recorded since 2000 in each hectad, as well as bumping up the better recorded tetrads to the 75% level of sufficiency; and picking up particularly under-recorded tetrads (all recording is at monad or better resolution). In addition we want to look for various rare and/or recently under-recorded species which could well be declining.

I have developed a 'VC34 outside Dean' recording card which will be field tested shortly and then printed. An online presence for Gloucestershire needs to be established on BSBI's website in the next few months. We also need to increase the number of MapMate users in Glos.

Following an SRPG 'dandelion' meeting in early April I hope to do some more collecting.

VC36 (Herefordshire): Peter Garner & Heather Davies

Progress with Atlas 2020 – Records for 2015 *ca* 10, 000 and for 2016 *ca* 8, 000. These records are now on our database and when we have exchanged post -2000 data with the BSBI we will be able to identify where there are gaps in the coverage. It is hoped that our RPR will be published in 2017.

It was the second year of field meetings by BoB (Bonkers on Botany). There were eight meetings/training sessions for young botanists and any others who are keen to improve their ID skills, as described in BSBI News September 2016.

A *Rubus* weekend with Rob Randall was run in July. We recorded 22 different *Rubus* spp from six sites -Haugh Wood SO53Y, Belmont Wood (SO43Y), Nether wood (SO53B), Athelstan Wood (SO53F),

Broadmoor Common 63D). We were grateful for the support given by Ann Haden who came all the way from Jersey.

Notable records included *Bromopsis benekenii* (Lesser Hairy-brome) at Doward (2012) by David Green. This is the first county record for 100 years. *Orobanche rapum-genistae* (Greater Broomrape) was found by Tom Fairfield (2016) at Brilley. This is currently the second site in county. Interesting finds from Bromyard Downs with Mark Jannink and Tim Rich in May included *Taraxacum landmarkii* and *Taraxacum oellgaardii. Verbascum phlomoides* was found in September in Rotherwas Industrial Estate by Peter Garner.

NCRs: *Taraxacum palustrisquameum* (Moseley Common 2015 Peter Garner, 2016 Tim Rich Det A J Richards), previously only known from Norfolk, Lancashire, East Lothian and North Perthshire.

VC38 (Warwickshire): John & Monika Walton

The recording for Atlas 2020 is going well, we have increased the number of botanists submitting records and we have been focusing on under-recorded tetrads which are mainly in the south near the Oxfordshire border. We have sent in about 23,000 new tetrad records this year.

The Flora Group participated in the 2016 New Year Plant Hunt in Kenilworth and there were 16 Field Meetings including a visit to Winterbourne Botanical Gardens (lots of aliens). We ran our first indoor Poland Day (well attended by professionals from the Warwickshire Biodiversity Audit and Wildlife Trust) and led a Daffodil Walk. We wrote two Newsletters, and a paper "Additions to the Flora of Warwickshire for 2014 and 2015" that was published by the Birmingham NHS. We organized our annual indoor meeting for the group at Brandon Marsh. We delivered two workshops on plant ID for the survey group of the Wildlife Trust and helped with some of the Reserve Condition Monitoring visits.

This year we have joined in the survey by Ian Trueman at Sutton Park NNR. We attended two courses run by the Oxford Rare Plants Group on Apiaceae and Grasses (we had to use the main Stace grass key!), and attended Jonathan Shanklin's Cambridge field meeting and the Fern meeting in Staffordshire.

We added 18 NCR's this year, mainly aliens, but one was a new Euphrasia hybrid!

VC39 (Staffordshire): John Hawksford & Ian Hopkins

A total of 11, 375 new, unduplicated records for the year, were made and entered into MapMate during 2016. More than 75% of the new records were made by one or other of the two VC Recorders. Five other individuals recorded between 230 and 1,150, each, totalling nearly 23%. A dozen more provided shorter lists. The recording was planned to give as uniform as possible coverage of the VC. Discussions are taking place between active individuals to fill in "gaps" during 2017.

An account of interesting finds for the year, a revised Rare Plant Register and an updated Checklist were deposited on the Staffordshire page of the BSBI website. Validation of earlier records using the DDb is well in hand. Details of new plant records have been forwarded to *New Journal of Botany*.

VC40 (Salop): Sarah Whild & Alex Lockton

A fairly quiet year in vc40 following the publication of our Flora the previous year. Some Shropshire Botanical Society (SBS) recording is going on, mostly visits to reserves and Wildlife Sites. There was good showing for the NYPH.

We work closely with the Shropshire Ecological Data Network (SEDN) and submit our vc data through them to the NBN.

The level of botanical recording in the county remains fairly high, especially with several members of the Botanical Society recording sites for the Wildlife Trust, who send us the data for computerisation. So far we have compiled some 8,000 records of 907 species for 2016, and there are many more still to be done.

On the SEDN web site (www.shropshireecology.co.uk) you can find the species accounts from our recent Flora updated to include new species, changes to taxonomy and significant changes to existing species accounts. The accounts are updated every month or two. Curiously, no-one ever seems to have done this before, but it seems a practical way of providing people with an up-to-date account of the flora of the county. The pdf is of course searchable, and the species names are deliberately not abbreviated to make it easier to find a particular plant.

The entire Shropshire Flora database is also available online via the SEDN web site. We have our own Flora web site where you can search for a site or species and download all the records at the touch of a button, or you can visit the NBN web site and access the data from there. There is even a spreadsheet available from SEDN that you can simply download to get a useful summary of all the records (1km square, year, site, species & recorder).

Records of new species

- Brachiaria platyphylla, Broad-leaved Signal-grass: Harlescott, SJ5015, 20 Sept. 2016, Handley, Mr J.
- Centaurea debauxii, Chalk Knapweed: Llanymynech Rocks, SJ2621, 04 Sept. 2016, Shanklin, Mr J., Rand, Mr M.W., Earl, Mr D.P.
- Conyza floribunda, Bilbao Fleabane: Prees, SJ5533, 11 Oct. 2016, Shanklin, Mr J.
- Cotoneaster franchetii, Franchet's Cotoneaster: Sambrook, SJ7124, 29 March 2016, Shanklin, Mr J.
- Crataegus x subsphaerica, a hawthorn: Fauls, SJ5833, 05 Oct. 2016, Shanklin, Mr J.
- Crocus x stellaris, Yellow Crocus: Tong Church, SJ7907, 15 Feb. 2016, Shanklin, Mr J.
- Linum grandiflorum 'Rubrum', Crimson Flax: Castlefields, Shrewsbury, SJ4913, 28 Sept. 2016, Whild, Dr S.J.
- Lonicera pileata, Box-leaved Honeysuckle: Marchamley, SJ5929, 05 Oct. 2016, Shanklin, Mr J.
- Orthotrichum obtusifolium, Blunt-leaved Bristle-moss: Hawkstone Park, SJ5729, 06 March 2016, Wrench, Mr D.H.
- Pterocarya fraxinifolia, Caucasian Wingnut: Eardiston, SJ3725, 25 May 2016, Shanklin, Mr J.
- Silene chalcedonica, Maltese-cross: Uffington, SJ5314, 05 July 2016, O'Donnell, Dr S., O'Donnell, Mrs E.

- Taraxacum pietii-oosterfeldii H. Ollg, Cole Mere, SJ4233, 5 May 1978, T. Edmondson (det. A.J. Richards, 2017, new to Britain).
- Ulmus laevis, European White-elm: River Severn at Sheintonbrook, SJ6004, 06 June 2016, Wrench, Mr D.H.

VC53 (South Lincolnshire): Sarah Lambert & Malcolm Pool

2016 was a very busy year in VC53! So far I've entered 25, 327 records into MapMate, comprising 1147 taxa from 37 hectads. Recording has been more evenly distributed across the vice-county, with significant progress made in TF04 and TF05. In thirty hectads at least 65% of species now have post-2000 records. In 2017 recording efforts will be concentrated on more northerly hectads, particularly SK85, SK95 and TF06. Malcolm Pool has added many records for SK93 (the tetrad with the highest number of records in 2016) and Kerry Harrison has thoroughly recorded a number of tetrads in TF03 and TF04 (the tetrad with the highest recorded number of species).

The South Lincolnshire Flora Group (SLFG) continues to flourish with thirty-four people on the e-mail list, of which about half either attend field meetings or are recording independently. There have been five SLFG field meetings between March and September, including visits to urban areas, woodlands, limestone grassland and arable land. There was also a very successful BSBI recording weekend held in April 2016, which was attended by 22 botanists and resulted in 2000 additional records for the north of the vice-county.

We have recorded 70 new taxa in 2016, the majority of which are garden escapes and planted trees,. The most intriguing new vice-county record is that of Fragrant Agrimony *Agrimonia procera*, which was recorded from three sites by three different recorders, all in the South Kesteven woodlands. Other records of interest include a population of Straw Foxglove *Digitalis lutea* on the side of the A15 south of Sleaford and Ragweed *Artemisia ambrosiifolia* in Stamford.

VC55 (Leicestershire): Geoffrey Hall & Russell Parry

A total of 124,113 records were added to the DDb, including a backlog of 55,436 following a data exchange with the Environmental Record Centre and 43,462 from one prolific recorder (2000-2016 only!) Apart from the 11 monads surveyed by the VC55 botany group, it is difficult to identify how many tetrads and monads have been surveyed, as some recorders have completed parts of tetrads, others are not yet complete and other have yet to submit records. In 2016, the breakdown of records submitted so far is:

No of Records per Tetrad in 2016	Tetrad Frequency	Interpretation
>500	1	Well recorded
400-499	3	Well recorded
300-399	8	Well recorded

200-299	28	Partially recorded to well recorded
100-199	85	Partially recorded to well recorded
11-99	148	Partially recorded and random records
0-10	53	Random records

Gaps in recording are mainly in the west and north east of Leicestershire, and parts of Rutland. A meeting will be organised in early April to galvanise Atlas 2020 recording volunteers for the 2017 season. A talk on Atlas 2020 progress is scheduled for the Leicestershire & Rutland Recorders' meeting in February. A checklist of Charophytes is progressing slowly; specimens at the BM (NH) were examined this year.

GH & RP arranged eight local group meetings to survey monads, one to survey community woodland, one for the local Wildlife Trust and one to a local Arboretum (Shady Lane). GH helped the Wildlife Trust to survey the Great Central Railway and a couple of LWSs, and contributed to the Severn Trent partnership project by surveying flood relief storage areas. RP & GH surveyed sites for Leicester City Council and RP participated in the City Bioblitz. Help was offered with re-surveying LWSs to LRWT and to the 'Back to Green' project for 2017. GH &RP helped local botanists, students and NatureSpot users with identifications and finding training opportunities. Lists of endangered local species and practical help collecting seeds to the LU Botanical Garden local plant conservation project 'Genebank 55'. Two talks were given; GH gave a talk on Urban Botany to a local horticultural group, and RP presented a slide show on 'local trees' to Leic. Lit & Phil. Soc.

GH wrote articles on 'Seaside plants' and 'Atlas Progress' for the Leicestershire & Rutland Recorder, and an article on new sites for Potentilla argentea for BSBI News. RP wrote an article on the 6th Mass Extinction based on local botanical surveys for Leic. Lit & Phil. Soc.

There was a number of notable finds. *Scrophularia vernalis* (NCR); *Utricularia vulgaris* agg. x 2 (first since 1920); *Fumaria capreolata* ssp. *babingtonii* (1st since 19th century); *Ranunculus parviflorus* (1st since 1953); *Trifolium resupinatum* (NCR); *Atriplex sagittata* (NCR); *Bolboschoenus laticarpus* (NCR); *Salix gmelinii* (NCR).

VC56 (Nottinghamshire): Mark Woods & David Wood

It has been another busy year with regards to Atlas 2020 recording. 35,000 records have been collected to date with another 10,000 yet to be processed (when I get them). I have yet to review tetrad coverage, but estimate that we have another 50 to do and still to obtain paper records from the County BRC for 2000-2010.

Interesting records this year include *Dactylorhiza* x *insignis* (NCR); *Lythrum hyssopifolium* (2nd site); *Umbilicus rupestris* (confirmed from 2015); first records for *Corylus colurna, Phytolaca polyandra, Galanthus nivalis* x *plicata, Festuca glauca, Clematis viticella, Crocosmia masonorium, Dryopteris affinis* subspecies *paleaceolobata, Helleborus* x *hybridus, Dipsacus laciniata, Hypochaeris glabra* x *radicata, Mentha requienii, Scutellaria altissima, Teucrium hircanicum, Trachyspermum ammi. Further records of Gymnocarpium robertianum,* three new records of *Cyrtomium falcatum,* third record for X *Schedolium braunii*; seven new records of *Torilis nodosa*, third and fourth records of

Papaver lecoquii, third site for Allium roseum, two new sites for Acaena novae-zelandiae; fourth site for Oxali dillenii; third site for Artemisia verlotiorum; a sixth site for Carex divulsa subsp. divulsa and three new records of Erodium moschatum.

The second edition of the Nottinghamshire RPR will be ready for posting on the BSBI web-site in the coming weeks. Our Flikr page continues to expand and a recording group of BSBI members / non-members organised via Facebook continues to be active. It is intended to increase support for this group in the future (workshops, training, field trips etc.), but Atlas work is taking priority.

An archive of Ann Gilbert's 19th Century records has been found at Nottingham High School; this has been digitised and submitted to the DDb.

VC57 (Derbyshire): Alan Willmot

The year of 2016 has been a relatively quiet one after the excitement of 2015 when we published our new county Flora after almost 20 year's work. The Flora has continued to sell well over the year and we have now sold over 750 of the 1,100 published volumes. The main focus of work over the year was to collect records for the new Atlas of which some 36,000 were added to our local database and forwarded to the DDb. These records were collected on our eight Flora Group trips, by dedicated recorders working on specific hectads and increasingly by spontaneous contributions from local enthusiasts. Out of 42 partial or complete hectads in VC57 we have only two "red squares" but 24 "yellow squares". Plans have therefore been made to concentrate work in 2017 to convert as many squares as possible to green over the year by concentrating efforts on the re-finding of previously known species. The usual programme of outdoor meetings has been organised for the summer though we have consciously decided to extend the period of visits further into the autumn than before.

There have been a large number of new county records this year, mainly for introductions such as garden escapes or throw-outs e.g. *Cicerbita plumieri* (Hairless Blue-sowthistle) and *Cotoneaster hissaricus* (Circular-leaved Cotoneaster). However, there were a couple of possibly native newcomers *Alnus x elliptica* (A hybrid Alder) and *Lysimachia thrysiflora* (Tufted Loosestrife). The former probably arose *de novo* from introduced plants, whilst the latter may have been overlooked previously or just yet another garden escape. We now have all four species of *Conyza* in Stace (2010) recorded for the county.

VC59 & 60 (South & West Lancashire): David Earl

The total number of 2016 vascular plant records added to the Mapmate database came to just over 11,000 for vc59 and 9,500 for vc60. This is a significant fall from the usually figure of around 50,000. There is still a need to capture additional 2016 records from local recorders, recording projects and record centres.

2016 was the second year of the Bio-diverse Society Project (run by Lancashire Wildlife Trust) with surveys leading to the discovery of a new site for *Geranium sylvaticum* near Burnley and a visit to see the locally rare *Eriophorum latifolium*. An excursion with the Lancashire Botany Group took us to Leck Beck where limestone specialists included *Actaea spicata*, *Dryopteris submontana* and *Gymnocarpium robertianum*. Species monitoring included *Blysmus compressus* and *Viola canina* at St. Anne's and *Carex bigelowii* at the north-east tip of Lancashire. In the Forest-of-Bowland *Trientalis*

europaea was found to be flourishing at the only extant Lancashire location. *Eleocharis multicaulis* thought to be extinct in a VC59 was found by Peter Jepson at Belmont Head Flushes.

Lists for the Botanical Society of the British Isles of Rare (1-3 sites per vice-county) and Scarce (4-10 sites per vice-county) have now been compiled for vc59 and vc60 and are available as downloads via the BSBI website which will hopefully encourage local naturalists to monitor the populations of species on the lists.

VC61 (South-East Yorkshire): Richard Middleton & Peter Cook

This year we visited eight sites as a BSBI Local Group and thanks to efforts by individuals working on their own, we have completed our programme of recording in selected tetrads that had no post-2000 records. Some selected tetrads with low scores have been topped up following seasonal visits by individual members and we now have very few tetrads with fewer than 100 taxa.

We rarely encounter Gallant Soldiers in the field but finding both *Galinsoga parviflora* and *G. quadriradiata* in one place gave Richard opportunity to show their differences by the power of digital photography - our News page on the webpage is proving useful and informative.

Water Bent *Polypogon viridis* embarrassingly turned up literally on our doorsteps as an NCR and has been recorded in several places in urban environments - a find illustrating neglect of our own locale as we square-bash distant tetrads. This self-inflicted phase of Atlas 2020, recording as a Local Group activity, has been enjoyable but, in some cases, hard and depressing work. VC61 is both intensively farmed and severely 'manicured' such that tetrad scores of 150 or more are exceptionally good.

We have demonstrated that the strategy of concentrating our recording effort in selected tetrads over the last few years has been effective in that we have been adding only a small number of additional hectad records. With this square-bashing phase over, we now look forward to spending time in more species-rich habitats, tracking down old records and venturing into pastures new.

VC63 (South-West Yorkshire): Louise Hill & Kay McDowell

One of our botanists, Steve Hindle from the Sowerby Bridge area, found that southern marsh orchid had been wrongly recorded as northern marsh orchid in a lot of squares in the Calderdale area.

We have recorded in a good number of km squares in the SD95 hectad (around the Skipton area) which previously had no records. One of the best finds was oxlip (*Primula elatior*) which has been planted but is spreading and hybridising with primrose.

I've had a really good year getting to know local natural history groups such as the Halifax Scientific Society. This group has really made me feel welcome, even though I'm not from Yorkshire originally! We've recorded in km squares in the far west of the county which previously had no records. Kay.

I have spent the first year as Joint Recorder reviewing gaps in coverage seeking additional records from Local Records Centres in order to target field work in under-recorded areas. Several recording days were held in the north-east of the Vice County where records are very sparse. The plan for 2017 is to continue to work this area together with recorders from local Naturalist's Societies and South Yorkshire Botany Group members. Louise

VC64 (Mid-West Yorkshire): David Broughton

The never-ending data entry continues! Which I take to be a good sign of the state of recording in the county, and the numbers of people actively participating and motivated to pass on data. Data flowing to the DDb is now threefold what it was a few years ago, and is gradually moving the county in the right direction for the Atlas. The Wharfedale Naturalists' Society continues to be a great source of high quality detailed records, particularly pinpoint records of rarities, and I continue to be very grateful for the contributions of the Society (via their Recorder) and the additional contributions from members.

My own efforts have continued to focus on those parts of the county that have been largely overlooked and they continue to reward. I have also been actively recording some of the 'false natives' that are still widely overlooked in the region. This year the abundance of *Crataegus x subsphaerica* has been a real revelation and I would encourage others to look critically at their hawthorns when in fruit – a complete eye-opener when you see all those erect sepals and in the horrified words of one of my colleagues "I don't know what real hawthorn looks like anymore". Focussed searches from late summer have also worked wonders for our knowledge of the distribution of *Limosella aquatica* and *Persicaria minor* in the VC, with a number of new sites found. Populations of the latter all seem to be resolutely white-flowered, which adds additional interest.

VC66 (County Durham): John Durkin

This was a good year for recording, with 11,000 2016 records and 27,000 earlier records inputted to the database. Special thanks are due to Ruth Starr-Keddle, who provided more than 10K records from her 2013-2016 surveys of North Pennine meadows. Thanks are also due to Fal Sarker of the Darlington Field Club, who provides many records in every year.

A new edition of the county RPR was produced.

The tools on the BSBI website were invaluable in steering recording effort. Most of the "special" species records were validated on the DDb, with many records amended, and 10 of the 42 county hectads were brought up to the "75% and 5 tetrads at 75%" standard. The average hectad now has 67.8% re-recording and 2.5 tetrads at 75%. This is, however, not "on target" to complete the county by 2019. The difficult hectads are lowland ones with few interesting or accessible sites, and coastal part-hectads that have lost historically rich habitats.

The Durham Wildlife Trust launched their botany group, with visits to a number of DWT reserves and other sites. There are good attendances, 10-20, of interested beginners. On the debit side, several regular contributors left the county, and will be missed.

My predecessor, Rev. Gordon Graham, died this year. His funeral was well attended and included a number of his botanical friends and colleagues. An obituary has been prepared by David Shimwell and Julie Stobbs.

VC68 (North Northumberland): Chris Metherell

There has been good progress with Atlas 2020 recording. Using the 'My County' tab on the DDB, the map (or rather the underlying data) shows an increase in the re-recording rate from 76.5% to 82.5%.

We're aiming for over 90% by the end of 2019. However, in some ways this should be set against the rather poor previous recording coverage - over 35% of species recorded having not been seen in the relevant hectad before 2000.

I was able to negotiate access to the VC68 section of the Otterburn ranges and we are about half-way through recording this area which has had very little coverage in the past.

One of our recorders, an ex-forester, has been organising coverage of forests and policy woodlands, resulting in the discovery of many interesting individual trees, for example Abies cephalonica, Alies firma, Picea nigra subsp. palasiana and Cryptomeria japonica, several of which appear to be new UK records.

VC69/70 (Westmorland/Cumberland): Mike Porter, Jeremey Roberts, Phill Brown

On taking over as VCRs, our biggest and most pressing task was to ensure that records from 2000 to the present were entered on the DDb, showing us what still needed to be done for Atlas 2020 and thus enabling us to see where future recording efforts needed to be concentrated. Although what we have done this year has reduced the backlog, there is still a vast amount of time-consuming work to do.

In 2016 we held six well-attended field meetings for our Flora of Cumbria group and were involved in a number of joint meetings with other local organisations. The Annual BSBI Summer Meeting was held at the Blencathra Centre in Cumbria and contributed a notable quantity of new records. A BSBI National Field Meeting on Sedges was also held in the county. We have organised a number of workshops on difficult groups, including ferns. Individually we have done a great deal of additional recording. Overall, about twenty people contributed **622** recorder days between them with many more recorders contributing a few days each.

We have begun work on the updating of the RPR (published 2014) after which it will go online. In addition to our web pages "Cumbria Botany", we also run a Facebook site the "Cumbria Botany Group" which now has 172 members and is extremely active with questions and contributions from many different members, most of whom are **not** members of the BSBI.

Significant Finds:

Callitriche palustris (1st record for Cumbria and, apparently, England)

Circaea alpina (5 new sites for this Nationally Scarce plant)

Corallorhiza trifida (4th site in Cumbria for this Nationally Scarce and Vulnerable plant)

Galeopsis angustifolia (1st record in Cumbria since 1992 for this Critically Endangered plant)

Oenanthe aquatica (2nd record for Cumberland and Cumbria)

Senecio inaequidens (NCR Cumberland)

Trichophorum cespitosum s.s. (3 new sites for this Nationally Rare plant)

VC113 (Sark): Susan Synnott

Recording is progressing. All records to end 2015 have been sent in and 2016 records will be sent shortly. A good visit by Wild Flower Society in June was led by Anne Haden, and Anne returned again in August. I am in contact with Julia Henney in Guernsey about plant recordings for Digimap, and all our records are up to date to the end of 2015. A project of clearing gorse around heather on certain areas of headlands (Pilcher & L'Eperquerie) is ongoing. Discussions with a new owner for maintenance of a wet valley on his property where orchids found have been positive. I thought I had a NCR for Sark, *Cakile maritima*, but later discovered it had been recorded previously - in 1838 and 1879!

VC113 (Jersey): Anne Haden

Our local botany group The Botany Section of the Societe Jersiaise continues to increase in numbers, with some members who lapsed in the past returning to join us. We meet every fortnight, with indoor meetings in the winter and outings in the summer. Our theme for the summer was intended to be to go to sites to try and find common hybrids and suggested in Pete Stroh's list of 50 common hybrids. Unfortunately very few were found, we shall continue our search this year. In winter we had some focused workshops on topics such as conifers, twigs, bryophytes and a 'Poland' evening. The size of the island means that every monad has been surveyed apart from two urban sites for the Atlas.

The RPR for Jersey has progressed, but is not yet complete.

Steve Clarkson led a weekend training on recording using the DARFOR scale to show abundance. The Environment Dept. has said that our botanical records will be more useful in the future if we record showing abundance. All our records continue to be sent to the Jersey Biological Centre.

At a Wild About Jersey weekend run by the Environment Department to highlight the work done by volunteers we had a stall and gave a key-note presentation on the work of botanical recording done by local botanists. The group continue to record at the NPMS square.

New records for Jersey are aliens such as *Trachycarpus fortunii*, *Eranthis hyemalis*, *Passiflora caerulea* and *Rubus tricolor*.

VC113 (Alderney): Brian Bonnard

2016 was an unusual year for weather. Seasons were upset and at the beginning of the year many early spring flowers were late in flowering and later produced a second flowering in October-December. Noticeable amongst these were *Primula vulgaris* which has continued to flower through Christmas to March 2017, several *Hebe* species, mostly the common (in Alderney) *H. x Franciscana* Blue Gem a widespread garden escape still flowering now, *Viola riviniana* a native flower going rampant in gardens and still open in large swathes in March, *Bergenia crassifolia* widely planted in gardens and clumps surviving on waste ground, a few heads showing before Christmas and plenty now. *Ulex europaeus*, of which the island has vast areas, was noticeably scarce in flower up to Christmas but is just coming into large areas of bright yellow again after an unusually long period of low rainfall with well above average sunshine at the end of the year and again now with much fog now and high humidity between the sunny days.

New records for 2016:

Mimulus guttatus Monkeyflower. BB Bonne Terre Stream July 2016. Small patch.

Sisyrhinchium striatum Pale Yellow-eyed-grass. Visitor. Probably a garden escape. Specimen shown to me but no firm idea of the site.

Euphorbia cyparissias Cypress Spurge. BB in flower June-December 2016. Route de Picaterre in roadway at base of a wall. Single large plant with many stems. Probably a garden escape.