



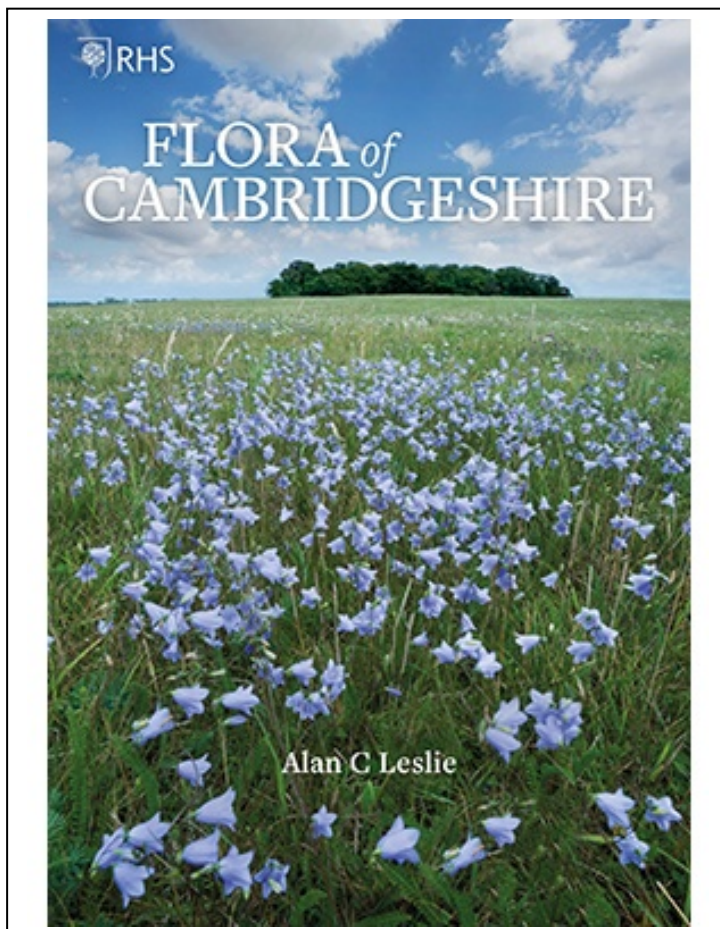
Cambridgeshire Flora Group

Newsletter 2020

1st Edition

News

Two big events relating to the county occurred during 2019 – the retirement of Alan Leslie as Vice-County Recorder (VCR), and the publication of his Flora of Cambridgeshire. Alan became a Botanical Society of Britain & Ireland (BSBI) VCR for Cambridgeshire in 2002, following the retirement of Gigi Crompton. He was joint recorder with Nick Millar until Nick retired from the role in 2013 and I began my stint. He will continue to help county botanists and will remain an active recorder in the county. Many of us, beginners and improvers alike, are very grateful for his tuition and patience.



The Flora is a very weighty tome, weighing in at 3.5kg, a kilo more than the Flora of Suffolk, but slightly lighter than the Flora of Bedfordshire. Both of these have distribution maps, but there are none in the Flora of Cambridgeshire, thus reducing its size. Alan lists hectad occurrence for species, but for maps you will need to go to the BSBI Distribution Database (DDb). Unfortunately, the public interface to the BSBI maps does not easily allow viewing of county distributions, though it is possible. The book includes an introductory chapter setting the scene, a chapter on the plant recorders and one on selected sites of interest. The bulk of the book is taken up by the species accounts covering some 2330 species and hybrids. There will be a full review in Nature in Cambridgeshire (NiC),

but I do recommend purchasing a copy if you want to learn everything about our county flora.

On the Botanical Society of Britain and Ireland (BSBI) front I continue as the Hon. Field Meetings Secretary and Council member, and have also taken on the role of the Chair of the new Committee for England. Perhaps as a consequence of this we have three BSBI meetings in the county this year. Two of these are more specialised (Elms and Cotoneasters) and one is intended for beginners. There are the usual Flora Group meetings and these cover a variety of sites across the county. We are now in a new BSBI date class and a potential project following on from Atlas 2020 is a register of county botanical sites. For this reason I've organised early and late season meetings at two of these, in order to make a start on surveys. A possible future step further would be compilation of site floras for the best of these, something that Alan has already done for Chippenham Fen (NiC, 2015) and the Devil's Ditch (NiC, 2011). There are also published accounts for Kingston Wood (NiC, 2003) and the Ouse Washes ditches (NiC, 2003) and for several major sites in the new Flora, but few for other sites. I have made site surveys at quite a few places, including most recently RSPB Fen Drayton, the Furze Hills, Kingfishers Bridge, Madingley Wood, Magog Down, Wandlebury and several Cambridge colleges, though have not contemplated writing these up for NiC. I know that Monica Frisch has paid several visits to Hayley Wood. There are many more sites that would benefit from intensive recording and a written account of their flora.



Jacobaea (Senecio) paludosa (Fen Ragwort)
introduced at Kingfishers Bridge

Recording News

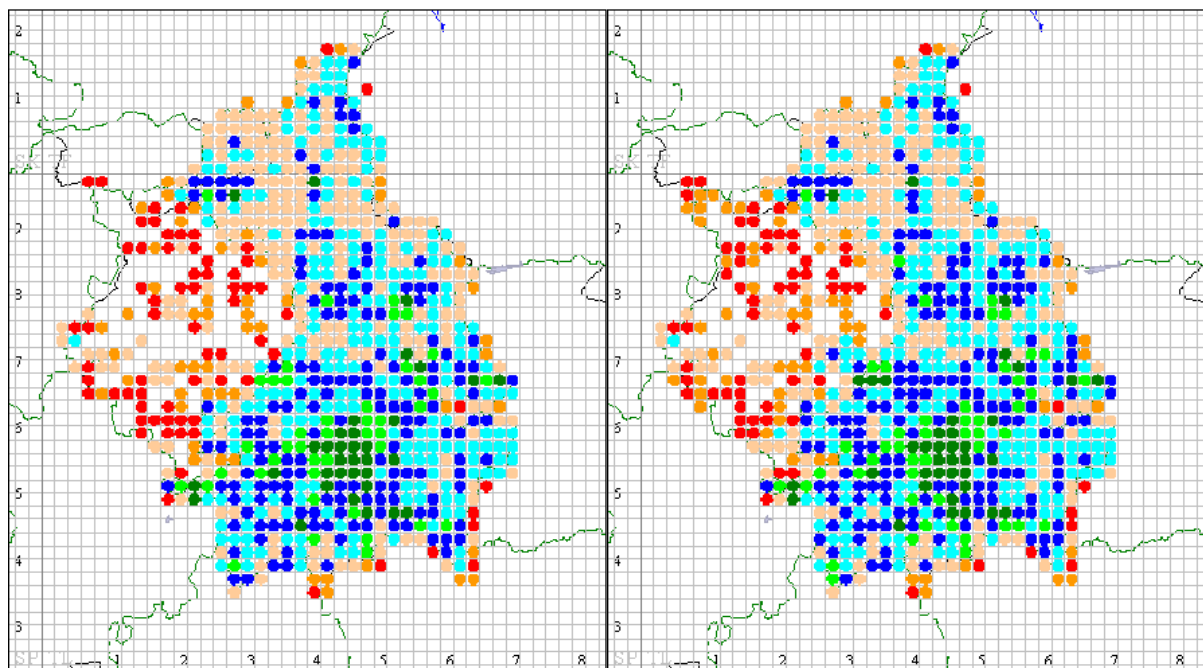
I have made the annual update of the Rare Plant Register (RPR) and the Register of Plants of Conservation Concern (RPCC). The list of those species not seen recently, which is subdivided into decades has also been updated. All of these are on the web page. The decadal listing might help people to target specific species and perhaps re-discover them.

There have been several re-finds of species that had not been seen for several decades and these are described by Alan in his notes later in the Newsletter. Of the 736 species on the RPCC at the start of the year, 349 (47%) were seen in 2019, 549 (75%) have been seen since 2010 and 592 (80%) since 2000. Five species have not been seen since 2000 and will be added to the potentially extinct group. Of the 301 species (which excludes 145 probably extinct species) on the RPR at the start of the

year, 136 (45%) were seen in 2019, 268 (89%) have been seen since 2010 and 292 (97%) since 2000. *Chenopodium vulvaria* (Stinking Goosefoot) has not been seen since 1990 and is therefore presumed extinct but *Cuscuta epithymum* (Dodder) was re-found during the year. Additional sites have been found for three species, thus making them scarce and they have therefore been removed from the RPR, but remain on the RPCC. 14 species previously listed as VU on the RPCC have been found at sufficient additional sites for them to be removed, but 12 species have been added as being VU following insertion of older records into the DDb. *Campanula rapunculus* (Rampion Bellflower), probably a casual species, has been added as Rare to both lists. There is still a chance that some species thought to be extinct will be re-found in the county, either as casuals, or as returning natives.

Cambridgeshire tetrad richness 2018 12

Cambridgeshire tetrad richness 2019 12

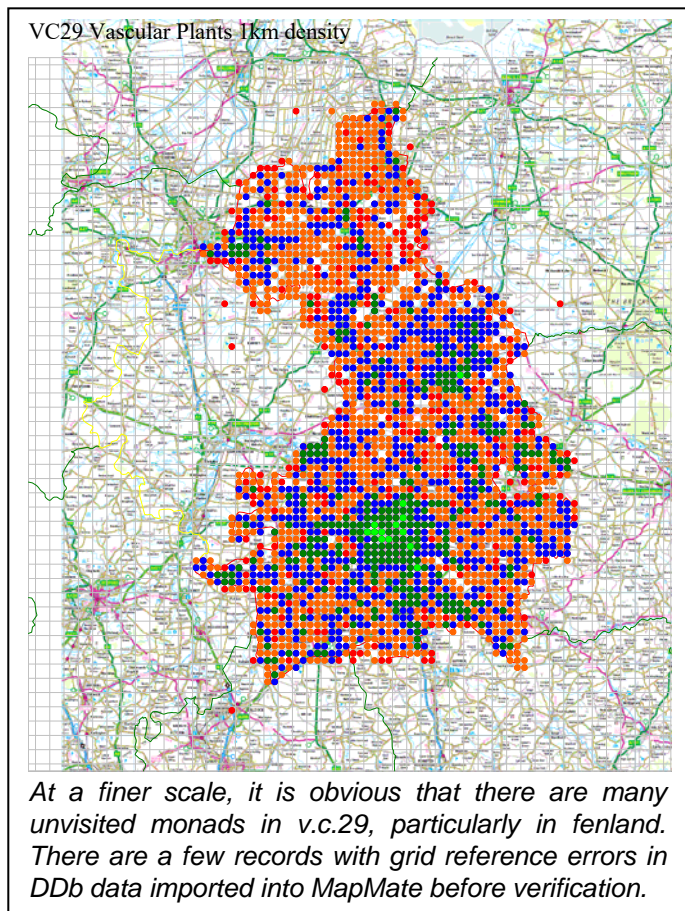


Recording progress in 2019 showing the change in coverage over the year for Cambridgeshire (v.cc.29 and 31). The biggest change shown here is in Huntingdonshire (v.c.31), where all the records are from Jonathan making some records during bryological outings and more recently filling in some recording gaps. In v.c.29 the biggest change is around Ely, where Tim Inskipp has done a lot of recording. There is an animation showing progress in monthly steps since 2013 November on the web page.

We completed the tetrad coverage of the county for Atlas 2020 and Fenland Flora with all tetrads and hectads achieving the desired coverage of 75% of all species being found or re-found post 2000. Further records for 2017 and 2018 have come in and their BSBI Distribution Database (DDb) totals (slightly different from the previously reported Windows MapMate figures) now stand at 26356 and 27927 records respectively, whilst so far there are 24329 for 2019. Although lower than the peak of 32854 in 2014, these are still magnificent totals, and show the intensity of recording in Cambridgeshire. We have DDb records for 3214 (2615 post 2000) different taxa. 1255 species (1350 taxa) were recorded during 2019, slightly down on 2018 which set a record of 1280 (1379 taxa). Rather like records of temperature, 13 of the 14 years with records of over 1000 species have occurred in the 21st century, but I doubt if this is caused by climate change! June was the most popular month to record (5182 records) with December being the least (19, as I spent time recording in

v.cc.28 and 31 and otherwise only visited well-recorded v.c.29 sites). Overall in the v.c. MapMate database the most frequent species remain as *Urtica dioica* (Nettle) (664) tetrads out of the 665 in the v.c.), followed by *Galium aparine* (Cleavers) (661) and *Dactylis glomerata* (Cock's-foot) (658).

The NatHistCam project lead by the Cambridge Natural History Society continued to survey the wildlife of the 64 monads of Cambridge during its last year of field work. I continued with the botanical surveying and the all-time median number of species per monad in this area stands at 315, with a range from 163 (TL4960) to 711 (TL4458). Despite the botanical recording for NatHistCam, surveys of Magdalene and Robinson Colleges and some re-recording of special sites, TL45 dropped to 9th for the most species recorded in a hectad in Britain & Ireland during 2019 with 791, considerably fewer than SU96 (Bagshot to Chobham) with 1216 and TQ27 (London) with 1157. Most of the other top 10 are also within the M25. In Cambridgeshire other well covered hectads in the national top 100 were TL44 with 528 and TL57 had 518. Taking all records into consideration TL45 has had 1971 species, with the county having 2779 species according to the DDb.



Although Atlas recording has ceased, a new date class has started, so records from any location can begin to accumulate. The new BSBI policy is not to accept records unless they are at tetrad resolution or better, and there is really no excuse not to record at monad level, or better for rare species. I will accept occasional casual records in any format, but lists should be submitted in properly formatted spreadsheets. There are hints and tips on format and recording on the county web page at <http://www.cnhs.org.uk/vc29%20recording.htm> There is a very helpful xls utility to input records which will create nicely formatted records at http://www.cnhs.org.uk/Species_Mapmate_vc29.xls Phone apps are being developed by the BSBI and others for direct recording, and iRecord is operational, though does introduce erroneous records. The BSBI is in the process of producing a specification for a MapMate replacement that will allow members to input records directly and which will allow better validation.

If you are not already a member of the BSBI do consider joining. The Society journal *BSBI News* comes out three times a year and is full of interesting material. In addition you get discounted rates on many publications.

New Books

Botanical publishing continues apace and Alan's Flora is not the only new publication of the year. A new edition of the big "Stace" came out in January, and quite a few Latin names have changed, for example, Slender Tare changes from *Vicia parviflora* to *Ervum gracile*. An addition to the UK flora is "our" new English endemic *X Beruladium procurrens* from Chippenham Fen. In the main however recording will continue to use the old Stace 3 names, if only because neither MapMate nor the BSBI DDb have introduced the new names. Other new books include a BSBI Handbook on Gentians by Tim Rich and Andy McVeigh, which includes the *Blackstonia*, *Centaureum* and *Gentianella* that occur in Cambridgeshire. A book on Grassland plants of the British and Irish lowlands by Peter Stroh, Kevin Walker et al. mostly comprises accounts of threatened grassland (including moors and marshes) species and many of these are present in Cambridgeshire. The accounts give suggestions as to best management practice for these species. There is a new and improved edition of John Poland's Vegetative Key due out in the near future. I find this a vital companion in the field, so the new edition is on order. Neighbouring Huntingdonshire has published a book on its Orchid flora, though I don't think there are any intentions of Cambridgeshire following suit.

The 2019 edition of NiC (Issue no 61) had several botanical papers, including accounts of Whittlesey pits by Owen Mountford and Jonathan Graham, Vascular plants in decline in Cambridgeshire by myself, Cambridge Science Park trees by John O'Boyle, Wild Liquorice in Cambridgeshire by Peter Stroh and British Floras by Cambridge authors by Chris Preston. For subscription details see <http://www.natureincambridgeshire.org.uk>

Vascular Plant Records 2019 – Alan Leslie

Full details of the notable records for the year will be published in *Nature in Cambridgeshire (NiC)*, which is due out in mid summer. Here Alan Leslie gives some highlights of the records.



Potentilla verna on Newmarket Heath

It is always pleasing to be reporting on positive news and 2019 was rewarding both for records of rare or unusual native plants in new areas, and for the reports of others from previously known sites from which we had no recent records. In the former category there was nothing to match the discovery of a significant quantity of *Potentilla verna* (*P. tabernaemontani* Spring Cinquefoil) over an area of Newmarket Heath from which we have had no previous records. It still occurs in one other area on the Heath, but has been lost

from several others, as well as in most other sites in the county. The window of

opportunity to spot this plant in spring is short, as once the yellow flowers are over the plants seem to melt into the turf, but for a few weeks in May it is almost conspicuous and is flowering before any accompanying *P. reptans* (Creeping Cinquefoil) has got into its stride. Might *P. verna* also be found somewhere in the vast expanse of grassland straddling the county border to the north of the Rowley Mile grandstand?

Just as exciting was the result of our CFG visit to Great Heath Plantation at Gamlingay, an area largely out of bounds in recent years and, although still very much a private area, its new owners have been prepared to allow some limited access to recorders. This area is on the southern margin of the former Great Heath on the Gamlingay greensand and was at one time much visited by botanists from Cambridge. By the 1970s the woodland was being used as a free-range pig farm and the ground flora had been almost obliterated. The pigs have now gone, the ponds in the centre of the wooded area have been dug out, and an area on the eastern margin has been partially cleared - with soil spread over some of this ground, which unfortunately appears to have eliminated the large colony of *Avenella* (*Deschampsia*) *flexuosa* (Wavy Hairgrass), a very rare grass in Cambridgeshire! However, we did see (with the date of the last record we have from the Plantation) large populations of *Juncus bulbosus* (Bulbous Rush, 1954), at least 10 clumps of *Carex echinata* (Star Sedge, 1957), *Carex leporina* (Oval Sedge, 1977), *Carex pilulifera* (Pill Sedge, 1956), *Galium saxatile* (Heath Bedstraw, 1919) and *Hypericum humifusum* (Trailing St John's-wort, 1945), all very scarce native plants in the county.

A follow up visit after another CFG excursion, this time to Wilbraham Common, resulted in the confirmation of a previously queried record there for *Danthonia decumbens* (Heath-grass), which was located in two places on the Common. There are very few sites for this grass in Cambridgeshire. The discovery on the meeting of *Carex distans* (Distant Sedge), a new species to the area, demonstrates yet again that visiting areas of known diversity can often be rewarding and not just for the plants for which they are well-known. This was demonstrated yet again when the BSBI *Taraxacum* meeting visited Wicken Fen, one of our most visited botanical sites in the county and one of the few areas in the county to have had some previous attention from those dedicated to this difficult group of apomictic plants. Dr John Richards determined plants of *T.*



John Richards determining a *Taraxacum* on the Devil's Ditch

disseminatum, *T. hamatulum*, *T. mimulum*, *T. obtusifrons*, *T. oellgaardii*, *T. pruinatum*

and *T. retroflexum* from the reserve, all of which were firsts for the vice-county, as well as several others for which we have few other records. It was clear too that populations of dandelions can fluctuate widely over the years, as the meadow just beside the visitor centre, where many species of dandelion have been recorded in the past (including *T. palustre*) appeared devoid of any!



Althaea officinalis at Chesterton (Lucy Watts)

We also had new records in 2019 for other locally rare native species including *Althaea officinalis* (Marsh-mallow), *Armeria maritima* (Thrift), *Carex vesicaria* (Bladder-sedge), *Cuscuta epithymum* and *Oenanthe crocata* (Hemlock Water-dropwort), and whilst some of these have probably arrived with a degree of human assistance, other such as *Epipactis helleborine* (Broad-leaved Helleborine), *Myosurus minimus* (Mousetail) and *Veronica scutellata* (Marsh Speedwell) appear to be of entirely natural occurrence.

We also had the customary batch of new alien plants, including *Cardamine occulta* (Hidden Bittercress), which is a further addition to the plants being found as nursery and garden centre weeds, *Campanula rapunculus* which appeared on one Cambridge

Common, and a single plant of Chick Pea (*Cicer arietinum*) that was found on a Cambridge road verge, whilst *Solanum chenopodioides* (Velvety Nightshade) was found in quantity along the A11 and *Teucrium hircanicum* (Iranian Germander) was making a glorious display on waste ground at Soham. Details of these and other finds will be published later in *Nature in Cambridgeshire*.

Cambridgeshire Rare Plants

As a winter challenge last year, I suggested that readers might like to see if they could spot *Viscum album* (Mistletoe) in any of its lost hectads. I don't think anyone else took it up, however I did go hunting, and found it in a sufficient number of locations to take it off the RPCC. There are still a few hectads where it has apparently gone, so do look in TL26, 37 (Earith), 38 (Chatteris), 64, 67 (Fordham), TF40 (Wisbech) and 50 (Upwell).

For this issue I have chosen some plants that have been seen again after a gap of a decade or more. All are known from only a few sites, so I haven't included distribution maps. The introductions come from the BSBI Atlas accounts. For further information see the Flora of Cambridgeshire.

***Bupleurum tenuissimum* (Slender Hare's-ear) [County Rare and Endangered, England Vulnerable]**

This slender, often diminutive, annual is primarily a colonist of thinly vegetated or disturbed coastal sites, including coastal banks, sea walls, drained estuarine marshes and the margins of brackish ditches. Inland populations formerly grew on commons and roadsides. (BSBI Atlas, Photo L. Rooney, Kent) In v.c.29 it was historically known along the banks of the tidal River Nene, but this population has reduced to only one location at Foul Anchor. The small



population has persisted here, despite the absence of grazing in recent years, and was relocated at the same place where the Flora Group saw it in 2009. Alan Leslie also found it in 2009, on a bank in Sutton, near where it had been seen a hundred years previously. It could conceivably be present elsewhere, as even when in flower it is difficult to spot.

***Carex vesicaria* (Bladder-sedge) [County Rare and Critically Endangered, England Vulnerable]**



A perennial herb of wet habitats, mainly mesotrophic and at least slightly basic, occurring where the water table lies close to or above the soil surface. It is found by lakes, rivers, streams, ponds and canals, in marshes and swamps, ditches, wet meadows and depressions in pasture, and in wet woodland. It also colonises wet hollows in disused sand-, gravel- and clay-pits. (BSBI Atlas, Photo L. Rooney, Kent). In the previous edition of the RPCC the plant was listed as possibly extinct, not

having been recorded since 1993, when it was seen at Bassenhally Pit, and it was also seen at Welches Dam in 1990. Previously, there were occasional records of the plant at widely scattered locations between Cambridge and Wisbech. In 2019 I found it in two, possibly related, locations in Over. One tussock was at the edge of a stream where it might have arrived from a pond a kilometre or so away. There, several tussocks were around the pond edge, where they could have been planted as it was not previously known from the hectad.

***Cuscuta epithymum* (Dodder) [County Rare, Critically Endangered, England Vulnerable]**

An annual, rarely perennial, rootless twining herb, parasitic on the stems of a wide variety of small shrubs and herbs [most frequently on *Calluna vulgaris* (Heather), *Thymus drucei* (*T. polytrichus* Wild Thyme), *Ulex gallii* (Western Gorse) and *U. minor* (Dwarf Gorse)] on heathland, chalk downland and fixed dune grasslands. It is also casual on field crops and in arable field-borders at the northern and western extent of its range. (BSBI Atlas, Photo P Shannon, North Devon)



It was last seen in the county in 1975 at the railway cutting at Over, but was previously more widespread, particularly as a weed of clover crops. Alan Leslie found it in 2019 in Hobson's Park near Cambridge and will give more details in NiC.

***Dianthus deltoides* (Maiden Pink) [County Rare, England Vulnerable]**



A perennial herb of dry, usually base-rich, soils overlying chalk and limestone, mica-schist or basalt; sometimes on metal-rich mining spoil or sandy soils and dunes. It can occur in short, closed grassland, but prefers an open sward broken by bare rock or soil. It also occurs as a garden escape. (BSBI Atlas) In v.c.29 it is currently only known from one native site, that of the Hildersham Furze Hills, which are relict sandpits in glacial material. It had not been seen there for some years, but flowered well in 2019 (left, with *Erodium cicutarium* agg. Common Stork's-bill). Historically it had been recorded more widely in this area, and also possibly on the greensand in the Gamlingay area. It was last previously recorded as of probable garden origin in Cambourne in 2007 and there are scattered

other casual records.

***Erophila majuscula* (Hairy Whitlowgrass) [County Rare]**

The habitats of *E. majuscula* are typical of those of the aggregate as a whole: limestone rocks and thin limestone turf, chalk downland (where it may grow on ant hills), sand dunes and sandy ground inland, walls, railway lines and gravel paths. (BSBI Atlas) It is only known from two sites in the County. David Broughton found the plant on disturbed gritty soil on the edge of farmland at



Nutsgrove Farm near Thorney in 2006. Alan Leslie had suspected it on the Breck sands of Mamre Farm at Chippenham in 2018. In 2019 I found two plants there with densely grey-hairy stems however my photo (above; a voucher was not taken as I was following the 1 in 20 rule) does not provide conclusive proof according to the referee.

What of the challenge for 2020? A possible BSBI project is to monitor populations of plants for which GB has or may have international responsibility, because a major part of the European population occurs here. These species include amongst others *Dactylorhiza praetermissa* (Southern Marsh-orchid), *Hyacinthoides non-scripta* (Bluebell) and *Sison* (*Petroselinum*) *segetum* (Corn Parsley), which are all relatively easy to recognise. *S. segetum* can be confused with *S. amomum* (Stone Parsley), however the former usually has over six pairs of rather rigid leaflets held more or less horizontally, whilst the latter has fewer than six much less rigid leaflets. Whilst *S. amomum* may have a petrol like odour, it doesn't always have much of a smell. Do send in records for these species if you spot them, particularly in locations where they have not been seen recently.

Review of the 2019 excursions

BSBI Dandelion Workshop

Alan and I attended the BSBI Dandelion Workshop, which ran over May 4 - 6 and was organised by Tim Rich with expert identifications provided by John Richards. It was based at Eriswell in neighbouring Suffolk, but we had visits to Wicken Fen and the Devil's Ditch. Altogether on the two visits we recorded 24 species of *Taraxacum* in the county and probably saw several others. Nearly half of these were vice-county records or were on the RPCC, largely because there have been few expert identifications in the County. We became a little more confident in identifying species to the extent that after the workshop closed Alan and I returned to Newmarket Heath and recorded some further locations for one easily identifiable species *T. brachyglossum*. Our main target for this extension was however to confirm the identity of a sedge reported on the Heath in the hope that it might be *C. ericetorum* (Scarce Spring Sedge). Rather as expected we only saw *C. caryophyllea* (Spring Sedge), though that was nice enough. The star find was an extensive new population of *Potentilla verna*, followed by some further clusters of the plant. It will be a long time before we are competent at identifying Dandelions to species, but we



Members of the group getting close to Dandelions on the Devil's Ditch

should be able to identify them to Section. With that in mind I've added a draft county key to *Taraxacum* in the County Plant Notes booklet.

Tuesday, April 16, Weston Colville and Lower Wood



Alan with the *Ranunculus auricomus* in
Great Coven's Wood

Our first excursion took place on a nice spring day, though it had been dry and cool for most of the previous month. The choice of date clearly didn't suit most of the regulars as the party consisted of just four. We began at Weston Colville church, where a slightly odd-looking *Potentilla* keyed out to *P. recta*, however on reflection it was just *P. reptans* with 7 leaflets. The churchyard had somewhat surprisingly several tetrad records, and one for the hectad in *Euphorbia characias* (Mediterranean Spurge). Sadly, we didn't refind the *Ranunculus auricomus* (Goldilocks Buttercup) seen in 2017. Duncan Mackay had negotiated access to Great Coven's Wood, so we headed towards it, though were distracted on the farm track leading to it by several dumped garden species in the hedge. These included *Kerria japonica* (Kerria) and *Corydalis solida* (Bird-in-a-bush). Then a patch of Primulas generated

some discussion and we decided that there was *P. elatior x vulgaris* and *P. veris x vulgaris*, with the latter having in one instance been created from breeding with a garden primrose. In the wood itself we came across the *Geum rivale* (Water Aven) along the ditch bank and a group of *Campanula trachelium* (Nettle-leaved Bellflower). Quite surprisingly we then came across some *Ranunculus auricomus* on a ride crossing – a species not recorded here previously. Having completed a circuit of the wood, we realised it was lunch time and John Rogers kindly invited us back to 'Capella' as Duncan hadn't brought any lunch. After lunch we looked round John's meadow, where there were many basal rosettes of *Anacamptis pyramidalis* (Pyramidal Orchid). Having been told that he'd nearly trodden on one Jonathan had a closer look and discovered a patch of *Ophioglossum vulgatum* (Adder's-tongue Fern), with a couple of other patches then being located. The meadow also had *Tragopogon porrifolius* (Salsify), one of the species "missing" from the hectad. We then headed back to Lower Wood, where Duncan guided us around to some of the wood's specialities: more *Geum rivale*, *Orchis mascula* (Early Purple Orchid) and *Hylotelephium telephium* (Orpine). Whilst the patch of Orpine was spreading, there were few *Orchis mascula* rosettes and we only saw two in flower. Finally Duncan located the markers for the *Epipactis helleborine* (Broad-leaved Helleborine), though only last year's flowering stems were visible. Along the way Alan noted *Rubus radula*, another hectad record. After completing the wood there was just time for Alan and Jonathan to make a short circuit of the village to look for *Prunus padus* (Bird Cherry), during which we found another of the wanted species for the hectad –

Cynoglossum officinale (Hound's-tongue), but not the *Prunus*. The area had been chosen because TL65 was on the list of hectads with fewer than 75% of species re-found, however the hectad had been crossed off the week before in the final bryological outing of the year. The Flora Group outing made further inroads into the missing species and found a pleasing selection from the RPCC.

Sunday, April 28, Chatteris

Jonathan Shanklin had already paid a couple of visits to Chatteris in 2019, but it stubbornly remained our worst recorded hectad. This excursion aimed to rectify this. Despite there being only 7mm of rainfall during April, Chatteris seemed to have it in for the Flora Group and one mm of them fell during our excursion, but it was never bad enough to stop recording, although there was a cold easterly wind. We began by hunting over the area where we parked where a bronze *Foeniculum vulgare* (Fennel) was our first hectad record. A Brassica on a drain feeding into "The Gault" detained us for a while – the question of whether it was *B. napus* (Rape) or *B. rapa* (Turnip) remained in doubt, though on later finding specimens of *B. napus* the balance swung in favour of that species. The Gault had been recently slubbed out, and whilst the material had been piled along the bank by the footpath, there



The *Sagina maritima* on the rough ground in Chatteris needed a close-up look

was not much of note coming up, though there was clearly going to be a screen of willows in the future as uprooted fragments of stem were beginning to grow well. Our next stop was the allotments and here we made a couple of nice finds: One plant of *Anthriscus caucalis* (Bur Chervil, last seen in TL38 in 1930, and one plant of *Gnaphalium uliginosum* (Marsh Cudweed). It was now lunchtime, and the only likely shelter from the wind seemed to be a switching room for a nearby solar farm, and, despite the warnings of "danger of death" it provided an ideal spot with a convenient concrete platform to sit on. We now headed for an area of waste-ground north of "Jack's", the Chatteris Tesco that had proved uneconomic until opened in a different guise. This provided considerable interest, with perhaps the most astonishing find being *Blackstonia perfoliata* (Yellow-wort, last seen in TL38 in 1899) on an area of limestone rubble. Nearby was *Sherardia arvensis* (Field Madder) and a surprising find was *Sagina maritima* (Sea Pearlwort) in an area that had clearly been flooded with run-off from the bypass over the winter. From here Jonathan navigated a winding route through sub-urban Chatteris to the New Road Cemetery, where Alan spotted another of the "wants" – *Diplotaxis muralis* (Annual Wall-rocket). Our final stop was the General Cemetery, and here Jonathan finally found a patch of *Luzula campestris* (Field Wood-rush), whilst Alan found *Ranunculus auricomus* under Lime

trees. By the end of the day we had found or re-found 23 species for the hectad, but it still required a further visit by Jonathan to get it over the 75% line.

Sunday, May 12, Wilbraham Common

After some wet weather in the preceding week, when more rain fell than in all of April, it was a relief to have a lovely spring day for our excursion. Wilbraham Common is a large area of quality chalky grassland, through which at one time a river flowed, giving it a wide range of species. The group met at Quay Water bridge, and headed east along Quay Water and the Little Wilbraham River. We found *Elodea canadensis* (Canadian Pondweed) in the river, and somewhat to the surprise of the Scot in our party, who saw it as an unwelcome invader, thought this was quite a nice find. Further along the river we looked the other way to discover that the drain on the south side was of much better quality and supported plants such as *Potamogeton coloratus* (Fen Pondweed) and *Valeriana officinalis* (Common Valerian). Having navigated through Hawk Mill Farm, Jonathan then took the party on an accidental detour via the New Cut, but it didn't delay our arrival at Wilbraham Common and



Sherardia arvensis, (Roger Horton)

lunch for too long. Oli spotted a nice bank which provided a view over the Common, which didn't seem to be getting much grazing. However after lunch we spotted the sheep and cattle which were grazing in separate halves of the Common. The sheep certainly made identification difficult, as many species were dwarfed, however the sheep were doing a good job in keeping some of the ranker species at bay. We slowly added one or two of the more recent "missing" species to the record card, then Jonathan came across a sedge, which he thought was *Carex distans* (it was indeed Distant Sedge) and an addition to the

site flora. Whilst attempting to find *Astragalus danicus* (Purple Milk-vetch) along the bank of the old river course (we didn't) Alan found *Cerastium semidecandrum* and with it *Helictochloa (Avenula) pratensis* (Meadow Oat-grass). We then headed to the pond, which was rather cattle trampled and more mud than water, however a flowering *Nasturtium* seemed to have quite long pods making it *N. microphyllum* (Narrow-fruited Water-cress). We headed towards Little Wilbraham via Mill Road, with the route taking us through grain baron territory. One field margin did have a pollinator mix sown in it, which included a giant version of *Medicago lupulina* (Black Medic) similar to one that we had previously seen in Chatteris, which generated some discussion. Long Drove Way was rather impoverished, but it was good to see that D'Engayne's Fen, a "secret" public wildlife site next to the A14 and owned by Cambridgeshire County Farms, had been mown, considerably reducing the scrub that had begun to grow. There was nothing very special botanically, though Chris

found a rare rust on *Sherardia arvensis* (Field Madder). Although we made a dent in the number of “missing” species from Wilbraham Common, it was still the case that over half the species known from the Common have not been recorded in the last decade. We may have to return at a later time of year. [Alan Leslie and Monica Frisch made a summer visit and re-found a good number of the missing species.]

Tuesday, June 4, Bottisham Hall

Toby Carter arranged permission with Roger Jenyns to visit the Hall, the home of the family, which has long-standing connections with natural history. We were met by Toby, and Roger soon joined us and made us welcome. Rain was in the offing, and whilst we had some in the afternoon, it was never heavy. We began with a wonderful meadow outside the front door of the Hall, which is traditionally managed with an autumn cut. It supported plants such as *Briza media* (Quaking Grass), *Bromopsis erecta* (Upright Brome), *Carex caryophylla* (Spring Sedge) and *Cirsium acaule* (Dwarf Thistle). From here we

perambulated around the shrubbery and kitchen gardens, finding the *Atropa belladonna* (Deadly Nightshade) which was in 1860 “Formerly in such abundance in the Shrubberies at Bottisham Hall, that the Keeper used to make a profit by collecting & selling it, supposedly for medicinal purposes.” Although we found a couple of *Ophrys apifera* (Bee Orchid) we failed to find the *O. insectifera* (Fly Orchid) which was last seen here in 1975. On the high walls of the kitchen gardens was a blue-flowered plant that Alan identified as *Veronica teucrium* (Large Speedwell), which was growing elsewhere in the garden. We lunched under the shelter of trees next to the mill stream, and then began a walk around Bottisham Park and the remains of the Medieval Village. The high banks of the village suggested that it was necessary to build structures well above the formerly marshy ground, but the only relict of this was some *Eleocharis palustris* (Common Spike-rush). Rookery Wood was rather disappointing, with head-high nettles in a distinct band. Whether this was linked to the sewage outflow installed when the house was commandeered during the second world war or to previous use of the ground wasn’t clear. The Moat was partly dry, as the bed had cracked during the 1976 drought, but there were wetter patches, and the bed was often a carpet of *Myosotis scorpioides* (Water Forget-me-not). We had a final search round the lawn outside the front door in the hope of re-finding *Potentilla erecta* (Tormentil), but failed – in the end only three of the 13 “notable” species recorded in the on-line Flora were found, but there were 22 species from the RPCC and we recorded 224 species in total. Roger then invited us in to look at some of the Jenyns diaries, and entertained us to tea in the dining room where Darwin had dined. Toby took away one of the diaries, which recorded some of Jenyns’ visits round the country, to be scanned and with perhaps some entries to be digitised.



The Flora Group walking through the species rich meadow at Bottisham Hall

Saturday, June 8, RSPB Nene Washes

We had about the worst weather possible for our visit to the Nene Washes – driving rain in winds gusting to gale force and a temperature of only 12 degrees. The conditions certainly affected recording, though Jonathan had suspected that conditions might be difficult and had prepared waterproof recording cards for the area. He wasn't quite so well prepared for hypothermia, and this may have affected some of the records. We were welcomed to the site by the RSPB Site Manager, Charlie Kitchen, who explained that some fields were out of bounds, particularly due to breeding Black-tailed Godwits, which we saw several times. Charlie started us on field 38, which



Charlie Kitchen explaining some of the meadow management to the Flora Group

had one of our target species *Dactylorhiza incarnata* (Early Marsh-orchid). A sedge by the marginal drain generated some discussion, but was eventually determined as *Carex acuta* (Slender Tufted-sedge). Emma found *Linum usitatissimum* (Flax), which was last seen here in 1993. We then moved on to field 53, where we looked for *Cirsium dissectum* (Meadow Thistle) expecting it to be standing out in flower. Phil Ricketts eventually tracked down some leaves near the expected location, and then we found one flower about to open in the patch of plants, which also had *Sanguisorba officinalis* (Greater Burnet) and *Eleocharis uniglumis* (Slender Spike-rush) in the neighbourhood. Although lunch was beckoning, Charlie then led us into fields 19 and 18 where we added a couple of tetrad records in *Bidens tripartita* (Trifid Bur-marigold) and *Brassica nigra* (Black Mustard). Charlie then showed us where we could go in the afternoon and left us to our lunch. Half the group left at this point and the remainder had lunch in the cars, with the engines running and heating full on! Our first stop after lunch was at a group of meadows, and perhaps the star find of the day was made by Chris as we crossed between two of them. In a small bare patch of ground he spotted the seeding heads of *Myosurus minimus* (Mousetail), a new hectad record and its furthest north location in the county. Meadow 10 had a group of about 35 flowering spikes of *Dactylorhiza incarnata* (Early Marsh-orchid) which were in much better condition than those that we had seen earlier. The rain had stopped and we finally targeted the west end of the reserve, beginning with the droves and the Nene banks, and although we didn't find anything outstanding we did make a few tetrad records. We finished with field 1, which had a small pond near the centre – this seemed to be rain-water fed and was the only place we saw any Water Crowfoot, which determined to *Ranunculus aquatilis* once Chris had spotted some floating leaves. Overall the site was very rich in species from the RPCC, with 33 seen during the day, of which 12 were first sightings for 2019.

Saturday, July 13, Gamlingay

I was at the BSBI Annual Summer Meeting at Malham Tarn, so Alan Leslie and Monica Frisch have provided this account.

The group spent the whole day within one monad (TL2251), most of the time in the southern half, within the woodland marked as Great Heath Plantation, but we also investigated the verge of the driveway and a small area of woodland and meadow to the east of the driveway. The verge of the driveway had areas of short open turf where we found *Aira praecox* (Early Hair-grass), *Filago vulgaris* (Common Cudweed), *Hypericum*



Ornithopus perpusillus at Gamlingay (Peter Leonard)

humifusum (Trailing St John's-wort) and *Ornithopus perpusillus* (Bird's-foot). The ponds in the Plantation had been restored and on the new banks and piles of earth spoil we found quite a lot of *Ranunculus flammula* (Lesser Spearwort) and *Juncus bulbosus* (Bulbous Rush), together with *Gnaphalium uliginosum* (Marsh Cudweed), *Holcus mollis* (Creeping Soft-grass) and *Stellaria uliginosa* (Bog Stitchwort). Damp mossy woodland along the small stream emanating from the ponds held a population of *Carex echinata* (Star Sedge), whilst the drier western margins of the woodland held good colonies of *Carex pilulifera* (Pill Sedge) and *Galium saxatile* (Heath Bedstraw), whilst *Carex leporina* (Oval Sedge) was seen on one ride. A variety of brambles were scattered through the woodland with *Rubus cardiophyllus*, *R. criniger*, *R. flexuosus* and *R. polyanthemus* being especially prominent. The damp strip of woodland to the east of the driveway looked unpromising, but once penetrated proved rewarding, with *Carex remota* (Remote Sedge), *Epilobium obscurum* (Short-fruited Willowherb), *Juncus acutiflorus* (Sharp-flowered Rush), *Luzula multiflora* (Heath Wood-rush) and *Senecio sylvaticus* (Heath Groundsel), most of which we had already seen in the Plantation itself. Along the northern edge of this strip was a flowery meadow, with a lot of *Vicia cracca* (Tufted Vetch) and *Ervum tetraspermum* (*Vicia tetrasperma*, Smooth Tare). In total we found 180 species, of which 24 were only in the eastern strip of woodland. Over 30 were species marked on Jonathan's list as a common species not previously recorded. Overall, as hoped, the group found quite a number of heathland specialists, though not all the rarest species which had once been recorded here. Talking to the owner at the end of the afternoon it was clear he is interested in the natural history of his land (about 60 acres) and keen to manage it to retain and improve its biodiversity.

Thursday, July 25, Cambridge Guided Busway

With very high temperatures predicted for the day, and the busway closed between the Science Park and Histon we made the decision to delay the excursion to 2020.

Sunday, August 11, Kingfishers Bridge

Our visit to Kingfishers Bridge coincided with the tail-end of an un-seasonally deep depression, however it was much less windy than the day before and was pleasantly cool. The visit co-incided with an open day at the nature reserve, and some participants were a bit disconcerted at the number of cars in the car park, however only ten people were on the Flora Group excursion. Jonathan Shanklin had been

carrying out a detailed inventory of the plant species in the site and knew where the more interesting species grew, but didn't know where all the field gates were to allow a short route between them. We started with a quick explore of the Warden's vegetable patch, which was infested with *Galinsoga parviflora* (Gallant-soldier). We then visited a field known as "Rough Cover", where two new ponds had been created with one hosting a stand of *Jacobaea paludosa*, though so far this hasn't spread from its introduction site. Exploring this area took until lunchtime, and the group decided to get out of public view into the neighbouring field. After lunch we attempted to get to the Cam Washes, but a deep ditch prevented access, so we returned to the entrance track and went in a couple of gates down. On the side ditch we found a small patch of *Trifolium fragiferum* (Strawberry Clover), then found that it was widespread in the field. Near the "Flight Pond" we found a few spikes of *Triglochin palustris* (Marsh Arrow-grass), and again found many more spikes nearby. With time passing we went on to the "Winter Flood" an area under water during the winter, but dry in the summer, providing the ideal habitat for *Teucrium scordium* (Water Germander), which has become established all round the lake. This area also had *Rumex maritimus* (Golden Dock) and the more common *Rumex conglomeratus* (Clustered Dock). Chris Preston found a plant that looked like the hybrid between the two, an identification later confirmed by the BSBI Referee, Geoffrey Kitchener. At the north shore of the lake Oli Glenister found a liverwort which was growing on the peat – the terrestrial form of *Riccia fluitans*. Jonathan soon found it in the neighbouring monad. Completing our circumnavigation, we headed towards the site where *Viola stagnina* (*V. persicifolia* Fen Violet) had been introduced. In one enclosure one plant was clearly present – growing between marker sticks. In the next compartment another area had more introduced plants marked by bamboo canes, but we only found 8 plants. With rain showers in the distance Jonathan decided it was time to beat a strategic retreat to the marquees for tea, and shortly after reaching them rumbles of thunder heralded a short downpour, bringing an end to our visit.



Teucrium scordium at Kingfishers Bridge

Sunday, September 1, Summer House Farm and Royston bypass

The first day of meteorological autumn produced a fine day for our last general excursion of the year. We began at Summer House Farm, which has a storage facility for caravans. Last year Alan Leslie had found various alien species here, so our hopes were high for some interesting records. Sadly we were disappointed, and apart from one odd looking *Galium* we were unable to find anything very unusual. We therefore moved on to Goffers Knoll, the wooded site of a Neolithic tumulus, surrounded by chalk grassland. Here there was more interest and we soon found *Clinopodium acinos* (Basil Thyme) and *Helianthemum nummularium* (Rock-rose). Bill Sutherland showed us some worked flints that hadn't been quite good enough for

arrowheads and had been discarded. A glade in the wood produced a few oddities – first a pansy which we decided must be *Viola x contempta*. Nearby was a plant of *Aquilegia vulgaris* (Columbine) and also a *Nicotiana* (Tobacco Plant), so it might have been of garden origin. After lunch we continued west of the Knoll where a



The view from Goffers Knoll.

game cover crop had a lot of *Fumaria parviflora* (Small-flowered Fumitory) and also some *Fumaria densiflora* (Dense-flowered Fumitory). We then moved on to Royston and decided to park in a housing estate. Almost as soon as we got out of the car Monica spotted an *Atropa belladonna* (Deadly Nightshade) in a shrub border. The wide verges of the Royston bypass gave us quite a few different *Cotoneasters*, something of a foretaste for our final excursion. At the junction

with the old Royston Road we found several *Hieracia* (Hawkweeds), though we weren't able to name any of them. Steve took back some cuttings which he hopes to grow on under controlled conditions to get some identifications. We returned via the top of the hillside overlooking Royston, which had been left uncultivated for a couple of years. There was a strong growth of *Buddleja*, and amongst this there were several plants of *Epilopium tetragonum* subsp. *tournefortii*, which has flowers the size of *Epilobium hirsutum* (also present). Dropping back down to the bypass the party split into two with Alan and Jonathan crossing to the other side for the return to the cars. A few more species were picked up and by the end of the day we had recorded 227 different species

Saturday, September 21, Cherry Hinton

Cotoneasters formed the subject for this meeting, which was a joint one with the BSBI. We had a glorious autumnal day for the visit to Cherry Hinton chalk pits, with not a cloud in the sky. Three adjacent pits of different ages combine to form a Local Nature Reserve, in part managed by the City Council and in part by the local Wildlife Trust.

East Pit, last worked in the early 1980s, was our primary destination. Following the abandonment of working, it had become covered in *Buddleia* scrub, interspersed with many different species of *Cotoneaster*, all bird-sown from local gardens. The local Wildlife Trust acquired it and re-profiled the floor of the pit in 2009 to create several gentle bowls, with much of the *Buddleia* removed. Eventually the intention is that these will become chalk grassland, though some areas will be scraped to provide habitat for species that prefer bare ground. Alan took us on a clockwise walk around the margins of the pit introducing us to seventeen of the species known from it. Some, such as *C. horizontalis* and *C. salicifolius* were relatively easy to recognise, but others such as *C. sternianus*, *C. franchetii* and *C. amoenus* initially seemed to form a spectrum of similar appearance. Within this spectrum was *C. bradyi*, which



Alan Leslie at East Pit

has a rather more spikey habit and is only known from here and Newport in the Isle of Wight. As we progressed, we got better at noting the factors that help to identify each species. We took lunch on the more shaded side of the pit and after an attempt to find one more species we headed across the road to West Pit.

This pit had ceased working by the middle of the 20th century and had since become mature Ash woodland. An area of chalk grassland remained at the top, and this was our target area, requiring an arduous climb up (for Cambridgeshire) of 20m. We first saw some well-grown plants of *Seseli libanotis* (Moon Carrot), then descended the sloping meadow to see *Gentianella amarella* (Autumn Gentian). We had hoped to see *Falcaria vulgaris* (Longleaf) in the neighbouring school grounds, but access to this had recently been

blocked off. We therefore reverted to the Cotoneasters, finding a range of species growing on a chalk scree overlooking the caravan site below. Two of these seemed a bit different so Alan took samples for determination before we headed back down.

The oldest pit, Lime Kiln Close, was known to Relhan and Henslow as a site for *Orchis ustulata* (Burnt-tip Orchid), but that is long gone. We did however see two notable plants from the site: *Astragalus glycyphyllos* (Wild Liquorice) and *Dipsacus strigosus* (Yellow Teasel).

With botanising nearly concluded several of the group visited the local pub for refreshment (non alcoholic!), and then set out in various directions for home. One surprise find as we left, in a small area of grass in the pub curtilage adjacent to the road, was *Campanula rotundifolia* (Harebell) a new record for the monad. The grassland must have been a small relict from the days when the whole area was species rich chalk downland

Excursions for 2020

Please take careful note that our excursions vary both in the day of the week on which they take place and in the time at which we meet on each occasion. I will send out an email before each meeting reminding you of the details and of any changes, and they will also be posted on the web page. Participants are welcome to join us for all or part of any excursion, but please arrive promptly at the start. We often have to give a site briefing at which you must be present. A packed lunch will be required for

all meetings and we will generally finish towards the end of the afternoon. On occasion we will be walking for some distance over ground which may be rough. Please do read the BSBI advice to participants on field meetings, which is at <http://bsbi.org/download/6323/>. Meeting places have been chosen as having some parking space, but this can not be guaranteed. Several landowners specifically request no dogs, and the BSBI guidance is not to have dogs (except guide dogs) at meetings, so if you do have a dog, please leave it at home. Our meetings often produce some surprising and interesting records so do come along if you can. This year our outings mainly focus on sites in order to help compile the county register of best botanical sites. Over the next five years the aim is to visit many of them, with repeat visits at different times of year. When the opportunity arises we will also visit other sites that have rarely been explored.

Sunday, March 22, 11:00, Hardwick Wood

The Flora Group hasn't visited Hardwick Wood this century, so with the start of a new date class we are putting this right. This early season visit may give us a chance to use John Poland's key to winter twigs and the new edition of his vegetative key. Park in Caldecote and meet by the track to the wood at TL350582.

Thursday, April 23, 10:30, Sawston Hall, TBC

We hope to pay another visit to Sawston Hall, this time to see spring flowering species. As with much of the south of the county, water supply is an issue for the "Sawston Moor" and *Selinum*



Arum maculatum, (Roger Horton)

has not been seen there since 2006. On this visit our target species is *Myosotis discolor* (Changing Forget-me-not), though this hasn't been seen here since 1903. Meet by the church at TL487492. There is parking space along the road.

Saturday, May 23, 10:00, Kings Dyke Nature Reserve

Kings Dyke Nature Reserve is home to several species in the RPR, such as *Sagina nodosa* (Knotted Pearlwort) and many Stoneworts, and was last visited by the Flora Group in 2010. Sarah Lambert has carried out surveys more recently, though some plants have not been seen for 20 years. Meet at the Reserve car park TL249973.

Sunday, June 28, 10:30, Melbourn TBC

We hope to visit a private site in Melbourn, but if this does not prove possible we will visit Shepreth L-moor, where *Astragalus danicus* (Purple Milk-vetch) was last seen in 1987, and either Melwood LNR in Meldreth or Stockbridge Meadows Nature Reserve

in Melbourn if there is time. Assuming that we begin at Shepreth L-moor, park at TL385475.

Thursday, July 23, 10:00, Guided Busway

We will make another attempt to walk along the Busway, detouring off in a few places and returning on the bus. Hopefully the bridge repairs will have been completed and it won't be too hot. Meet at Cambridge North station TL474605 near the cycle racks.

Saturday, August 8, 10:00, Dimmock's Cote quarry

The quarry is mostly known for its geology, but the older parts have developed an interesting flora. Depending on how long we spend in the quarry we may go on to the Wildlife Trust site at Doghouse Grove in Wilburton and perhaps Wilburton churchyard. There is limited parking outside the quarry at TL541722 but please do not block the quarry gates. You will be required to wear a high viz jacket and hard hat, so bring these if you have them.

Saturday, August 29, 10:00, RSPB Nene Washes

We are making a second visit later in the season to the interesting washes managed by the RSPB along the River Nene. Park at the edge of the track off the B1040 north of Whittlesey at TL279991.

Saturday, September 26, 10:00, Great Shelford meadows

Jesus College, who own pasture land along the River Cam, have kindly given permission for us to visit some uncharted territory. We will begin at Great Shelford church (TL458518), then walk through the pastures along the river to Hauxton Mill, returning along the permissive path. There is a good cycle path from Cambridge. There may be car parking outside the church, otherwise park in Great Shelford.



Myosurus minimus at RSPB Fen Drayton

Saturday, October 10, 10:00, Newmarket and Cheveley

We will begin the day at Newmarket cemetery and if we cover this quickly will then visit Cheveley churchyard. We will then move to Warren Hill, which becomes open access in the afternoon. There is parking off the A1304 at the cemetery entrance (TL636628).

In addition to the Flora Group meetings, many of the Cambridge Natural History Society field meetings have a botanical bias. This year the Society is carrying out a detailed survey of the Coton Countryside Reserve. There may also be further "Nature in my neighbourhood" visits to explore Cambridge streets, and visits to Wandlebury Country Park or Magog Down. Dates for all these will be included on the web page.

This issue concludes with some additional images taken during the year:



Fumaria muralis (Chris Preston) and *Pulsatilla vulgaris* (Pasque Flower, Jonathan Shanklin)



Gamlingay – Great Heath Plantation and *Senecio sylvaticus* (Heath Groundsel, Peter Leonard)



Goffers Knoll – lunch spot (Peter Leonard) and *Clinopodium acinos* (Roger Horton)

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