Cambridgeshire Flora Group

Newsletter 2023

1st Edition

News

With the threat of Covid much reduced, there was no significant impact on recording this year. For me, systematic recording concentrated on Stanmoor Hall farm, with its two SSSI sites of the Thriplow Peat Holes and the Whittlesford – Thriplow Hummocky Fields. I had also planned to cover Chippenham Fen, but although I made a few visits I did not manage to make good coverage. The CNHS field studies of the Backs also required additional recording as I tried to systematically record five of the Backs colleges, along with Churchill College and several churchyards. The summer drought rather stalled a lot of planned recording as the prospect of trying to identify crisped plants rather lacked appeal, even to me. Instead I paid a series of visits to somewhere where there was a bit of water – the Ouse Washes. I've continued with local recording, visited some more protected road verges and ticked off a few "Shanklins". Alex Lockton (Shropshire) coined this term for a monad with no previous records as I was managing to visit quite a few such monads in his county. Despite the very intensive recording across Cambridgeshire there are still some to record, particularly in fenland. Altogether there are around 130 entire or partial "Shanklins", and over 400 other monads that have fewer than 50 recorded species. Whilst most are unlikely to hold anything of significance, you never know!

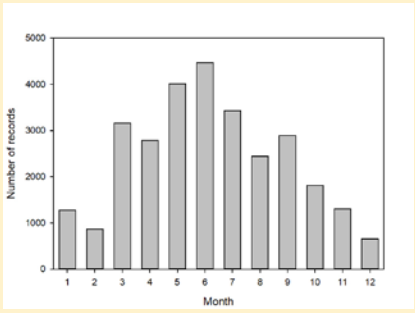
Cut-leaved Selfheal at the Gog Magog Golf Course SSSI [Peter Leonard]

On the BSBI front I continue as the Hon. Field Meetings Secretary and Chair of the Committee for England (CfE). Both roles keep me pretty busy, particularly when you add in organising the BSBI Annual Summer Meetings, a Recorders' Meeting and the

forthcoming England launch of the new Atlas. The last will partly be taking place in Cambridge and if there is space you will be welcome to come.

Recording News

Although I said this last year, the BSBI's local logging software, "MapMate" has still not been updated to use Stace 4 names. Therefore when submitting species lists, please continue to use the Stace 3 names. I have received at least one list that used a mix of Stace 2, 3 and 4 names, which then required some editing! The BSBI has now updated all names in the main database to Stace 4 and in a few cases to post Stace 4 names. The BSBI is working on producing a new recording app, but this is unlikely to be in a useable form before the summer.



Records by month in 2022

Recording was down in 2022 compared to the previous two years. This is largely because most of the blank post Atlas monads near Cambridge now have records! Nevertheless over 29,000 records were added to the BSBI DDb. Rather than give a list of numbers each month, the graph tells the story of when people were out recording: June is the most popular month and February the least. I record in quite a few other counties, and including these gives me a total of over 40,000 records for the year, though not all are yet on the DDb as some VCRs don't pass on records promptly for a variety of reasons. Mick Crawley has over 36,000 records on the DDb, though he does have something of a reputation for recording planted garden species which other recorders ignore.

Early in 2022 I discovered that the BSBI had revised its guidelines for a Rare Plant Register (RPR) in 2017, but had not fully communicated the changes. The changes mean that there is no need for a separate RPR and a Register of Plants of Conservation Concern (RPCC). The County RPCC is the equivalent of a RPR and was therefore given this status from February. As usual I carried out a review at the beginning of 2023. There were two deletions, three additions, three restorations to the main list and around 20 changes of status, with some actually becoming less threatened. These are listed in the RPCC.

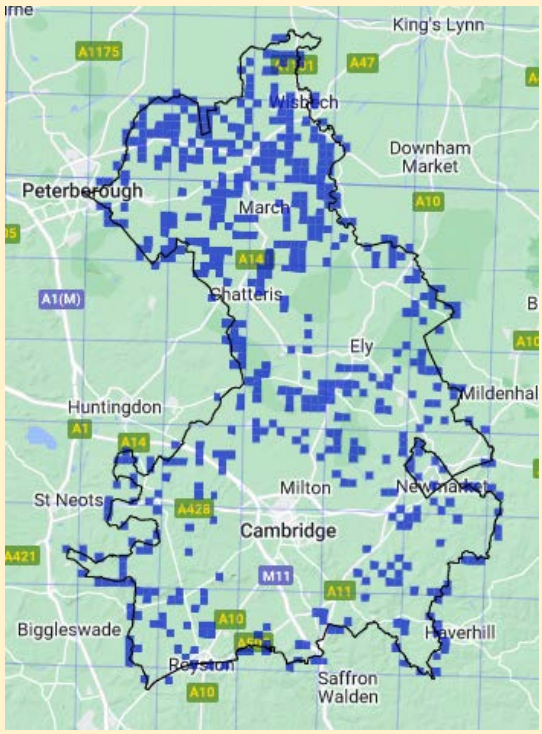
Of the 589 species on the RPCC at the beginning of 2023 and thought to be still present in the county, 311 (53%) were seen in 2022, with 439 (75%) seen this decade. 27 species haven't been seen since 2010, though some of these, such as *Rubus*, need expertise to identify. In addition 145 species, formerly known from the county, are listed as Regionally Extinct; these were previously included in the main count. Currently 98 hybrid species and 56 invasive species are also listed, though these lists have not been updated for a couple of years.

Three species have been added to the list of RPCC plants not reported for over a decade: *Carex binervis* (**Green-ribbed Sedge**) [Whittlesford, Middle Moor], *Lysimachia foemina* (**Blue Pimpernel**) [Sutton allotments] and *Montia fontana* subsp. *chondrosperma* (**Blinks**) [Orchard Park]. In compensation *Hordelymus europaeus*

(**Wood Barley**) was re-found after 43 years, as recounted by Alan elsewhere. In addition *Ajuga chamaepitys* (**Ground-pine**), *Centaurea calcitrapa* (**Red Star-thistle**) and *Colchicum autumnale* (**Meadow Saffron**) are all established in semi-wild situations in Cambridge.

Ground-pine in the Botanic Garden
[Jonathan Shanklin]

The BSBI project LORE (LOst Rarieties in England) encouraged recorders to go out and look for the quite large number of native and archaeophyte species that hadn't been seen in hectads since 2000. In v.c.29 some have been found in deliberate searches, others accidently during a deliberate search and some during general recording. An early success was made by Sarah Saunders who re-found *Primula veris* (**Cowslip**) at Over in TL37, almost certainly in one of its original locations. I had an accidental find of *Artemisia absinthium* (**Wormwood**) in Wimpole Lodge whilst searching for *Stellaria holostea* (**Greater Stitchwort**) in TL34. The *Artemisia* was behaving as a casual, so may not be seen again, and I didn't find the *Stellaria*, most likely as the location has become too scrubbed over. Two species in TL45 were found semi-wild in the Botanic Garden: *Centaurea calcitrapa* (**Red Star-thistle**) and *Sambucus ebulus* (**Dwarf Elder**). Quite a few old records of species are from the Botanic Garden, but neither of these was originally recorded from there. Chris Preston made an accidental find of *Fumaria densiflora* (**Dense-flowered Fumitory**) south of Fordham in TL66, with it last being seen in the hectad in 1974. I found both *Roemeria argemone* (**Prickly Poppy**) and *Roemeria hispida* (**Rough Poppy**) south of Steeple Morden in TL24 in the area where they were seen in 1992. Altogether eight LORE RPCC species were recovered during the year, with some 182 hectad records restored in total. There are still plenty to find, including common species, so do go out to look. On the web page you can find a simple list of species against hectads, along with more detailed records which may help to refind them.



Map showing "Shanklins" and monads with fewer than 50 species.

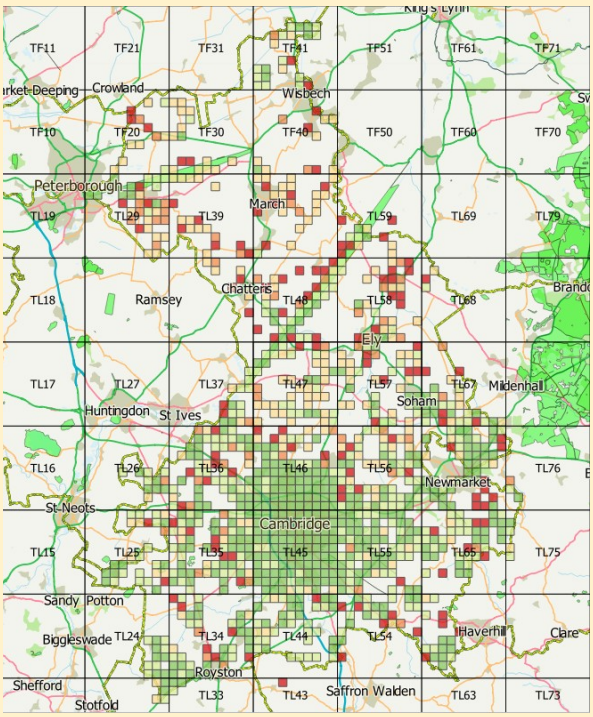
There are 665 tetrads that are all or partly in the county according to the BRC defined county boundaries on the BSBI DDb. MapMate tells me that there are 664 tetrads with a record for our most common plant, *Urtica dioica* (**Nettle**), but the DDb tells me that there are two without such a record. I suspect that this simply reflects the fact that the

MapMate county boundaries are not as accurate as they should be. The two tetrads without a record of *Urtica dioica* in the DDb are TL25N and TL64N, the next most frequent species, *Galium aparine* (**Cleavers**), is missing from TL25C, TL26Y and TL64N, whilst *Dactylis glomerata* (**Cock's-foot**) is missing from TF41J, TL25C, TL25Y, TL28U, TL64K, TL64M, TL64N and TL68L.

Given the local recording of the Backs, it should perhaps be no surprise that TL45 was again one of the most diverse hectads in the country with 920 species recorded during 2022. It was beaten into second place by TQ16 (centred on Esher in Greater London) which had 968. Taking all records into consideration TL45 has records of 2010 species in the DDb, an increase of four over the year.

The county register of botanical sites is still a work in progress, although some further sites that had few recent records have been visited. A positive development is that I now have the actual boundaries of all the county designated sites, which allows better allocation of records to sites. Land ownership is not always clear, so some not yet designated sites may still get misallocated records.

If you have lists of records, please submit them promptly, in properly formatted spreadsheets if possible. This makes it much easier for me to verify them and import them into the local and thence national database. Casual records of interesting species can be submitted in any format and images are also welcome, particularly where they can help illustrate the newsletter. There are hints and tips on format and recording on the county web page. There is also a very helpful xls utility to input records which will create nicely formatted records. Phone apps are being developed by the BSBI and others for direct recording, and iRecord is operational, though does introduce erroneous records. Records from iRecord will only be accepted if they clearly meet the standard for what is a good record, in particular that the recorder gives a name rather than a pseudonym. Also please make sure that your records are correctly located; other counties have reported that some iRecord records of aquatic species were apparently found nowhere near water. Note that at the moment records from iRecord and iNaturalist are not being transferred to the BSBI DDb, so please extract them as a spreadsheet and send them to me directly.



QGIS map showing recording in v.c.29 since the completion of the BSBI Atlas 2020 at the end of 2019. Red/amber/yellow < 51 species, shades of green > 50. Base map Ordnance Survey Open_Zoomstack.

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 as is their

open access scientific journal British & Irish Botany (B&IB). Some abstracts from the latter follow. By joining BSBI you can get discounted rates on many publications, including their Handbook series and the forthcoming Plant Atlas 2020, which retails for £132.

Abstracts of Recent Papers

The following papers from British & Irish Botany (B&IB) either mention Cambridgeshire (in this case v.c.31) or are of relevance to plants that we see along major roads (*Atriplex*) or at Foul Anchor (*Cochlearia*). The links should take you to the paper.

British & Irish Botany 4(2): 95-105, 2022 June 9

Growth trajectories of diploid and tetraploid trees of the *Betula pendula/B. pubescens* complex (Betulaceae): a 38-year record of trunk circumference

John A. Gill[1], Anthony J. Davy[2]
[1]Deceased; [2]University of East Anglia, Norwich, UK

Two views of open birch woodland at Holme Fen, Cambridgeshire, representative of the stand of trees studied from 1977 to 2014. Birch trees are shown at the early leafing stage, on 21 April 2022. [Stephen McAdam]

Abstract: Growth in trunk circumference in a natural, uneven-aged stand of 20 trees in the *Betula pendula/B. pubescens* complex at Holme Fen, Cambridgeshire (v.c.31), UK was monitored over a period of 38 years, from 1977-2014. At the beginning of the

study, their chromosome numbers were determined, and trees were aged by counting the rings in radial cores. Circumferential growth trajectories with increasing age of five diploid and 13 tetraploid trees were modelled using three-factor sigmoidal regression. As with previous morphological and molecular studies of the same trees, the tetraploids were considerably more variable in growth trajectory than the diploids; tetraploids included both the slowest- and fastest-growing individuals. Diploids behaved more coherently, having more similar trajectories. Greater variation in tetraploids probably reflects their allopolyploid origin, with subsequent unidirectional introgression. There were indications that diploids may grow faster and reach greater asymptotic circumferences than tetraploids but the differences in this small sample were not statistically significant. There was no evidence that the two cytotypes have different life expectancies.

British & Irish Botany 4(2): 140-144, 2022 June 9

Notes on *Atriplex* (Amaranthaceae) species and hybrids, particularly *A. littoralis* and the hybrid *A. littoralis* x *A. prostrata* (*A. x hulmeana*)

Michael Wilcox, Bradford, W. Yorkshire, UK

Abstract: *Atriplex prostrata* Boucher ex DC. (Spear-leaved Orache) and *A. littoralis* L. (Grass-leaved Orache) are two distinct taxa. Observations on their hybrid *A. x hulmeana* Taschereau suggest variation relates to hybridisation, backcrossing and or segregation. These features may also relate to difficulties in identifying other species and hybrid combinations.

Leaves of *Atriplex* taxa. Left: *A. littoralis*, the middle leaf 11 x 1.2 cm;
centre: *A. x hulmeana,* the middle leaf from lower part of stem, 11.5 x 2.5 cm;
right: *A. x hulmeana*, the middle leaf from lower part of stem, 10.5 x 2.5 cm.

If you happen to be wandering down a road verge where both parents grow it is worth looking for the hybrid. There are scattered records across the county, mostly from major road verges. Perhaps surprisingly it hasn't been reported from Foul Anchor although both parents grow there.

British & Irish Botany 4(3): 347-363, 2022 September 9

Cochlearia officinalis sensu lato (Brassicaceae) around northern Irish Sea coasts

Eric F. Greenwood[1], Hugh A. McAllister[2]
[1]Wirral, U.K., [2]University of Liverpool Botanic Gardens, Ness, Neston, UK.

Abstract: For over 100 years botanists have found it difficult to identify *Cochlearia* (Scurvygrasses) growing on salt marshes and muddy shores of the northern Irish Sea coasts. They have been variously identified as *C. anglica* L., *C. officinalis* L. and more recently *C. atlantica* Pobed. This study describes the history of recording *Cochlearia* plants on these shores and their varied morphology, and through cytological analysis demonstrates that they are derived from the hybrid between *C. anglica* (2n = 48) and *C. officinalis* (2n = 24) with 2n = 36.

Large *Cochlearia* plants in mid-marsh salt marsh communities, Heswall, Dee estuary, Merseyside

Nature in Cambridgeshire

The 2022 edition of *Nature in Cambridgeshire* (No 64) had several papers with a botanical dimension, including Cherry Hinton East Pit Chalk Grassland and Invertebrate Monitoring (Sian Williams), Biodiversity monitoring at King's College wildflower meadow (Cicely Marshall *et al.*), Autumn Lady's-tresses at Tydd Gote (Lucy Wilson), Lower Wood Part 2: The Flowering Plants and Shrubs (Duncan Mackay), The Flora of Cambridgeshire Churchyards (Jonathan Shanklin), Trumpington Meadows: A report on the CNHS Field Studies area of 2021 (Jonathan Shanklin) and Vascular Plant Records 2021 (Alan Leslie). Subscription details are on the NiC web page. All back issues over two years old are freely available and often offer fascinating views of how some of our sites appeared in the past.

New Publications

The result of the Cambridge Natural History Society project to record a snapshot of the wildlife of Cambridge appeared on the bookshelves in 2022 October when *The Nature of Cambridge* was published by Pisces. The chapter on the Flora of Cambridge was written by myself, using the same recording period as the BSBI Plant Atlas 2020, ie going back to 2000. Others contributed boxes on Black Poplars (Roger Horton), Large Elms (Duncan Mackay) and Floating Pennywort (Mike Foley). Mark Hill oversaw the chapter on Plant distributions and habitats, which was based on the BSBI plant records, with contributions from Monica Frisch and Chris Preston. There is much more about the wildlife of Cambridge in the book, which is profusely illustrated and well worth purchasing.

Vascular Plant Records 2022 – Alan Leslie

The **Lizard Orchid** at Sawston [Sabine Eckert]

Unprecedented is a word that has been used a little too freely of late, but would seem entirely justified in describing the surge in records for *Himantoglossum hircinum* (**Lizard Orchid**) in Cambridgeshire in 2022. This magnificent orchid is well-known from a long-standing population on or near the Devil's Ditch, at Newmarket, with rare mostly short-lived records elsewhere in the county. Last summer we had records from seven new sites, mostly single flowering plants, often on road verges, ranging from Little Shelford, Sawston, Linton, Lode (two sites), on the Newmarket Road near Cambridge airport, to Almoners Avenue within Cambridge city. The previous year we also had new records from Swaffham Bulbeck and Litlington. We are not alone in reporting this phenomenon, as other counties in southern England have reported new localities (sometimes indeed small populations), and this species is clearly experiencing one of its periodic expansions. As it takes some time to build up to flowering size the individual plants must have been with us for several years. Whether these individuals will be able to persist and form new populations will be fascinating to watch. Perhaps we could even find ourselves with a tongue orchid (*Serapias* spp.), several of which have been seen in southern England in recent years, although perhaps not all of them without some human assistance.

Although not quite so spectacular there have been other natives which have shown signs of further expansion in this last year. *Cephalanthera damasonium* (**White Helleborine**), for example, has now been reported from near Newmarket, *Bidens cernua* (**Nodding Bur-marigold**) and *Oenanthe crocata* (**Hemlock Water-dropwort**) continue to appear in new fenland localities and **Polypody** (*Polypodium vulgare* agg.) crops up in more and more places. A Flora Group excursion to the recently rarely visited Balsham Wood revealed one bramble-strewn slope harbouring new sites for some other ferns including *Polystichum setiferum* (**Soft-shield Fern**), *Athyrium filix-femina* (**Lady Fern**) and *Dryopteris affinis* (**Scaly Male-fern**). The brambles are pertinent in this context as they must have been helping to reduce grazing by deer: a large population of *Hylotelephium telephium* (**Orpine**) located elsewhere in the wood during the excursion, but without protection of brambles, had been entirely grazed off later in the year.

Spineless Saltwort, Chippenham [Mike Padfield]

One of the most satisfying aspects of botany can be rediscovering plants in sites where they have not been seen for some time and in some cases had been thought lost. Sometimes the species may just be naturally sporadic, in other cases they may be in little-visited localities or perhaps in areas difficult of access. Some examples are worth highlighting here, such as *Hordelymus europaeus* (**Wood Barley**) which had only one locality in the county in the twentieth century and had not been seen there, in Knapwell Wood, since 1982, but was refound in good quantity in 2022. *Oenanthe fluviatilis* (**River Water-dropwort**) is still found in a number of places in the Fens, but had not been seen in the Cam for many years, but was rediscovered in the river at Hinxton from where it was last reported in 1964. Meanwhile *Carex vesicaria* (**Bladder-sedge**), which had a number of older records along the Old West (or River Great Ouse) had not been seen in any of these for many years, but was confirmed from near Stretham Bridge in 2021, the first sighting there since *c*.1930. Our visit to Balsham Wood also produced records for *Luzula pilosa* (**Hairy Wood-rush**) and *Allium ursinum* (**Ramsons**), both last recorded there many years ago. Such refinds can sometimes involve alien plants and perhaps the most remarkable this last year was the discovery of *Salsola tragus* (**Spineless Saltwort**) in sandy fields south of Chippenham Park. This is very close to where this was once recorded, on La Hogue Farm, in 1949; could it have been persistent in these rather rarely recorded fields all this time? Another rare alien, *Solanum triflorum* (**Small Nightshade**), has also shown some evidence of a similar persistence in this area.

The identification of hybrids can sometimes be challenging for many recorders, but this is an element in our flora which has become better recorded in the last 50 year or so. In 2022 we had the first report of hybridisation between the alien *Symphytum orientale* (**White Comfrey**) and the native *S. officinale* (**Common Comfrey**), near the river in Chesterton, Cambridge: this is only the second British record. A convincing case has also been made for the presence of hybrids between *Atriplex littoralis* (**Grass-leaved**

Orache) and *A. prostrata* (**Spear-leaved Orache**) along a couple of road verge in the south of the county. **Willowherb** (*Epilobium*) hybrids are generally more frequent, if often overlooked in mixed populations. In the 1964 *Flora of Cambridgeshire* there were only four recorded combinations, but by the time of the 2019 Flora this had risen to thirteen, and now we have two records for a fourteenth: *E. montanum* (**Broad-leaved Willowherb**) x *E. tetragonum* (**Square-stalked Willowherb**).

Panicled Willowherb in Alan Leslie's yard, which arrived there of its own accord. Bright sunshine made it difficult to photograph. [Jonathan Shanklin]

It will come as no surprise that there is also a string of new alien records, both of previously recorded species spreading to new areas (e.g. *Euphorbia maculata* (**Spotted Spurge**), *Digitaria sanguinalis* (**Hairy Finger-grass**), *Polycarpon tetraphyllum* (**Four-leaved Allseed**)and *Passiflora caerulea* (**Blue Passionflower**)), but also first records for a diverse assemblage of novelties including the American annual *Epilobium brachycarpum* (**Panicled Willowherb**) and a further trio of plants considered to derive from the coir element being used in nursery plant potting composts: two alien grasses, *Dactyloctenium aegyptium* and *Eragrostis viscosa*, as well as the Asiatic climber *Ampelopsis japonica*. Further details of many of these records (and others) will be in the account in the next *Nature in Cambridgeshire*.

Cambridgeshire Native Plants

In this section I detail a few stories of native or achaeophyte species that have been recorded in new hectads in 2022. The DDb suggests that there were 78 such records, some of which are just new subspecies, forms or varieties, or species only recorded at genus level.

Valerianella carinata (**Keeled-fruited Cornsalad**) spread to two new hectads: TL26 and TL29. In 2010 it was a rare plant at monad level, with only four records. Now it is scattered through much of the county, though as with many species there is a concentration of records around Cambridge. It is possible that the increase is linked to its use as a salad plant as many of the records are associated with habitation. On the other hand, Alan comments that most of the seed that is sold is of its sister, *Valerianella locusta* (**Common Cornsalad**). This is still common, though perhaps less so in the far north; it is more a plant of the wider countryside, for example along several of the wash banks. Another plant where the human hand is probably involved is *Arum italicum* (**Italian Lords-and-Ladies**), which has now made it to TL67.

Carduus tenuiflorus (**Slender Thistle**) has shown a similar increase, spreading to TL34 and TL65. Both of these locations are some way from where the main previous spread has been, which was along the A14 and A428 corridors, perhaps associated with the roadworks and subsequent sowings. Other members of the Asteraceae are also spreading, with *Crepis biennis* (**Rough Hawk's-beard**) long being frequent around Cambridge, but now found in TL65 and *Crepis vesicaria* (**Beaked Hawk's-beard**) in TL59.

Hemlock Water-dropwort at Stanground Wash [Peter Leonard]

A surprise aquatic addition was *Potamogeton crispus* (**Curled Pondweed**) in a lake near Papworth, though it could have been an introduction. A similar case was the find of *Oenanthe crocata* (**Hemlock Water-dropwort**) in a pond at Balsham, though here it was not a deliberate introduction. This plant is slowly increasing from first being found as a garden weed in 1977, to its first occurrence in the wild at Swavesey in 2006, though the DDb has an anonymous record here for an earlier record in 1991. A find which I didn't realise was significant at the time was *Lotus pedunculatus* (**Greater Bird's-foot-trefoil**) in Leverington Gull CWS in TF41. This is our most northerly site for the plant. The group visited Balsham Wood in April and I paid another visit in June, finding *Equisetum telmateia* (**Great Horsetail**), which is just the most easterly record that we have.

Ferns are considered as noteworthy plants in much of the county, in part because of the lack of ferns in the open fenland and chalk download. David Barden argued that Polypodies were increasing in a Nature in Cambridgeshire paper in 2009. Surprisingly the pre and post 2000 hectad counts are the same at 19. *Dryopteris affinis* (**Scaly Male-fern**) and *Polystichum setiferum* (**Soft Shield-fern**) were two more of several finds in Balsham Wood (TL54) in April. The first county record of the *Polystichum* wasn't made until 1964, and the early records were largely in the west of the county. Many of our ancient woods are under-recorded over recent decades, so it is perhaps not surprising that finds such as these should be made. Overall ferns are present in most of the county hectads, though are concentrated around Cambridge (again), Peterborough-Whittlesey and the eastern and western woods. In otherwise fern sparse areas, they are plants of the villages, often growing on suitable shaded walls.

The Flora Group in Balsham Wood [Peter Leonard]

Cambridgeshire Threatened Plants

This year I've chosen six species recorded infrequently during 2022, which have some of the smallest ratios of 2022 records to overall records. As previously each local description is followed by the ecological details from the Online Atlas of British and Irish Flora. Most of these accounts will be updated, along with the trends, in the new online Atlas, which will be published in early March, with the printed Atlas following in late March. BSBI members can purchase the printed Atlas at a 50% discount on the publication price of £132, but will need to join before it is published in March.

Apera interrupta (**Dense Silky-bent**) is a scarce plant in the county and is Endangered because it is substantially declining at monad, tetrad and hectad level. First seen in the county in 1852 it was most frequently recorded in the 1987-1999 date class. The solitary 2022 record was of one plant from a bank at the WildTracks Activity Park at Kennett, which was near the centre of its former stronghold in the county.

It is an annual predominantly found in arable fields, where it can be a weed, but also recorded from road verges, trackways and quarries. It has a more permanent niche in some tightly grazed grassy or grass-heath habitats. It occurs in waste ground as a casual from wool shoddy and imported aggregates, and as a seed impurity.

Galeopsis speciosa (**Large-flowered Hemp-nettle**) is similarly classed in the county and is also Vulnerable at England level. It was first seen in the county in 1860 and was never very frequent. It has a preference for fenland, with most records made during the 1987-1999 date class, though in terms of monads it was more widely distributed in 2010-2019. Oli Glenister made the only record, finding it frequent on the edge of a fallow arable field near Littleport.

It is an annual weed of cultivated, marginal and waste ground, often within root-crops (especially potatoes) on peaty soils.

Lythrum hyssopifolia (**Grass-poly**) at Whittlesford - Thriplow Hummocky Fields SSSI
[Jonathan Shanklin]

Legousia hybrida (**Venus's-looking-glass**) is declining in England and Endangered in the county with decline at monad, tetrad and hectad level. It is another arable plant first seen in 1860 that was most frequent during the 1987-1999 date class and clearly favoured the chalk arable fields. I found it locally frequent on the margin of an arable field in the Whittlesford – Thriplow Hummocky Fields SSSI.

This annual of arable fields is usually found on calcareous soils, especially on chalk. Outside its core areas, it occurs as a casual in disturbed sites such as motorway embankments.

Nymphoides peltata (**Fringed Water-lily**) has a much longer history in the county, first recorded by Ray in 1660. It is nationally scarce and vulnerable in the county with a decline at monad and tetrad level. Again it was most frequently recorded during the 1987-1999 date class, although a good number of records were also made during Fenland Flora recording. The main areas for it were the Ouse and Nene Washes and the bigger drains and rivers. It is still plentiful in some of these, but I didn't see it in the northern part of the Ouse Washes in 2022. However I did see it in two locations in the south of the Washes.

It is a rhizomatous perennial which grows in water 0.5-2 metres deep in lakes, ponds, slowly flowing rivers, canals and large fenland ditches. As a native it is a plant of calcareous and eutrophic water.

I found abundant *Sium latifolium* (**Greater Water-parsnip**) in the north of the Ouse Washes. [Jonathan Shanklin]

Potamogeton pusillus (**Lesser Pondweed**) is declining at monad level in the county and is therefore rated as Vulnerable. There are usually at least half a dozen records each year, so being on this list was a surprise, particularly as I paid several visit to its Ouse Washes stronghold and did take a grapnel with me. First seen in the county in 1843 it was most frequently recorded in the 2010-2019 date class, at least in part reflecting field work for the Fenland Flora. Generally it is widely distributed across the county. The one 2022 record was from Hobson's Conduit by the Botanic Garden and it was also in a water-lily tank in the glasshouses.

It is a plant found in standing or slowly flowing water in sheltered lakes and reservoirs, ponds, rivers, canals, ditches and flooded mineral workings. It favours mesotrophic to eutrophic water and tolerates slightly brackish conditions. [Chris Preston notes that whilst the online atlas says it is a rhizomatous perennial, this is incorrect. It dies back in the autumn and regenerates from turions.]

Ranunculus circinatus (**Fan-leaved Water-crowfoot**) was also frequent in the Ouse Washes, but also at Wicken Fen and in some of the good fenland drains. It too is declining at England level and county Vulnerable with decline at monad, tetrad and hectad level. The first county record was in 1763 and follows the pattern of a peak in 1987-1999 and a strong return in 2010-2019. The solitary record was made during the Flora Group excursion to Tubney Fen, where it was found in Reach Lode.

It is a perennial herb of clear, base-rich, standing or very slowly flowing water, most frequently in lakes, flooded gravel-pits, sluggish streams and rivers, canals and ditches. It usually grows at depths of 1-3 metres in meso-eutrophic or eutrophic water; only growing in shallower water if it does not dry up in summer.

Cambridgeshire Alien Plants

A new section this year, describing a few of the alien species recorded since 2000, and which may be increasing. Its inclusion was prompted by a comment from Helena Crouch during an online meeting with England recorders and seems a good idea to spot some plants that may become more frequent in future. There are several plants already in this category, such as *Laphangium luteoalbum* (**Jersey Cudweed**) [first recent record 1999, 13 records since 2020], *Polycarpon tetraphyllum* (**Four-leaved Allseed**) [first recent record 2012, 10 records since 2020] and *Senecio inaequidens* (**Narrow-leaved Ragwort**) [first seen 2006, 43 records since 2020]. Here are some others that appear to spreading, again with ecological details from the Online Atlas of British and Irish Flora.

There are historic records for *Amaranthus blitum* (**Guernsey Pigweed**), but the first recent record was not until 2017 when it was found in two locations: Barrington and King Street, Cambridge. It has persisted in the King Street location and has spread to monads to the east and west.

Four-leaved Allseed is doing well in Cambridge streets [Jonathan Shanklin]

The plant has been known in the wild in Britain since at least 1771 (Essex). It was formerly more frequent in the 19th century but then became rare. Babington in his 1860 Flora notes that it was found in "Waste places near towns", and quotes Relhan noting it "In the outskirts of Cambridge". A procumbent to ascendent annual which is persistent on waste ground, rubbish tips and cultivated land in Guernsey. It is more frequent as a casual wool, bird-seed and coir-fibre alien in similar habitats.

Bassia scoparia (**Summer-cypress**) was first reported from the county in 1970 initially on refuse tips, then in weedy urban locations. In late 2018 and 2019 there were several records along major routes such as the A11, A14 and A428, suggesting that there might be a rapid spread. Since then there have been only two records when it was seen on the central reservation of the M11 in 2020 September and the Coldham's Lane bridge in 2022 September. A similar situation seems to exist in Somerset, with few recent records.

It was being cultivated in Britain by 1629, and is now frequent in gardens. Although it was first recorded from the wild in 1866 (Surrey), it remained rare until the early 1900s. It now appears to be increasing, especially on roadsides around the Humber estuary. A bushy annual found in hedgerows and on roadsides, rubbish tips and waste ground, especially around ports, and in gravel-pits. It is sometimes naturalised on roadsides but is usually casual, being introduced with grain and carrot seed, oil-seed and wool shoddy. It also occurs as a garden escape.

Briza maxima (**Greater Quaking-grass**) was first reported from the county in 1971 with scattered records up to 1989. It was next reported from Gamlingay in 2018, then

from Magog Down in 2020 and the Botanic Garden in 2022. In at least some cases it may have arisen from seed put out for birds.

The plant was introduced into Britain by 1633 and recorded in the wild by 1860 (Jersey). It appears to be increasing, especially in S.W. England and the Channel Islands. It is frequently grown for ornamental purposes, and is increasing as a garden escape. It is also introduced with wool shoddy and esparto. An annual, naturalised or occurring casually on dry, bare banks and field margins, in cultivated ground including gardens, bulb-fields, on sand dunes, sea-cliffs, rubbish tips, waste ground and wall-tops, and in pavement cracks.

Nonea lutea (**Yellow Nonea**) originates from Russia and was first noted as a lawn weed in Cambridge in 1956. Most of the records are in or near Cambridge, but it seems to be cropping up more frequently as a plant of weedy ground. It was sufficiently rare that there is no entry in the current online atlas.


Spring Starflower [Peter Leonard]

Rapistrum rugosum (**Bastard Cabbage**) has been known in the county since Babington found it in 1848, though he did not record it in his 1860 Flora. There were then few records until the 1970s, when it cropped up on refuse tips. It has scattered records across the county, but most of the recent ones are in a broad zone between Cambridge, Ely and Huntingdon. The dead plants can be recognised in winter as was demonstrated when it was found at Chittering during a bryophyte outing in 2023 January.

It was introduced to cultivation in Britain by 1739, and was known from the wild by at least 1863. An annual or short-lived perennial herb, found mainly as a casual of waste ground, but now becoming naturalised in a variety of habitats where it is sometimes invasive, such as in open grassland. It is introduced with grain and bird-seed.

Tristagma uniflorum (**Spring Starflower**) was first seen by Alan Leslie in 2001 at three locations in or near Cambridge. Further records came in 2006 and 2019, but then a spate of records in 2020, 2021 and 2022 including some in villages west of Cambridge. It has a fairly short flowering season between March and April and many records are associated with habitats such as verges and churchyards. It does however seem a little strange that there should be a sudden passion for planting it.

The plant was first cultivated in 1832 and is frequently grown in gardens. It was recorded in the wild in 1921 (Jersey), and was known in the Isles of Scilly in 1952; it may be increasing in some areas. It is perhaps better known to gardeners as Ipheion uniflorum*, and is still marketed under this name. A bulbous perennial herb found on cultivated ground, roadsides and waste ground, and in churchyards; also as a relic of cultivation. It readily becomes established in suitable habitats, especially on sandy soils in mild areas such as in the Isles of Scilly and the Channel Islands. Reproduction is mostly vegetative.*

Review of the 2022 excursions

Saturday, January 1, Cambridge, "The Backs"
The traditional start for the year is a New Year's Day walk in the area covered by the Cambridge Natural History Society for their field studies. For 2022 the area was the monad TL4458, which includes several churchyards and colleges, three City Wildlife Sites, the River Cam and city streets and roads. What was not traditional was the temperature – the hottest New Year's Day on record for England, with the temperature above 15°C. Over a dozen people met up outside the west door of Gt St Mary's church, with our first target the churchyard, where we found 12 plants in flower. Leaving the churchyard we headed first to the Round Church, which at least had a flowering *Taraxacum*, before entering St Clement's churchyard, for which the leader had the combination for the padlock. A surprise plant here was *Sherardia arvensis* (**Field Madder**) not previously recorded from the churchyard and in flower. It produced a good total of 20 species in flower. We then headed back towards the centre of town and along Garret Hostel Lane.

Although not seen on the New Year's Day walk, I found *Ruscus aculeatus* (**Butcher's-broom**) in flower a couple of days later [Jonathan Shanklin]

The drain on the north side of the Lane is a City Wildlife Site, originally designated for the presence of Water Voles, which became locally extinct following bank clearance. Much to our delight there were signs that it was again being used by voles, and indeed one was seen in the adjacent ditch by Queens' Green. The brick wall of the drain is covered with the liverwort *Conocephalum conicum* (**Great Scented Liverwort**), an uncommon species. At the top of the brickwork we found flowering *Erophila verna* (**Common Whitlowgrass**), a spring plant flowering early. A nearby Yew showed the presence of the gall causer *Taxomyia taxi*, with both 1-year and 2-year life cycle forms present.

Crossing Queen's Road, we headed through the University Library grounds. A Cedar was provoked to shed some pollen, so it counted, but there was some debate about the species. In the end it seemed most likely to be a cultivar of *Cedrus atlantica* (**Atlas Cedar**). A nice weedy patch of lawn provided flowering *Stellaria media* (**Common Chickweed**), which had eluded us elsewhere. Crossing back across the road, we found some flowering *Anthriscus sylvestris* (**Cow Parsley**), but were disappointed with the freshly repointed brickwork around Queens' College. Passing the remnant of the original Botanical Garden, we paid a quick visit to St Benet's churchyard where we found *Campanula portenschlagiana* (**Adria Bellflower**) in flower. A gall on a Fuchsia was caused by a mite that cannot survive in temperatures below 5°C, so was clearly quite happy with the weather.

Our final churchyard was St Edward's, where we had several additions to the list, including *Erigeron karvinskianus* (**Mexican Fleabane**) and two strawberries in flower *Fragaria vesca* (**Wild Strawberry**) and *Potentilla indica* (**Yellow-flowered Strawberry**), the latter producing strawberries. Overall during the afternoon we recorded 96 species (not everything was recorded as the VCR has been active in the area) of which 43 were in flower.

Saturday, March 19, Fenland churchyards

Our first excursion of the year took place under sunny spring skies, with not a cloud in sight all day. Five botanists met up outside Cottenham church. The church tower is striking, with three stages in different brickwork capped with four distinctive pinnacles. The churchyard was far less striking, mostly consisting of what could be described as amenity grassland, managed by "cut and drop" rotary mowers. There were large patches of the invasive *Smyrnium olusatrum* (**Alexanders**), some plants already in flower. A plant close to the church provided some debate as Jonathan had (mistakenly) recalled that *Potentilla indica* (**Yellow-flowered Strawberry**) was present, but the vegetative key pointed firmly (and correctly) to *Fragaria vesca* (**Wild Strawberry**). In all we found 25 additional species in the churchyard, bringing its total to 133.

Cottenham church
[Jonathan Shanklin]

Our next stop was Sutton, which is another imposing church, situated at the top of what were sea-cliffs during the last interglacial period. The churchyard had quite a lot of introductions, including the invasive *Allium triquetrum* (**Three-cornered Garlic**), but it was probably the wildest churchyard of the day. One challenge was a Stonecrop, which required recourse to the vegetative key. This suggested that it was *Phedium stoloniferus* (**Lesser Caucasian-stonecrop**) as there were no papillae on the stem, though what may have been the same plant was recorded as *P. spurius* (**Caucasian-stonecrop**) on the previous visit in 2017. By now it was lunch time, but although the church was hosting a beer festival (and offering tea and cakes), we declined the offer and had our picnic lunch on a grassy bank. Rather conveniently the beer festival had brought three mobile toilets to the churchyard, which gave some welcome relief! Here we added 37 additional species, bringing the churchyard total to 152.

Chatteris was also largely amenity grassland, which was being invaded by *Ceratochloa cathartica* (**Rescue Brome**). The "wildflower meadows" shown on OpenStreetMap at the back of the church proved rather overstated, though there were clearly several introduced species present. At the start of the day there were 24 species known from the churchyard and we increased it to 94, recording 71 during the visit.

Doddington churchyard had a few points of interest, with a good colony of *Polypodium interjectum* (**Intermediate Polypody**) on the churchyard wall. We found three species

of Violet: *Viola odorata* (**Sweet Violet**) (both violet flowered var. *odorata* and white flowered var. *dumetorum*), *Viola reichenbachiana* (**Early Dog-violet**, with pointed sepals and dark spur) and *Viola riviniana* (**Common Dog-violet**, with cream colour spur, though it was a cultivar of the Purpurea Group, with purple suffused leaves). As a sideline we saw four different species of ladybird, including the increasingly rare 2-spot. With only seven post 2000 records, we made a substantial addition, noting 63 species and increasing the all time total to 91 species.


Chatteris church [Jonathan Shanklin]

With time passing we decided to head back towards Cambridge but stopped first at Mepal. Jonathan had mistakenly thought that this had a small churchyard without a church, but there was also a small chapel, with a single bell. Despite the churchyard's small size it had one of the churchyard axiophytes (a nice plant indicative of a good habitat) - *Luzula campestris* (**Field Wood-rush**). We failed to find five of the nine known species, but increased the total to 59. With the cemetery being immediately opposite we decided to spend a short time recording that as well, though annoyingly it was in two separate tetrads. It was a worthwhile diversion and we found several species not seen elsewhere, including *Arabidopsis thaliana* (**Thale Cress**) and *Galium verum* (**Lady's Bedstraw**).

During the day we recorded 187 species (including the vars, ladybirds and liverworts) of which 47 were seen in flower. Nine species shared the top spot, including *Prunella vulgaris* (**Selfheal**), which is sometimes overlooked when not flowering. Not surprisingly, *Bellis perennis* (**Daisy**), one of the most frequently recorded denizens of churchyards, was the only species seen in flower at all six sites.

Sunday, April 24, Balsham churchyard and Wood

A group of 14 met at Balsham church on a lovely spring day, though with a slightly bracing easterly wind. We began with the churchyard, which although visited by Jonathan Shanklin the previous autumn still had plenty of new species to find. One plant, not reported there since 1977, was *Ranunculus auricomus* (**Goldilocks Buttercup**). The plant seen then by Alan Leslie was soon found by an early arriving group, but it turned out that there was another of the apomict group in the churchyard as well, which Alan suggested was close to *R. crassilobus*. The first plant has not yet been named. We also found a patch of grassland close to the church that was more species rich than the rest of the churchyard, where there was *Lotus corniculatus* (**Common Bird's-foot-trefoil**), *Pimpinella saxifraga* (**Burnet-saxifrage**) and *Rumex pulcher* (**Fiddle Dock**) amongst other species. From the churchyard, Richard Pargeter led us towards Balsham Wood, with only the minor distraction of *Valerianella carinata* (**Keeled-fruited Cornsalad**) before we reached Rosie Green Wood. As there were benches here and it was 12:30 we decided it was a good spot for lunch.

The three-leaved form of **Herb-paris**
[Peter Leonard]

After lunch we continued on to Balsham Wood, which thanks to the interlocution of Richard Pargeter, the owner, Robin Vestey, had given us permission to visit. The woodland rides had been widened some 18 months previously, giving plenty of light for vascular plants. In particular *Scrophularia nodosa* (**Common Figwort**), no longer so common in Cambridgeshire and therefore on the RPCC, seemed to have appreciated the disturbance caused by removal of the trees. We soon started finding species on the "wanted" list such as *Moehringia trinervia* (**Three-nerved Sandwort**) and *Veronica montana* (**Wood Speedwell**). We then headed north and were delighted to find a patch of *Paris quadrifolia* (**Herb-paris**), not far from where we hoped to see it, and as had been reported in 1953 was often more accurately *P. trifolia*. Near here we also found *Luzula pilosa* (**Hairy Wood-rush**), not previously reported in the wood and *Neottia ovata* (**Common Twayblade**). Continuing north to the fragment of the wood in TL55 we found *Orchis mascula* (**Early-purple Orchid**) on the way and in the fragment there was more scattered *Primula elatior* (**Oxlip**), a species not seen in the hectad for over 20 years, hence now able to be deleted from the BSBI England LORE list. Our next delight was refinding some *Hylotelephium telephium* (**Orpine**) where it had previously been reported, initially just a few leaves, then a large patch. Travelling south in a large loop we came across a relatively small area just off the ride that clearly had different ground qualities. Here we first found five fern species *Pteridium aquilinum* (**Bracken**), *Dryopteris dilatata* (**Broad Buckler-fern**), *Polystichum setiferum* (**Soft Shield-fern**), *Athyrium filix-femina* (**Lady-fern**) and *Dryopteris affinis* (**Scaly Male-fern**), then a patch of *Allium ursinum* (**Ramsons**), which had last been reported in the wood in 1855. This was particularly surprising as we subsequently found a couple more patches on the main ride.

Orpine shoots
[Peter Leonard]

The day had been so interesting that it was quite a surprise that when we looked at the time it was already 17:30, so a little reluctantly headed back towards the church and our cars. There was an offer of tea from Richard, but this was reluctantly declined as several people needed to get back to their homes. During the day we found five LORE species, recorded 41 in the churchyard and 79 in Balsham Wood, and saw many others that had been recorded since 2020.

Tuesday, May 10, Histon set-aside

Our excursion to Histon was a little different to the usual pattern and was in part more of a social affair. Although promised a dry day after patchy drizzle dispersed, we actually had a couple of light showers, but these were not enough to warrant putting on waterproofs. Histon villagers are purchasing a parcel of land that has been abandoned for many years, which is locally known as "the set-aside". The land is on somewhat sandy ground from the glacial river Cam terraces. It was probably ploughed until the 1940s, then abandoned and has become scrubbed over, though some glades remain. We were led by David Dives and accompanied by two members of the village trust who will help manage the site. With David already having made several visits to the site he continued with the recording, giving Jonathan Shanklin a much appreciated day off, having just returned from seven days continuous recording in Shropshire.

David first took us to a veteran *Pyrus pyraster* (**Wild Pear**), noted in Nature in Cambridgeshire **42** as "the only wild specimen known in Cambridgeshire". The route to it was distinctly "amber" in nature, but after that the going was easier. Continuing the theme of veteran trees we then went on to see the remarkable *Quercus robur* (**Pedunculate Oak**), which had a girth of 6.2 m in 1999. We diverted from the main path to see a veteran *Acer campestre* (**Field Maple**), which had a small patch of *Ruscus aculeatus* (Butcher's-broom) nearby.

Changing Forget-me-not [Peter Leonard]

We turned our attention to one of the glades, where we saw *Myosotis discolor* (**Changing Forget-me-not**), which Alan Leslie and Peter Leonard identified as subsp *discolor*, which only has a couple of other sites in the county. It can be distinguished from the slightly more common (in Cambridgeshire) subsp. *dubia* by its initially yellow corolla, with the latter having an initially white corolla. Just to confuse things Jonathan Shanklin pointed out some plants that had an apparently white corolla, but did have the correct vegetative characteristics. This area also supported a Cudweed, which both Alan and Jonathan thought most likely to be *Filago germanica* (**Common Cudweed**).

Continuing round a path to see a willow glade, Jonathan spotted an Oak, which clearly had much longer petioles than the common Cambridgeshire Oak which is *Quercus robur*. It had auricles to the leaf but there were also small stellate hairs in the underside vein junctions indicative of *Quercus petraea* (**Sessile Oak**), so was clearly the hybrid *Quercus x rosacea* (the English names refer to the Acorns, with

the leaves being the opposite). It was a bit early to confidently identify the willows, but there was clearly a mixture with parents being *Salix caprea* (**Goat Willow**), *Salix cinerea* subsp. *cinerea* (**Grey Willow**) and *Salix cinerea* subsp. *oleifolia* (**Rusty Willow**).

With time passing we headed for the neighbouring ridge and furrow fields of Manor Farm, where we were welcomed by the owners. Initially appearing to be full of *Anthriscus sylvestris* (**Cow Parsley**) and *Urtica dioica* (**Common Nettle**), once over their fringing barrier the more splendid sight of an ancient meadow faced us. The first debate was over an awned grass. With an initial thought of *Arrhenatherum elatius* (**False Oat-Grass**), reference to Poland clearly showed it to be something else, and *Avenula pubescens* (**Downy Oat-grass**) fitted well. In the meadow we saw one of the larger areas of *Conopodium majus* (**Pignut**) in the county; this had been refound by David earlier in the year after last being reported in 1999. The meadow also had at least three species of *Ranunculus auricomus* (**Goldilocks Buttercup**), along with *Ranunculus bulbosus* (**Bulbous Buttercup**) and *Ranunculus acris* (**Meadow Buttercup**), which gave a golden dusting to our walking boots. One of the Goldilocks was *R. argillicola* (**Boulder Clay Goldilocks Buttercup**) and another close to *R. crassilobus* (**Carlton Goldilocks Buttercup**) but probably an un-named variant. Despite many eyes searching we didn't find any truly scarce species, though did encounter a white flowered *Trifolium pratense* (**Red Clover**).

Pignut [Peter Leonard]

Strangely the meadows have never been given a conservation designation, probably because historically designation has been based on the presence of rare species. They will probably receive a designation of County Wildlife Site as they are sufficiently large and species rich to warrant it. Although the meeting was specified as finishing around noon, in practice it was half an hour after GMT noon when we finally left the meadows, with the skies steadily brightening. Those returning to the starting point were rewarded with the sound of a Turtle Dove churring and seeing it perched on a television aerial. The set-aside provides the habitat it likes and with appropriate management could also provide a feeding area.

Saturday, June 18, Stanground Wash NR

The day before our excursion saw temperatures above 30°C, but a cold front was moving south. Surely we couldn't have a third successive wet outing to the Nene Washes? It turned out we could, and although it was still t-shirt weather when the Cambridge contingent left the City, by the time we arrived in Peterborough it was getting colder and we had patchy rain throughout the day. Fortunately I had prepared waterproof recording cards, so we were able to record the area without too much trouble.

The reserve is bounded on the south side by the Back River and on the north side by the main railway line. A few ditches cross the washes, which are cattle grazed, and old sidings form the part of the reserve adjacent to the railway line, giving a wide range of habitats. We parked at the car-park, which is in Huntingdonshire, and whilst we had a look at the car park flora whilst we waited for other members of the group, we didn't record any of it. Once all were assembled we headed for the reserve and crossed over the foot-bridge. This gave an opportunity to try fishing with the grapnel, confirming some *Hydrocharis morsus-ranae* (**Frogbit**). We then started eastwards along the bank of the Back River.

Initially it appeared that the meadow had been improved with a lot of *Lolium perenne* (**Perennial Rye-grass**), however further from the track there was plenty of *Hordeum secalinum* (**Meadow Barley**). A short diversion to a patch of seasonally wet and trampled ground revealed several stems of *Achillea ptarmica* (**Sneezewort**), a first for the reserve. At several points along the bank we used the grapnel, collecting *Potamogeton perfoliatus* (**Perfoliate Pondweed**), *Potamogeton lucens* (**Shining Pondweed**) and *Stuckenia* [*Potamogeton*] *pectinata* (**Fennel Pondweed**). A surprise find was a couple of patches of *Oenanthe crocata* (**Hemlock Water-dropwort**), new for the reserve, but previously seen nearby on the North Bank of the Nene Washes. Near the end of the bank section we found some *Rorippa amphibia* (**Great Yellow-cress**), Endangered in the county and the first sighting since 2019. In the ditch that ran parallel to the railway we found plentiful *Hottonia palustris* (**Water-violet**) and some *Oenanthe aquatica* (**Fine-leaved Water-dropwort**). When we finally completed a circuit of the western wash fields it was well gone lunch time, so we sat on a ditch bank, where the cattle on the opposite side kept watch on us.

Fine-leaved Water-dropwort
[Peter Leonard]

We then headed for the old railway but first debated covering another rush covered field and decided nothing ventured, nothing gained. Pretty much immediately we gained *Oenanthe fistulosa* (**Tubular Water-dropwort**). Finding the entrance gate to the railway we started eastwards to maximise coverage of the eastern monad. There was plenty of *Filago germanica* (**Common Cudweed)** on the old cinder track, along with *Hypericum perforatum* (**Perforate St John's-wort**) and its hybrid *Hypericum x desetangsii* (*H. maculatum x perforatum*). Another hybrid was *Viola x contempta* (*V. arvensis x tricolor*) along with *Viola arvensis* (**Field Pansy**), but in both cases we couldn't find the other parent. Near the end of the section was a patch of more disturbed ground where a Willow had been felled and this had several arable weeds present. A quick glance suggested one was *Descurainia sophia* (**Flixweed**), however a more considered viewing showed that it was *Sisymbrium altissimum* (T**all Rocket**).

We retraced our steps to cover the western section, adding many more species to the list. A chance stop to inspect closely an area of ground showed a plant of *Spergularia rubra* (**Sand Spurrey**) making us wonder what else we had missed. A call of *Brachypodium sylvaticum* (**False-brome**), was retracted under closer examination, with the banana shaped florets indicating *Brachypodium pinnatum* (**Heath False-brome**). Towards the end of the siding, vegetation cover became greater, with patches of *Saponaria officinalis* (**Soapwort**). Heading back to our entrance point we found a patch of *Filago minima* (**Small Cudweed**), extending over some 10 metres. Finally on the railway, close inspection of a willow with pointed leaves showed no striae under the bark of 2nd year twigs, suggesting that it was the hybrid *Salix x smithiana* (*S. viminalis x caprea*). With it now gone five most decided to depart, but the final car load decided on a quick look at the final field to see if there was anything else other than a possible patch of *Thalictrum flavum* (**Common Meadow-rue**), but there was nothing of great significance.


Lunch on the bank [Peter Leonard]

When we left it was only 14°C, but we had made 346 records of 243 species with 27 of them on the RPCC, and 65 new to the reserve. However we failed to find some of the oddities reported previously such as *Calluna vulgaris* (**Heather**) and *Potentilla erecta* (**Tormentil**). I'd expected to have time to walk along the South Bank to Shanks Millenium Bridge, but that will have to wait until another time.

Tuesday, July 5, Gog Magog Golf Course SSSI

The Golf Course is one of the Cambridgeshire jewels of chalk grassland. Jonathan Shanklin had fairly thoroughly recorded it during 2021, so the main focus of this visit was simply seeing some of the rare plants that are present on the site, and where possible adding additional species. It was another warm day and there had been little rain since our previous excursion. We began by heading up the service road and were soon finding species on the RPCC, such as *Cirsium acaule* (**Dwarf Thistle**, still common but with a tetrad and hectad decline), *Koeleria macrantha* (**Crested Hair-grass**, also still fairly common but with a hectad decline) and *Linum perenne* (**Perennial Flax** – scarce in the county but we have possibly the largest population in the country, and it is a plant for which the UK has an international responsibility). Sadly most of the Flax was no longer in flower, so the promised "blue haze" was not in evidence. We also found a few plants missed in the previous survey,


Cypress Spurge [Peter Leonard]

including *Trisetum flavescens* (**Yellow Oat-grass**). Another highlight here was finding the creamy coloured flowers of *Galium x pomeranicum*, the hybrid between *Galium album* (**Hedge Bedstraw**) and *Galium verum* (**Lady's Bedstraw**).

Continuing round we headed for the area with *Euphorbia cyparissias* (**Cypress Spurge**) and Chris Preston found a single plant of *Polygala vulgaris* (**Common Milkwort**) by the hedge. This was the only sighting of the plant on the SSSI, and it is absent from Magog Down as well, though common in the nearby Stapleford Parish Pit. We made a brief foray into the "new" part of the course, which is outside the SSSI, but should become a CWS, to look for *Cephalanthera damasonium* (**White Helleborine**), which has become widespread under Beech trees, though on this occasion only found a couple of spikes. Our next target was the *Prunella laciniata* (**Cut-leaved Selfheal**), which with an accurate grid reference was soon found, though the route to it did involve negotiating several fairways. With some shade present this seemed a good spot for lunch nearby.

Common Fiddleneck [Peter Leonard]

After lunch we headed for the old sand pit near the top of the plateau, where we saw *Clinopodium acinos* (**Basil Thyme**) and added *Anisantha diandra* (**Great Brome**) to the site list. The composting area by the old well proved to be the source of *Amsinckia micrantha* (**Common Fiddleneck**) seen not far away on a patch of ground being left to re-seed and this management area also had a plant of *Senecio viscosus* (**Sticky Groundsel**) on a bund. We had previously passed the "Half-way House", which offered refreshments to weary golfers, and given the heat also stopped for refreshment in the form of ice-creams.

Looking for **Moon Carrot** at the Golf Course [Jonathan Shanklin]

We now headed for one of the other site specialities - *Seseli libanotis* (**Moon Carrot**) and were rewarded with a flowering plant. Climbing upward we came across a most unexpected patch of *Trifolium arvense* (**Hare's-foot Clover**) on the bank of a tee. Continuing around the course we came to the old chalk pit, which had not been included in the previous survey as a sign said "out of bounds". The group succumbed to temptation and ventured in, finding more *Clinopodium acinos* and a patch of *Thalictrum minus* (**Lesser**

Meadow-rue) at the top. Rather worryingly the bowl of the pit had many plants of *Heracleum mantegazzianum* (**Giant Hogweed**), so a recommendation was made to the course manager to try and remove it.

From here it was a relatively short walk back to the car park. Although recording was not a major focus of the day, we did record 98 plant species of which 8 were new for the site, with 21 species on the RPCC.

Sunday, July 24, Ely cemetery & Ely Pits and Meadows SSSI

The long drought continued and temperatures were forecast to hit 29°C, though this was at least cooler than the previous week and there was a good breeze. On arrival at the cemetery gates the ground looked verdant, however this turned out to be a damper area under trees and the majority of the cemetery was crisped. The Cemetery is designated as a County Wildlife Site for its neutral grassland interest. The citation also mentions the unlikely *Lysimachia nemorum* (**Yellow Pimpernel**), though this appears to have been dropped from the digitised records.

With several beginners in the group we started with a few of the plants near the cemetery gates, several of which were additions to the cemetery list, and late arrivals were surprised to find us still there! One of the additions was *Sagina apetala* subsp. *apetala* (**Annual Pearlwort**) which was initially identified by Jonathan by the glandular hairs on the peduncle and sepals on a dead plant, and confirmed by Nick Jardine, who is the BSBI referee for the genus. Identifying dead plants proved to be a common theme during the day! Moving out into the cemetery grounds we started to find grassland species such as *Lotus corniculatus* (**Common Bird's-foot-trefoil**), *Pilosella officinarum* (**Mouse-ear-hawkweed**) and *Pimpinella saxifraga* (**Burnet-saxifrage**).

The view across the cemetery from the Mill Mound [Jonathan Shanklin]

Moving around clockwise, we found an area of more disturbed ground that was probably destined to become a garden. In the meantime it gave space for some more ruderal species such as *Erigeron canadensis* (**Canadian Fleabane**) and *Tripleurospermum inodorum* (**Scentless Mayweed**). Continuing round we found some dwarfed flowering *Knautia arvensis* (**Field Scabious**) in the mown grassland, though it did better elsewhere on the site. We also found some rosettes of *Plantago media* (**Hoary Plantain**). Further round there were areas of long grass, which included *Hordeum secalinum* (**Meadow Barley**) and *Trisetum flavescens* (**Yellow Oat-grass**), though we didn't spot the *Briza media* (**Quaking-grass**) that had been found during a 2005 survey.

It was now lunchtime, and the Mill Mound had plenty of shade and a bench to sit on. It also gave a good vantage across the Cemetery. With time passing we decided to

have a quick look around the remaining long grass areas, the rougher southern margin and the chapel. Of these the chapel proved most interesting, with several species self-sowing from more ornamental beds. *Verbena bonariensis* (**Argentinian Vervain**) was established along path margins and *Erodium manescavii* (**Garden Stork's-bill**) had become established in the grassland. The latter has only been recorded twice previously in the county. Some basal leaves defeated the recorder. One phone id app suggested *Arbutus unedo* (**Strawberry-tree**) but agreed with another that there was a good chance that it was *Verbascum phoeniceum* (**Purple Mullein**), though better evidence will be required before it is recorded as such.

Leaving the Cemetery we headed first for the Common, where Helen Moore gave us a short introduction to Ely Wildspace, then we headed down Kiln Lane to the river and grazing meadow and marsh that forms unit 9 of the Ely Pits and Meadows SSSI. One of the first interesting species to be spotted was *Trifolium fragiferum* (**Strawberry Clover**), though the ripe heads looked more like droppings than strawberries. In the river we found a little *Potamogeton crispus* (**Curled Pondweed**), with *P. perfoliatus* (**Perfoliate Pondweed**), though grapnel trawls were largely fruitless in bringing up anything. On the river bank was a little *Senecio aquaticus* (**Marsh Ragwort**), with some plants perhaps indicating the hybrid with *Senecio jacobaea* (**Common Ragwort**). Some of the grazing cattle looked a little guilty when we came across them eating *Glyceria maxima* (**Reed Sweet-grass**) in the river, but it was a hot day.

The dried up marsh
[Jonathan Shanklin]

Numbers dropped as we reached the edge of the monad and the remainder of the party returned through the grazing marsh, though even the ditches were largely dry. There was a little pool of water in one ditch by the railway, and one of the cattle had claimed it as a sanctuary from the heat, happily lying down in it. Zig-zagging across we found a few puzzling stems of a plant, then realised that this was the remains of *Hippuris vulgaris* (**Mare's-tail**), showing that the area was usually under water. Towards the eastern end of the marsh we found a shallow ditch with *Bidens tripartita* (**Trifid Bur-marigold**) and *Oenanthe fistulosa* (**Tubular Water-dropwort**) on the bank.

Although we didn't add many species to the monad lists, which Tim Inskipp had recorded extensively, we did add many species to the site lists. For the cemetery we added 45 species, though equally we didn't re-find 70. Many of these were spring flowering, so would have been unrecognisable during our visit. For the specific SSSI designation we added 40 to the existing 158, though in practice many more species would have been recorded under different site names, such as Roswell Pits, which does show one of the difficulties when trying to establish whether the flora is changing.

Wednesday, August 3, Guided Busway

There had been little rain since our previous excursion and there was a warm, humid breeze. At least there was a breeze and it was largely cloudy, though the temperature reached 27°C by the end of the day. We began at the Longstanton stop with a leftover

from our visit to Ely as Sharon had been so enthused by the pondweeds that she had been swimming to collect some. We agreed on *Stuckenia pectinatus* (**Fennel Pondweed**), and the initial impression was that the other was *P. lucens* (**Shining Pondweed**), but there was some doubt. Turning to *Poland* the questions were "Does it have a denticulate margin? – No", "are the leaves petiolate? – No", "Do the leaves have a hooded tip? – Yes", which suggested the much rarer *P. praelongus* (**Long-stalked Pondweed**), although the leaves seemed quite short. Sharon re-wet them and was taking them to her car when Chris Preston came into view. Sharon was called back and Chris confirmed the identity as *P. praelongus*.


The Flora Group in Mare Fen
[Peter Leonard]

We then set off along the busway, quickly passing through the first two partial monads, which we had visited last year, only spotting a few additional species. The most notable of these was the hybrid between *Erigeron acris* (**Blue Fleabane**) and *Erigeron floribundus* (**Bilbao's Fleabane**), only the third county record. As expected, much of the ground was burnt brown, but deeper rooted plants still showed green. One of the busway compensation areas proved more interesting with a winter wet area that had a sedge with stiff triangular stems: *Carex otrubae* (**False Fox-sedge**). A little further on was a tall Bent, which was clearly *Agrostis gigantea* (**Black Bent**), but close to it was a shorter plant that seemed to match the hybrid between it and *A. stolonifera* (**Creeping Bent**). Another sedge drew attention, but this had thinner stems and narrower leaves. The flower head was slightly more spread out and it had a long ligule, so *C. spicata* (**Spiked Sedge**).

Next we came to the Over Cutting County Wildlife Site, which is primarily designated for **Grizzled Skipper**, though we didn't see any, though there was a **Painted Lady** and a **Wasp Spider**. Jonathan read out a list of possible additional botanical species to look for, which were mostly grasses, with *Anisantha sterilis* (**Barren Brome**) at his feet as he read the list. Sharon quickly added *Festuca rubra* agg. (**Red Fescue**) and *Lolium perenne* (**Perennial Rye-grass**). Although *Cuscuta epithymum* (**Dodder**) was on the list, it had always seemed a very unlikely possibility and we didn't see any. Sarah drew attention to a Melilot that seemed to have white flowers, though the leaves suggested *Melilotus altissimus* (**Tall Melilot**). Eventually we spotted a few flowers that were still yellow, with the majority having been bleached by the sun.

We continued onwards, but was it lunch time yet? Not quite, so we did a short diversion along the Swavesey Drain in the hope of finding *Berula erecta* (**Lesser Water-parsnip**), a LORE species that hadn't been seen in the hectad for over 20 years. It wasn't present, however several other aquatics were added to the list. We crossed the busway to seek a little shade for our lunch spot. Jonathan's apple certainly attracted the wasps, but they eventually seemed satisfied with the core. Adjacent to the spot was *Malus pumila* (**Apple**) (perhaps from a previous lunch?) and we contrasted the leaves with those of a small sapling that we'd seen on the busway, which seemed to key out to *Malus*, but differed slightly to those in the book, so was perhaps an alien species.

Veronica catenata (**Pink Water-speedwell**) [Peter Leonard]

Arriving at Swavesey, we had a choice – ice-cream now or after visiting Mare Fen, where the Environment Agency had completed some bank work and drain clearance. We chose after, as we'd only had lunch an hour previously, so headed up the road. Arriving at the Local Nature Reserve it was obvious that more cattle were grazing than had been the case in previous years, so would we find any of the potentially interesting species? On the baked bank we soon found *Persicaria hydropiper* (**Water-pepper**) and *Rorippa palustris* (**Marsh Yellow-cress**), with *Oenanthe aquatica* (**Fine-leaved Water-dropwort**) in the internal drain. Chris spotted *Rumex palustris* (**Marsh Dock**), though despite the habitat looking suitable we never saw any *R. maritimus* (**Golden Dock**). Moving north along the drain we found more aquatic species: *Oenanthe fistulosa* (**Tubular Water-dropwort**), *Potamogeton crispus* (**Curled Pondweed**), *P. natans* (**Broad-leaved Pondweed**) and *Zannichellia palustris* (**Horned Pondweed**). Sadly also in the drain was the bloated body of a cow that had perhaps become stuck in the soft mud. Chris said "it looks like rain over there" and almost immediately some drops of refreshing rain fell. Sadly they only lasted a few minutes and weren't even enough to dampen the recording card.

Inflorescences of *Persicaria hydropiper* (**Water-pepper**) [top] and *Persicaria mitis* (**Tasteless Water-pepper**) [bottom] [Peter Leonard]

Having rounded the top of the cut Jonathan headed for an earth bank and discovered that behind it was a new scrape. Alan then called out that he'd found *Persicaria mitis* (**Tasteless Water-pepper**), so we all trooped across to look at it. The last time it had been reported from the Fen was 1991, along with *P. minor* (**Small Water-pepper**). Returned to the scrape we then found a dozen or so of the plants along its edge, but no sign of any *P. minor*. We continued southwards, but then diverted to a pond on the margin of the LNR, which was known to have *P. hydropiper*, so it might have the other species too. It did have *P. maculosa* (**Redshank**), though not the other species. Jonathan spotted a leaf and asked "Might this be *Rorippa amphibia* (**Great Yellow-cress**)?" Chris then appeared with a much more convincing specimen, though the first plant was clearly the same species.

We left the Fen and headed back to Swavesey, where the majority decided that an ice-cream was called for. We sat around some conveniently placed benches on the village green and watched an ant, which seemed to have lost its bearings, struggling to move an item of prey. As we got up to leave Sarah spotted a small ladybird that Jonathan identified as a 14-spot Ladybird. Despite largely only recording additions to the monad lists, we noted 117 species during the day. We didn't complete the walk to Fen

Drayton, so the final episode of the Guided Busway exploration will take place next year, starting from Swavesey.

Sunday, September 4, Ickleton area

The drought had continued throughout August, with only one short period of heavy rain. There were signs that some vegetation was beginning to green up, however many plants were clearly experiencing an early autumn. The weather for the day continued fine. We began at Coploe Hill Pit, a fairly small chalk pit, not far from the Essex border, which is largely managed by volunteer effort, with some rabbit grazing.

On the bank of Coploe Hill Pit [Jonathan Shanklin]

Although encroaching scrub and bramble are beginning to obscure some areas of grassland, many relict species remain. *Euphrasia pseudokerneri* (**Chalk Eyebright**) was present in the bowl of the pit, somewhat dwarfed in places, but generally showing its large flowers and aristate bracts. Some *Gentianella amarella* (**Autumn Gentian**) was still in flower near the entrance. On the recently disturbed bank nearest the road was plentiful *Lithospermum officinale* (**Common Gromwell**). A lone plant of *Rhinanthus minor* (**Yellow-rattle**) was an addition to the pit flora, but whether it was a recent addition or had previously been missed was not clear. Another addition spotted by Alan Leslie was the hybrid rose *Rosa x nitidula* which is a cross between *Rosa canina* (**Dog-rose**) and *Rosa rubiginosa* (**Sweet-briar**), both of which were also present. The lip of the pit proved disappointing as bramble had covered most of the grassland, which in any case was largely burnt brown. As we were leaving a spikey green grass caught Oli Glenister's attention, and was later determined by him as *Helictochloa* [*Avenula*] *pratensis* (**Meadow Oat-grass**).

From the pit we descended to Ickleton churchyard and immediately encountered *Plantago media* (**Hoary Plantain**), which was widespread in the mown grassland, along with *Echium vulgare* (**Viper's-bugloss**) around the margin. Whilst the former is a frequenter of churchyards, the latter used to be more associated with light sandy soils. A sedge caused much thought, with both *Carex divulsa* subsp. *leersii* (**Many-leaved Sedge**) and *Carex muricata* subsp. *pairae* (**Prickly Sedge)** having previous records. After much discussion, and the discovery of well grown specimens at the back of the church, we decided that what we saw was the former. One species that had clearly been previously mis-identified by this reporter was a strongly suckering Prunus with green twigs, which had been recorded as *Prunus cerasifera* (**Cherry Plum**). On our visit the identification was made much easier as it had ripe plums and was therefore *Prunus domestica* (**Wild Plum**). Whilst discussing the sedge a churchwarden's husband spotted us and wondered what we were up to. Satisfied that we were harmless he invited us to have a look at the church's wall paintings, which several members of the group duly did after lunch, which was taken in the churchyard.

Chalk Eyebright [Jonathan Shanklin]

Lunch finished, we made a detour to the Ickleton Lion, not for further refreshment, but to see *Sabulina tenuifolia* [*Minuartia hybrida*] (**Fine-leaved Sandwort**), which was still present on its old wall, albeit burnt off by the summer heat. Returning to Mill Lane, where we had parked, we crossed the railway line to the Wetlands Nature Reserve, which was created in 2005 as compensation for the construction of the Wellcome Genome Campus. The Reserve has several small lakes, low lying marshy areas (which were bone dry), with a sandy bank and is bounded by the meandering River Cam (or Granta). The grounds are species rich, though many species were introduced in a wild-flower mix when the Reserve was created and still persist. Others have come in by themselves and we saw several plants of *Cichorium intybus* (**Chicory**) in full flower, which were new to the site. One undesirable plant that came in was *Crassula helmsii* (**New Zealand Pigmyweed**), which now cloaks the lake margins, despite attempts to remove it. One small area which had recently been cleared and was currently dry gave quite a few new species, including *Lipandra polysperma* [*Chenopodium polyspermum*] (**Many-seeded Goosefoot**), *Gnaphalium uliginosum* (**Marsh Cudweed**) and *Plantago major* subsp. *intermedia* (**Greater Plantain** – the subspecies that occurs in seasonally flooded areas).

As it was not yet 4pm, we wandered down the public footpath to the river. This has wide verges and supports a population of **Glow Worms**. At the river we failed to spot the *Oenanthe fluviatilis* (**River Water-dropwort**), which had gone over since Jonathan saw it in June (though he did have the advantage of walking along the river bed in chest waders). From here the majority of the group was persuaded to go and have a look for the *Mentha pulegium* (**Pennyroyal**), which was known from the track along the Essex border. Crossing the border into an abandoned field in Essex, we found a good selection of interesting plants, including the *Mentha*, and *Filago germanica* (**Common Cudweed**) growing nearby. Much more astonishing however was the discovery by Alan of a plant of *Epilobium brachycarpum* (**Panicled Willowherb**), followed by another cluster of three plants. This is a North American species, first found in the UK at Colchester in 2004. It is clearly spreading westward as this was the first sighting at the western end of Essex, though it had made it to Alan's back yard in Cambridge earlier in the year. Having revised the appearance of the *Mentha*, we returned to Cambridgeshire and investigated a section of the M11 sliproad though we only found *Helleborus foetidus* (**Stinking Hellebore**). Walking back along the track however, we found it in small quantity on the Cambridgeshire side of the border.

Saturday, October 1, Reach & Tubney Fen

Our final visit of the year was to part of the National Trust Wicken Fen Vision area, which has been restored from arable to wetland. A small group assembled at Tubney Fen under blue October skies. There was little trace of the heavy rain of the evening before and a strong breeze soon evaporated any remaining dampness. We started with a quick look at the Trust field to the south, which Open Street Maps describes as a "Turf Farm". In practice it is now a silage meadow with little diversity, though in any

case the word “Turf” probably originally referred to peat cutting for “turves”. Entering the Fen proper, which was cattle grazed, we started recording some of the grasses and puzzled over a willow that we decided must be a hybrid between *Salix cinerea* and *S. viminalis*. Our next target was the old reservoir, which has been landscaped to give scrapes, shallows and deeper water. The effects of the summer drought were still evident, exposing sheets of *Crassula helmsii* (**New Zealand Pigmyweed**). We walked all the way round, finding *Rumex palustris* (**Marsh Dock**) in the draw-down zone and several different yellow composites on the banks. These included *Leontodon saxatilis* (**Lesser Hawkbit**), *Scorzoneroides autumnalis* (**Autumn Hawkbit**) and *Crepis capillaris* (**Smooth Hawk's-beard**) and we were able to compare their distinguishing features. The draw-down zone also had plenty of *Plantago major* subsp. *intermedia* (**Greater Plantain**), with three veins on the leaves and hairy leaf surfaces. Finally completing the circumnavigation we headed north and were still within sight of the cars when lunchtime arrived. This was taken by a large Oak log and a rubble pile that added *Papaver somniferum* (**Opium Poppy)** to our list. A species count on the card showed that we had already recorded over 100 species, something of a surprise as expectations had not been high as autumn had come early after the drought.

Smooth Hawk’s-beard [Peter Leonard]

Our progress through the rest of the Fen was a little more rapid, though we had to be careful to distinguish between what was on Trust land and what was on the other side of the ditch boundary. We did make a detour to another scrape, which was completely dry, albeit with signs of former wetness such as a terrestrial **Water Crowfoot** (these are not determinable to species) and a **Sweet-grass**, which seemed a bit intermediate between *Glyceria fluitans* (**Floating Sweet-grass**) and *Glyceria notata* (**Plicate Sweet-grass**). Arriving at Straight Drove, the adjacent field looked rather more interesting, with a long pond, albeit that this was crossed by the monad boundary. There was at least one grazing sheep in the field, though it determinedly stayed hidden in the reeds. The shallow part of the pond was still dry and this had *Gnaphalium uliginosum* (**Marsh Cudweed**), *Juncus compressus* (**Round-fruited Rush**) and one plant of *Rumex maritimus* (**Golden Dock**). Although the vegetative structure of the field was very different to those that were cattle grazed, the species composition was not, with the only significant additions being *Calamagrostis epigejos* (**Wood Small-reed**) and one bush of *Rosa rubiginosa* (**Sweet-briar**), which showed a much more upright habit compared to bushes of *Rosa canina* agg. (**Dog-rose**).

We continued down Straight Drove towards Reach, but were distracted by a reddish leaved Goosefoot. Was this *Chenopodium probstii* (**Probst's Goosefoot**) or the frequent *Chenopodium album* (**Fat-hen**). Samples were taken for examination of the seeds, which is the main way of telling the difference. My examination suggested the

seeds were different, but the one key feature was the wrong way round! Further down, the Drove was joined by a spur of Reach Lode, where on the opposite bank we saw a cage of *Sarracenia* (**Pitcherplant**), with one just outside the cage. Close inspection with binoculars showed that it was in a pot, so we couldn't count it. We did see several aquatic species in the water, so specimens were retrieved with a grapnel, revealing *Ceratophyllum demersum* (**Rigid Hornwort**), *Myriophyllum verticillatum* (**Whorled Water-milfoil**) (with turions), *Stuckenia pectinata* (**Fennel Pondweed**) and *Ranunculus circinatus* (**Fan-leaved Water-crowfoot**), of which only the first had been reported from here previously.

We saw *Linaria vulgaris* (**Common Toadflax**) in flower at Reach [Toby Carter] Newmarket Road

In Reach a long strip of an *Erodium* provoked some debate, until Chris found some cotyledon leaves, which had two teeth, thus proving that it was *Erodium moschatum* (**Musk Stork's-bill**), despite the young leaves being cut nearly to the mid-rib, which is normally the distinguishing feature for *Erodium cicutarium* (**Common Stork's-bill**). We took the footpath towards the former chalk pit, now Reach Wood, but were surprised to end up in a farmyard. A little backtracking showed what initially appeared to be a garden gate in the hedge, but was actually the entry to the footpath. Much of the pit has been planted by the Woodland Trust, but a couple of large open areas remained, where we hoped to find some chalk grassland species. Generally we were disappointed as the summer heat had finished most species, however James did find an extensive area of *Geranium sanguineum* (**Bloody Crane's-bill**), known from the east end of the Devil's Ditch, but not previously seen in this area. In the distance we could now see dark clouds, so decided that we should start our return to the cars.

The shower soon arrived, but a strip of ploughed chalky ground looked as if it might produce some arable species. It did, with plenty of *Chaenorhinum minus* (**Small Toadflax**), on which Chris found the downy mildew *Peronospora linariae*, which has around a dozen Irish & UK records but only one previously on *Chaenorhinum*. Jonathan then spotted slender leaves of a Fumitory, which a little further on was in flower, confirming it as *Fumaria parviflora* (**Fine-leaved Fumitory**). Now a little damp, but with the shower receding, we continued on to find Alan in a stubble field, which had abundant *Fumaria densiflora* (**Dense-flowered Fumitory**), with a little *Euphorbia exigua* (**Dwarf Spurge**) on the field margin. Rejoining the very uneven fen road towards where we were parked, we inspected several farm dumps, finding *Amaranthus bouchonii* (**Indehiscent Amaranth**) and *Echinochloa crus-galli* (**Cockspur**) on one and *Rapistrum rugosum* (**Bastard Cabbage**) and *Linaria purpurea* (**Purple Toadflax**) on another.

It was a surprisingly productive day given the season, producing many new records for the area. In total we made 470 records of 238 species of which 60 were noted as

being in flower. Perhaps the most significant were the *Geranium sanguineum*, which was a new hectad record and the *Ranunculus circinatus*, which had not previously been reported in 2022, with both being listed as county Vulnerable. *Erigeron floribundus* (**Bilbao's Fleabane**), found near Reach Lode was also a hectad record, with the majority of records for it being in Cambridge.

Excursions for 2023

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. Some Coronavirus or Flu guidance may be in force and this must be respected. 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. **Note that some venues are still to be confirmed.** Participants are normally 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. **This means that some meetings are not suitable for all participants.** Please do read the BSBI advice to participants on field meetings and consider whether your attendance will adversely affect how much ground can be covered. Cambridgeshire meetings are usually "green" (ie easy going) or "amber" (some more rapid walking required or over rough ground). Even "green" meetings may include some rough ground, but not all participants will need to cross it. Some meetings have been deliberately arranged to allow wide participation. Meeting places have been chosen as having some parking space, but this cannot 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.

Mepal church [Jonathan Shanklin]

Saturday, March 25, 10:30, Fenland churchyards, Green

Continuing with our early season format of starting with churchyards we will explore some in the far north of the county. We will begin at St Wendreda's, March, TL415952, where we can also admire the angels. Moving north we will stop at St Mary's Westrey TL399983 and aim for lunch at Guyhirn chapel of ease TF403040. After lunch we'll go on to Wisbech St Mary TF419081 and conclude with Wisbech Ss Peter & Paul TF463095. None of these churchyards have any post Atlas records.

Sunday, April 23, 11:00, Kennett area, Amber
Subject to H&S confirmation, we will explore one of the gravel pits east of the A11, with a view to refinding some of their early flowering Breckland species. Species not seen for some time include *Aira caryophyllea* (**Silver Hair-grass**), *Herniaria glabra* (**Smooth Rupturewort**) and *Trifolium striatum* (**Knotted Clover**). Details will be in the email.

Tuesday, May 16, 10:00, Guided busway, Green
We will aim to complete our walk east from Cambridge along the guided busway. We will include the part in v.c.31 and finish in St Ives at the P&R. Meet at the Swavesey stop TL364694. I will be taking the 9:30± bus from New Square. Some of the leg south from Cambridge to Trumpington will be covered during the CNHS visits to Great Kneighton.

Wednesday, June 7, 10:00 Devil's Ditch, Amber
The section of the Ditch between the Burwell Road and the A11 has been relatively neglected in recent years and was becoming scrubbed over in places. It has been grazed over the last few years and should have improved as a consequence. *Himantoglossum hircinum* (**Lizard Orchid**) spread significantly in the county last year, but so far there is only one record from this stretch of the Ditch. It is a known site for *Gymnadenia conopsea* (**Chalk Fragrant-orchid**) and *Astragalus danicus* (**Purple Milk-vetch**). *Hypochaeris maculata* (**Spotted Cat's-ear**) was last reported from here in 2012 and was not seen in 2022 despite Alan Leslie searching for it. There are several other notable species that we should find as well. We may also explore some of the conservation grazing meadows that run along the Ditch. Meet at the car park off Burwell Road TL581649.


The Flora Group at Histon set aside
[Peter Leonard]

Saturday, July 1, 10:00, Hauxton Pits, Green
The group last visited the Pits in 2012, though there was a bryology group visit in March 2022. The flowering species should be near their best and we will aim to add to the known species list. Meet at the entrance TL434521.

Saturday, July 29, 10:00, Ten Wood, Amber
Stetchworth Estates have given permission for us to explore this large wood in the summer. Details of where to meet will be sent in the usual email.

Tuesday, August 15, 10:00, RSPB Hope Farm, Green TBC
The site manager Georgie Bray gave a talk to the Cambridge Natural History Society in 2022. Hope Farm (shown on maps as Grange Farm) is mostly known for its management for farmland birds, but the RSPB have also attempted re-introduction of species such as *Ranunculus arvensis* (**Corn Buttercup**) in collaboration with Plantlife. There are several RPCC species that haven't been recorded since 2011 which we will attempt to refind. Meet at the farm car park TL332625.

Sunday, September 10, 11:00, Wicken Fen, Amber

There are relatively few post Atlas records from Wicken Fen and it is losing ground as one of the more diverse tetrads in the county outside Cambridge. We will aim to find some of the well-known species not reported post Atlas, perhaps add a few casuals and confirm the presence of the sedge hybrid *Carex hostiana* x *viridula*. Meet at the car park TL564706. Charges will apply to those who are not members of the National Trust.

The Flora Group at Balsham Wood [Peter Leonard]

Saturday, September 30, 10:00, Shingay Nature Reserve and Rouses Wood, Green

Our final visit of the year is to the semi-private Shingay Mill River Nature Reserve and we hope to have permission to visit the nearby Rouses Wood CWS as well. If there is time we will explore the green lane that runs towards Bassingbourn Barracks. Meet at the car park (which should be open for us) at TL321474, just west of Wendy. Several RPCC aquatic species haven't been recorded from here since the 1990s and we should refind some of them.

There may be additional meetings organised after publication of this newsletter. 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 Great Kneighton area, covering all of TL4554 and parts of adjacent monads to include sites such as Nine Wells LNR, Hobson's Brook CiWS and Red Cross Drain CiWS and will be visiting monthly from late March. There may also be further "Nature in my neighbourhood" visits to explore Cambridge streets, and visits to Wandlebury Country Park or Magog Down. There is also a BSBI meeting (booking required) at Hobson's Park on May 27, which is specifically targeted at new members and beginners. Dates for all these additional meetings will be included on the county web page.

Euphorbia maculata (**Spotted Spurge**) at Doddington [Chris Preston]

The Flora Group in Abbey Farm meadows at Histon [Jonathan Shanklin]

Viola odorata var. *sulfurea* (**Sweet Violet**) at Milton [Peter Leonard]

Veronica montana (**Wood Speedwell**) in Balsham Wood [Peter Leonard]

Myosotis scorpioides (**Water Forget-me-not**) [Peter Leonard]

Orobanche minor (**Common Broomrape**) at Street Way [Jonathan Shanklin]

Orchis mascula (**Early-purple Orchid**) at Balsham Wood [Jonathan Shanklin]

Lithospermum arvense (**Field Gromwell**) at Magog Down [Claire Beale]

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