

RARE PLANT REGISTER  
for  
Warwickshire  
(Vice County 38)



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BSBI Recorders for Warwickshire

March 2018

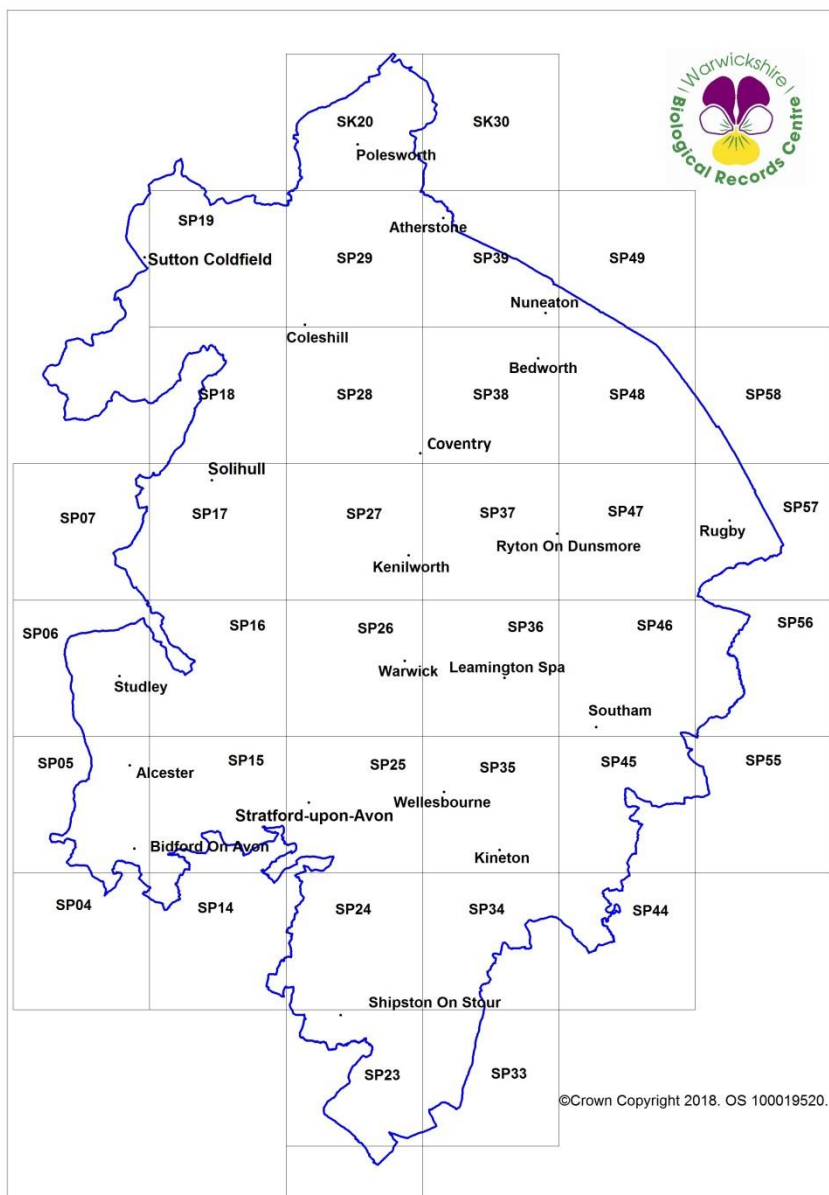


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Front cover: *Orchis anthropophora* (Man Orchid), *Parnassia palustris* (Grass-of-Parnassus) and  
*Botrychium lunaria* (Moonwort)

Map of Vice County 38



## Acknowledgements

We are very grateful to all of the botanists who have contributed to the register through their botanical fieldwork between 1990 and 2017. We would particularly like to thank Steven Falk who encouraged us to take on plant recording in Warwickshire in the first place.

The register would be nowhere near as complete without the valuable help and support from the Habitat Biodiversity Audit (HBA) and the Warwickshire Biological Records Centre (WBRC).

On a more personal note, we are indebted to many people who helped us to improve our botanical skills in the early days: John and Val Roberts, Brian Laney, Maurice Arnold, the late Michael Senior, Professor Ian Trueman, Mike Poulton and Steve Woodward.

This register is available online to download at [www.bsbi.org/warwickshire](http://www.bsbi.org/warwickshire)

Paper copies are available from Warwickshire Biological Records Centre at £8 (including postage), e-mail [wbrc@warwickshire.gov.uk](mailto:wbrc@warwickshire.gov.uk) or telephone 01926 418060 to request a copy.

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## INTRODUCTION

When we took over as BSBI Vice-County Recorders in 2010, Alex Lockton from the BSBI stated, tongue-in-cheek, that Warwickshire was one of the most boring counties in Great Britain! Well in a way he was right. Warwickshire is mainly an agricultural county, with no mountains or coastline. It is a little too far north of the Cotswolds to have any significant calcareous grassland or beech woods, and just a little too far south to have much of the upland flora found in the Peak District.

As in many other counties, most of our arable weeds have been lost to modern farming practises and our previously rich aquatic river and canal flora has deteriorated significantly due to increased boat traffic and nitrogen enrichment. Our rarest plants therefore are often restricted to nature reserves and SSSIs. Warwickshire Wildflowers (Falk, 2009) lists the seventy seven species that have become extinct in the county from *Cladium mariscus* (Great Fen-sedge) in 1670 to *Myriophyllum alternifolium* (Alternate Water-milfoil) in 1970. Although a few have been re-found, we are sure that this worrying rate of extinction is continuing. Forty two (16%) of the two hundred and sixty five taxa reported in our Rare Plant Register have not been seen since the year 2000 and many of them may already be extinct.

On the positive side, we do have a wonderful National Nature Reserve at Sutton Park, near Birmingham, a large and complex area of acid grassland, wet woodland, heathland and mire that is full of sedges and upland rarities. Without this site our Rare Plant Register would be substantially smaller.



*Erica cinerea* (Bell Heather)

## WHAT IS A RARE PLANT REGISTER?

Our Rare Plant Register (RPR) is a list of all of the rare plants seen in VC38 from 1990 to the present day (2017).

Each species has been given a county status:

- **Warwickshire Rare** - The plant has only been recorded three times or less since 1990;
- **Warwickshire Scarce** – The plant has only been recorded ten times or less since 1990.

If the plant also has an English Status in A Vascular Plant Red List for England (Stroh *et al.*, 2014), or a Great Britain Status in A Vascular Plant Red Data List for Great Britain (Cheffings *et al.*, 2005) that is also given. These categories are: **Critically Endangered, Endangered, Vulnerable** and **Near Threatened**.

A few Warwickshire species, like *Euphorbia exigua*, are included in the RPR even though they occur at many more than 10 sites in the county, as their national distribution has declined so much that they have a national status on the Red List(s).

Each species is classed as a native or an archaeophyte (i.e. introduced by man before 1500). We have also included some species that are native in the rest of the British Isles but only rarely found in Warwickshire as casuals. When this occurs the status is given in brackets e.g. (Warwickshire Scarce).

Records include site name, grid reference, the date when the plant was last seen and the initials of the recorder. A short text follows giving more details.

The year 1990 was chosen as a starting date as there was an increased level of recording during the 1990's for the National Atlas 2000 (Preston *et al.*, 2002). This campaign was coordinated by Pam Copson and John Bowra who organized identification workshops and Bioblitzes of some of the less accessible sites in the county. Had we chosen the year 2000 as a starting date, the register would have contained fewer species as there was an understandable slump in recording effort after the publication of Atlas 2000.



*Anacamptis morio* (Green-winged Orchid)



*Cephalanthera longifolia* (Narrow-leaved Helleborine)

## WHY HAVE A RARE PLANT REGISTER?

We hope this register will provide a focus for local botanists to explore some of the lesser known parts of the county and revisit past sites to find out just which rare plants are still thriving here. Knowing about the existence of a rare plant can also help to inform the management and conservation of key sites. Recent intensive surveying of Sutton Park NNR, by the Birmingham and Black Country Recording Group for a forthcoming Flora of Sutton Park, has proved that exciting discoveries can still be made. Several rare species that were previously considered to have been lost from the site have been re-found and new colonies of rare plants have also come to light. A similar countywide approach is certainly needed.



*Euphorbia exigua* (Dwarf Spurge)

## PREVIOUS PUBLICATIONS

Little information has previously been published specifically about Warwickshire's rarest plants. In Steven Falk's book *Warwickshire's Wildflowers* (Falk, 2009), the checklist at the back of the book introduces us to the BSBI criteria of "Warwickshire Rare" and "Warwickshire Scarce". It gives the number of sites for each species but without specific location details. In Appendix 1, following the checklist, he lists details of all of the Warwickshire plants that became extinct before 1970. The Red Data List species (Cheffings *et al.*, 2005) recorded between 1970 and 2009 can be found in Appendix 2.

In 1995 James Partridge, the previous County Recorder, wrote an unpublished paper entitled "Warwickshire's Rarest Wild Flowers". Available free on the Warwickshire page of the BSBI website

([www.bsbi.org.uk/warwickshire](http://www.bsbi.org.uk/warwickshire)), it is primarily concerned with the risks and threats to many of Warwickshire's rarest species, but is not comprehensive.

The earlier Computer-mapped Flora (Cadbury *et al.*, 1971), although a pioneering work in its own right, only shows species distribution to tetrad level without giving any site names. A huge project, organised by the Warwickshire Biological Records Centre, is currently digitising the thousands of paper records from the original Flora survey. These contain more accurate site details, dates and individual recorders names for each tetrad record in the Flora. The aim is to produce a fully interactive database that will be freely available to the public.

## EXCLUSIONS AND INCLUSIONS

There may still be a few places within the county where truly native *Helleborus foetidus*, (Stinking Hellebore), *Hypericum androsaemum* (Tutsan) and *Convallaria majalis* (Lily-of-the Valley) still grow. All three species regularly escape from gardens and can develop into large naturalized colonies, and it makes it very difficult to distinguish the true native sites.

Although there are few small woodlands south of Meriden that are carpeted with native *Narcissus pseudonarcissus* (Wild Daffodil) every March, most of the rest of the records for this species are likely to be of escapes or deliberate introductions. *Fritillaria meleagris* (Fritillary) is often planted to "improve and prettify" new meadow projects, such as the one at Dosthill Park, and it can sometimes turn up in totally inappropriate places, like the bare limestone spoil of Ettington Cutting. None of our current sites is likely to contain native plants, and because of these difficulties we have chosen not to include any of these species in the Rare Plant Register.

In common with many other Rare Plant Registers, we have excluded the complex genera of *Rubus* and *Taraxacum* as very little new data has been collected since 1990. On the other hand, we have included records of *Hieracium* and *Euphrasia*, thanks to the excellent support from referees David McCosh and Chris Metherell with the naming of recent collections. We have also included a few native hybrids. A few doubtful records and misidentifications can be found in the Appendix section at the back of the register.

## WHERE HAVE THE RECORDS COME FROM?

Initially we searched the BSBI Database and the Recorder Database at the WBRC. Ruth Moffatt had already put together a database of Rare Plants from the WBRC, digitised from paper records curated by James Partridge and Jane O'Dell in the Warwickshire Museum herbarium and this was invaluable. EcoRecord sent us up to date information from the part of Vice-county 38 that is now in Birmingham. We then started to dig deeper, and went through all of the records in the Herbarium at Warwick Museum, checking them against the specimens. Recent floras of Birmingham and the Black Country, Worcestershire and Staffordshire were examined and compared with the BSBI database. The Computer Mapped Flora and Warwickshire's Wildflowers were also consulted, and time was spent looking through cupboards full of pre-computer planning files dating from the 1990s at the WBRC. Many new records and even new species for the county were discovered. The huge task of ensuring that all of these new records are sent on to the BSBI and WBRC databases will be done, once this register is published.



## PLANTS AND THE LAW

Many of the sites in the RPR are on private land. Please remember that just because somebody has seen a plant at a particular site in the past, it doesn't give you the right to trespass in order to try and find it again.

It is illegal to collect or uproot any plant protected under Schedule 8 of the Wildlife and Countryside Act, 1981. The only Warwickshire plants on the Schedule 8 list listed in the RPR are *Dianthus armeria* (Deptford Pink), *Gnaphalium luteoalbum* (Jersey Cudweed) and *Salvia pratensis* (Meadow Clary), and all three are considered to be casuals or introductions within the county. Under the Wildlife and Countryside Act, (1981, as amended) it is also illegal to uproot any wild plant without the permission of the owner or occupier of the land.

### WHAT TO DO IF YOU FIND ANYTHING RARE?

Please let John and Monika Walton know.

Send us a grid reference, site name, date found, your name and the name of the plant (if you know it).

You can do this by e mailing [johnwalton46@tiscali.co.uk](mailto:johnwalton46@tiscali.co.uk) or phoning us on 01827 712455.

Please feel free to e-mail us a photo of your findings, but please don't pick any specimens until we have contacted you.

If you haven't already done so, you are welcome to come and join the

### **Warwickshire Flora Group.**

We hold about 20 survey meetings throughout the year, take part in the BSBI New Year Plant Hunt, run identification workshops, publish a newsletter and botanical report and hold a biennial indoor meeting.

There is no subscription, we are run as an e-mail group and anybody interested in wild plants can attend. You don't need to be an expert to join and it is an excellent way to develop your field skills.

Please send your e mail address to [johnwalton46@tiscali.co.uk](mailto:johnwalton46@tiscali.co.uk) if you would like to join and we will contact you with details.

## SPECIES QUALIFYING FOR INCLUSION IN THE WARWICKSHIRE RARE PLANT REGISTER (JANUARY 2018)

Alien or casual species are in brackets and deliberate introductions have been omitted.

### Critically Endangered

*Campanula patula*  
(*Carum carvi*)  
(*Chenopodium urbicum*)

*Galeopsis angustifolia*  
(*Gnaphalium luteoalbum*)  
(*Mentha pulegium*)

*Papaver argemone*  
*Ranunculus arvensis*  
*Scandix pecten-veneris*

### Endangered

*Anthemis arvensis*  
*Cephalanthera longifolia*  
(*Dianthus armeria*)  
*Euphrasia micrantha*  
*Gnaphalium sylvaticum*

*Hypopitys monotropa*  
*Lithospermum arvense*  
*Minuartia hybrida*  
*Orchis anthropophora*  
*Platanthera bifolia*

*Scleranthus annuus*  
*Torilis arvensis*  
*Valerianella dentata*

### Vulnerable

*Allium oleraceum*  
*Anacamptis morio*  
*Anthemis cotula*  
*Blysmus compressus*  
*Botrychium lunaria*  
*Bromus secalinus*  
*Carex diandra*  
*Carex vesicaria*  
*Catabrosa aquatica*  
*Chenopodium bonus-henricus*  
*Clinopodium acinos*  
*Eriophorum angustifolium*  
*Euphorbia exigua*  
*Euphrasia confusa*

*Galeopsis speciosa*  
*Galium parisiense*  
*Genista anglica*  
*Glebionis segetum*  
*Groenlandia densa*  
(*Hieracium prominentidens*)  
*Hyoscyamus niger*  
*Hypochaeris glabra*  
*Juncus compressus*  
*Misopates orontium*  
*Myosurus minimus*  
*Neottia nidus-avis*  
*Nepeta cataria*  
*Oenanthe fistulosa*

*Parnassia palustris*  
*Pedicularis palustris*  
*Pedicularis sylvatica*  
*Persicaria minor*  
*Pinguicula vulgaris*  
*Potamogeton friesii*  
*Sagina nodosa*  
*Silene noctiflora*  
*Spergula arvensis*  
*Stellaria palustris*  
*Trifolium fragiferum*  
*Vicia lutea*  
*Vicia parviflora*

### Near-threatened

(*Apera spica-venti*)  
*Carex echinata*  
*Carex elongata*  
*Carex pulicaris*  
*Colchicum autumnale*  
*Comarum palustre*  
*Cynoglossum officinale*  
*Drosera rotundifolia*  
*Eleocharis acicularis*  
*Epipactis palustris*  
*Erica cinerea*  
*Erica tetralix*  
*Erysimum cheiranthoides*

*Euphrasia nemorosa*  
*Filago vulgaris*  
(*Frankenia laevis*)  
*Genista tinctoria*  
*Gentianella amarella*  
*Helianthemum nummularium*  
*Hypericum elodes*  
*Jasione montana*  
*Melampyrum pratense*  
*Oenanthe silaifolia*  
*Platanthera chlorantha*  
*Polygala serpyllifolia*  
*Potentilla argentea*

(*Primula elatior*)  
*Prunus cerasus*  
*Salix repens*  
(*Salvia pratensis*)  
*Salvia verbenaca*  
*Solidago virgaurea*  
*Stachys arvensis*  
(*Stratiotes aloides*)  
*Triglochin palustris*  
*Valeriana dioica*  
*Veronica scutellata*  
*Viola canina*  
*Viola tricolor* subsp. *tricolor*

### Warwickshire Rare

*Aconitum napellus* subsp. *napellus*  
(*Adiantum capillus-veneris*)  
*Aethusa cynapium* subsp. *agrestis*  
*Anagallis tenella*  
(*Anthriscus caucalis*)  
*Apium graveolens*

*Epipactis palustris*  
*Epipactis phyllanthes*  
*Epipactis purpurata*  
*Eriophorum vaginatum*  
*Erophila majuscula*  
*Festuca altissima*

*Potamogeton obtusifolius*  
*Potamogeton trichoides*  
*Ranunculus sardous*  
*Rhinanthus minor* subsp. *stenophyllus*  
(*Ribes alpinum*)  
*Rorippa islandica*

*Asperula cynanchica*  
*Atriplex littoralis*  
*Baldellia ranunculoides*  
*Bolboschoenus maritimus*  
*Calamagrostis canescens*  
*Callitriche hermaphroditica*  
*Carex canescens*  
*Carex dioica*  
*Carex divulsa* subsp. *leersii*  
*Carex hostiana*  
*Carex laevigata*  
*Carex strigosa*  
*Dactylorhiza incarnata*  
*Deschampsia cespitosa* subsp.  
*parviflora*  
*Diplotaxis tenuifolia*  
*Elatine hexandra*  
*Eleocharis palustris* subsp. *palustris*  
*Eleocharis quinqueflora*  
*Eleogiton fluitans*  
*Empetrum nigrum* subsp. *nigrum*  
*Epilobium lanceolatum*

*Festuca filiformis*  
*Festuca ovina* subsp. *ophiolicola*  
*Festuca rubra* subsp. *commutata*  
*Fumaria capreolata*  
*Fumaria officinalis* subsp. *wirtgenii*  
*Galium palustre* subsp. *elongatum*  
*Gastroidium ventricosum*  
*Helleborus viridis*  
*Hippocrepis comosa*  
*Legousia hybrida*  
*Littorella uniflora*  
*Myosotis secunda*  
*Oenanthe aquatica*

*Oenanthe fluviatilis*  
*Oreopteris limbosperma*  
*(Orobanche hederæ)*  
*Osmunda regalis*  
*Papaver hybridum*  
*Pinguicula vulgaris*  
*Platanthera bifolia*  
*(Poa infirma)*

*Rosa micrantha*  
*Rosa stylosa*  
*Rumex acetosella* subsp. *pyrenaicus*  
*Rumex acetosella* subsp. *tenuifolius*  
*Rumex palustris*  
*Sambucus ebulus*  
*Samolus valerandi*  
*Scrophularia umbrosa*  
*Scutellaria minor*  
*(Silene uniflora)*  
*Stellaria palustris*  
*Suaeda vera*  
*Trichophorum germanicum*

*Trifolium scabrum*  
*Trifolium subterraneum*  
*Umbilicus rupestris*  
*Utricularia australis*  
*Vaccinium oxycoccos*  
*Vaccinium vitis-idaea*  
*Vicia lathyroides*

## Warwickshire Scarce

*Agrostis vinealis*  
*Alisma lanceolatum*  
*Alopecurus aequalis*  
*Anagallis arvensis* subsp. *foemina*  
*Astragalus glycyphyllos*  
*Atropa belladonna*  
*Avenula pratensis*  
*Callitriche brutia* subsp. *hamulata*  
*Callitriche obtusangula*  
*Callitriche platycarpa*  
*Carex binervis*  
*Centaureum pulchellum*  
*Cerastium diffusum*  
*Cerastium semidecandrum*  
*Ceratocarpus claviculata*  
*Ceratophyllum submersum*  
*Chrysosplenium alternifolium*  
*Cirsium dissectum*  
*Crepis biennis*  
*Cystopteris fragilis*  
*(Descurainia sophia)*  
*Eleocharis uniglumis*  
*Equisetum sylvaticum*

*Equisetum x litorale*  
*Erodium moschatum*  
*Erophila glabrescens*  
*Fumaria muralis* subsp. *boraei*  
*Geum rivale*  
*Juncus squarrosus*  
*Juncus subnodulosus*  
*Koeleria macrantha*  
*Lathraea squamaria*  
*Lepidium heterophyllum*  
*Lepidium latifolium*  
*Limosella aquatica*  
*Luzula multiflora* subsp. *congesta*  
*Lythrum portula*  
*Parentucellia viscosa*  
*Paris quadrifolia*  
*Plantago major* subsp. *intermedia*  
*Polygonum rurivagum*  
*(Polypogon monspeliensis)*  
*Potamogeton berchtoldii*  
*Potamogeton lucens*  
*Potamogeton polygonifolius*  
*Potamogeton pusillus*

*Ranunculus circinatus*  
*Ranunculus hederaceus*  
*Ranunculus omiophyllus*  
*Ranunculus parviflorus*  
*Ranunculus peltatus*  
*R. penicillatus* subsp. *pseudofluitans*  
*Rosa caesia* subsp. *vosagiaca*  
*Rosa sherardii*  
*(Rosa spinosissima)*  
*Rosa tomentosa*  
*Rumex pulcher*  
*Salix cinerea* subsp. *cinerea*  
*Salix triandra*  
*Scabiosa columbaria*  
*Schoenoplectus tabernaemontani*  
*Sinapis alba*  
*Spirodela polyrhiza*  
*Stellaria pallida*  
*Thymus pulegioides*  
*Trifolium striatum*  
*Ulmus minor*  
*Verbena officinalis*  
*Viola palustris* subsp. *palustris*

**PLANTS LISTED AS “NEAR-THREATENED”  
IN A VASCULAR PLANT RED LIST FOR ENGLAND (Stroh *et al.*, 2014)**

When *A Vascular Plant Red List for England* (Stroh *et al.*, 2014) was published, many widespread Warwickshire plants found themselves in the “Near-threatened” category because of the rate of decline in their English distribution. Although many of these species have become much rarer since 1990, they have too many Warwickshire records to be included in the Rare Plant Register on scarcity alone.

They are listed below, together with the number of sites from which they have been reported since 1990.

|   |  |
|---|--|
| <i>Briza media</i> (Quaking-grass)              | 62 sites   |
| <i>Calluna vulgaris</i> (Heather)               | 32 sites   |
| <i>Campanula rotundifolia</i> (Harebell)        | 38 sites, declining                                  |
| <i>Carlina vulgaris</i> (Carlina Thistle)       | 13 sites, limited to short limestone grassland       |
| <i>Cruciata laevipes</i> (Crosswort)            | 19 sites, declining on verges                        |
| <i>Filago minima</i> (Small Cudweed)            | 16 sites, populations vary annually                  |
| <i>Fragaria vesca</i> (Wild Strawberry)         | 106 sites, still quite common                        |
| <i>Hydrocotyle vulgaris</i> (Marsh Pennywort)   | 12 sites   |
| <i>Knautia arvensis</i> (Field Scabious)        | 74 sites, throughout county                          |
| <i>Lepidium campestre</i> (Field Pepperwort)    | 37 sites, declining recently                         |
| <i>Mentha arvensis</i> (Corn Mint)              | 32 sites   |
| <i>Nardus stricta</i> (Mat-grass)               | 12 sites, common in Sutton Park                      |
| <i>Ononis spinosa</i> (Spiny Restharrow)        | 20 sites   |
| <i>Oxalis acetosella</i> (Wood-sorrel)          | 70 sites   |
| <i>Plantago media</i> (Hoary Plantain)          | 59 sites   |
| <i>Potentilla erecta</i> (Tormentil)            | 82 sites, declining                                  |
| <i>Ranunculus flammula</i> (Lesser Spearwort)   | 44 sites   |
| <i>Sanicula europaea</i> (Sanicle)              | 30 sites   |
| <i>Senecio aquaticus</i> (Marsh Ragwort)        | 30 sites   |
| <i>Silene flos-cuculi</i> (Ragged-robin)        | 75 sites, distribution confused by use of seed mixes |
| <i>Succisa pratensis</i> (Devil’s-bit Scabious) | 59 sites   |
| <i>Valeriana officinalis</i> (Common Valerian)  | 53 sites   |
| <i>Veronica officinalis</i> (Heath Speedwell)   | 62 sites   |

The status of another species *Cyperus longus* (Galingale) which has been reported from 14 sites since 1990 is a bit more complicated as all of the Warwickshire records are either garden escapes or deliberate plantings that have become naturalized. The alien *C. eragrostis* (American Galingale) is appearing more frequently within the county and some of the 14 records may be misidentifications. It can be found in similar habitats to *C. longus* but has also been recorded as an urban weed growing in pavement cracks.

A table of the status of all Warwickshire Rare, Scarce and England and Nationally listed species can be found in Appendix 5.

## WARWICKSHIRE NOTABLES

Steven Falk’s book *Warwickshire Wildflowers* introduced us to the category of “Warwickshire Notable”. The plants on this list were species that had no National Status and were seen at more than ten sites. They are effectively the next layer down in rarity value from the Rare Plant Register and include Ancient Woodland Indicators and other species described as being “indicative of particularly fine habitat”. With the changes in status caused by the publication of *A Vascular Plant Red List for England* (Stroh *et al.*, 2014), and the recent increased level of recording leading to *Atlas 2020*, Steven Falk’s list is now out of date. We have therefore included a new list of Warwickshire Notables in Appendix 4 so that every category will be available in just one publication.

## LIST OF RECORDERS AND CONTRIBUTORS

|       |   |      |                            |       |                               |
|-------|---|------|----------------------------|-------|-------------------------------|
| AB    | Adam Bates                                    | EH   | Edwin Hopkins              | JWAR  | Jack Ward                     |
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| ADU   | Jo Dunn                                       | EP   | Ellen M. Pisolkar          | KC    | Kelly Clark                   |
| AE    | A. English                                    | FH   | F. Hull                    | KDS   | Katherina Dehnen-Schmutz      |
| AF    | Anita Ferguson                                | GAA  | George Arnold              | KF    | Karen Fry                     |
| AG    | Ali Glaisher                                  | GAF  | Gary Farmer                | KH    | K. Henegan                    |
| AI    | Anton Irving                                  | GC   | Glyn Clarke                | KK    | Katie Kibble                  |
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| AT    | Andrew Thompson                               | GS   | Sue Scott (G. E. Scott)    | LD    | Liz Dinsdale                  |
| AU    | Alison Unwick                                 | GT   | Graham Thompson            | LG    | Lucy Gardiner                 |
| AWR   | Bert Reid                                     | GTO  | G. Townsend                | LGT   | Les Tooby                     |
| BBCRG | Birmingham & Black<br>Country Recording Group | GW   | Geraint West               | LS    | Louise Sherwell               |
| BD    | Barbara Davies                                | HAR  | Harold Roberts             | LSC   | Landscape Science Consultancy |
| BL    | Brian Laney                                   | HBA  | Habitat Biodiversity Audit | LSH   | Liz Shearsby                  |
| BM    | Brian Mitchell                                | HD   | Dr. Hilary Dow             | LSL   | Louise Slack                  |
| BP    | Bill Proctor                                  | HHF  | Harold Fowkes              | MA    | Martin Adkins                 |
| BPE   | Brian Perry                                   | HL   | Hannah Lewis               | MAA   | Maurice Arnold                |
| BR    | B. Rowe                                       | HW   | Hannah Williams            | MARK  | Mark Kitchen                  |
| BSBI  | BSBI Meeting                                  | IT   | Ian Tanner                 | MB    | Mary Burgoine                 |
| CB    | C. Bailey                                     | ITR  | Prof. Ian Trueman          | MCB   | Martin Bennett                |
| CC    | Cyril Cleaver                                 | JA   | Jan Andrews                | MCC   | Malcolm Clark                 |
| CDP   | Dr. Chris Preston                             | JAH  | Joe Hardman                | MD    | M. Doughty                    |
| CH    | Cyril Higginbottom                            | JAN  | Janet Antrobus             | MF    | Mick Finnemore                |
| CI    | Chris Ivin                                    | JB   | Juliet Bailey              | MGW   | M. G. Woodhouse               |
| CL    | C. Lea  | JBA  | John Bates                 | MJH   | M. J. Hill                    |
| CN    | Camille Newton                                | JC   | John Clark                 | MJL   | Jo Lewis                      |
| CNHS  | Coventry Natural History<br>Society           | JCB  | John Bowra                 | MJS   | Michael Senior                |
| CNS   | Clare Smith                                   | JD   | John Day                   | MM    | Mitch Moore                   |
| CP    | Chris Parry                                   | JH   | John Harris                | MP    | Mike Poulton                  |
| CS    | Claire Siddaway                               | JHA  | Jane Hardwick              | MR    | Martin Rand                   |
| CW    | Christopher Westall                           | JHAR | Jacky Hardy                | MrsSW | Mrs. Somerset-Ward            |
| CWS   | Cotswold Wildlife Surveys                     | JHAW | John Hawksford             | MS    | Mike Smith                    |
| DA    | David Antrobus                                | JJB  | Jonathan J Bowley          | MSC   | M. Scholten                   |
| DAB   | David Broughton                               | JL   | J. Lansley                 | MVW   | Monika Walton                 |
| DB    | David Boyce                                   | JM   | John Mason                 | NA    | Nik Aspey                     |
| DC    | David Coles                                   | JMA  | John Martin                | NMW   | Neil Wyatt                    |
| DE    | Dorothy Evans                                 | JMC  | Jane Croft                 | NNB   | Nicky Bowen                   |
| DEC   | Darwin Ecology                                | JMP  | John Price                 | NRRR  | Northern Relief Road Report   |
| DH    | Don Hildred                                   | JOB  | John Bailey                | NW    | Natalie Walker                |
| DL    | David Long                                    | JR   | John Robbins               | OP    | Owen Powell                   |
| DLW   | David Lowe                                    | JRI  | Jane Ricketts              | PB    | P. Brierly                    |
| DN    | Di Napier                                     | JRR  | John Roberts               | PBA   | Peter Barton                  |
| DO    | D. Oakey                                      | JRU  | Jim Rushforth              | PC    | Phill Clayton                 |
| DOT   | Dept. Of Transport, Midlands                  | JS   | Jane Sells                 | PCO   | Peter Coxhead                 |
| DP    | David Porter                                  | JSL  | J. S. Lee                  | PFAG  | Paradise Farm Action Group    |
| DT    | Derek Thomas                                  | JST  | John Stephens              | PH    | Paul Hodges                   |
| DW    | Daniel Wrench                                 | JSW  | John Walton                | PJC   | Pam Copson                    |
| DWA   | David Wall                                    | JT   | Mrs. Jenny Turner          | PJM   | Paul Marriott                 |
| EC    | Eleanor Cohn                                  | JTE  | Jenny Teall                | PJOT  | Mr. P. J. O. (John) Trist     |
| EF    | E. Flower                                     | JTO  | Jan Tomlinson              | PML   | P. (Malcolm) Lockett          |
|       |   | JW   | Jeff Waddell               | PN    | Phyllis Noakes                |
|       |   | JWA  | John Wagstaffe             | PP    | Phil J. Parr                  |

|        |                               |       |   |
|--------|-------------------------------|-------|---|
| PR     | Paul Reade                    | SG    | Steve Garnett                               |
| PRE    | Pam Reason                    | SJ    | Sue Jones                                   |
| PS     | Pete Selby                    | SJF   | Steven Falk                                 |
| PST    | Paul Stevenson                | SJW   | Sarah Whild                                 |
| PSTR   | Peter Stroh                   | SM    | Sophie Milburn                              |
| RA     | Mr. R. J. Allen               | SMP   | Simon Phipps                                |
| RCK    | Roger Kendrick                | SP    | Sarah Pullar                                |
| RCP    | Richard Palmer                | SPC   | S. P. Chambers                              |
| RDM    | Roger Martin                  | SPG   | Sutton Park Group                           |
| REE    | Reg Elliott                   | SS    | Sarah Shuttleworth                          |
| RevALP | Rev. A. L. Primavesi          | SSC   | Sue Scott                                   |
| RG     | Robin Gibbs                   | ST    | Shelia Tame                                 |
| RH     | Ron Hill                      | SW    | Simon Walden                                |
| RHA    | Rebecca Harvey                | SWH   | Sarah Whild                                 |
| RHO    | Rob Holloway                  | SWO   | Steve Woodward                              |
| RJ     | Roger Jukes                   | SWR   | Steve Wright                                |
| RK     | Richard King                  | TH    | Tim Holland                                 |
| RL     | Ray Langdon                   | TM    | T. Manning                                  |
| RMR    | Richard Marsh                 | TMO   | Tim Moughtin                                |
| RMS    | Roger Maskew                  | VC    | Vicky Cooke                                 |
| RNHS   | Rugby Natural History Society | VCC   | Val Cooper                                  |
| RSKCE  | RSK Carter Ecological         | VN    | Vanessa Nixon                               |
| RT     | Robert (Bob) Thurston         | VR    | Val Roberts                                 |
| RTO    | Russell Tonks                 | WAT   | Bill Thompson                               |
| RW     | Richard Wright                | WB    | Bill Bond                                   |
| RWD    | Richard (Dick) David          | WBC   | Warwickshire Butterfly Conservation         |
| SA     | Sheila Apted                  | WCC   | Warwickshire County Council                 |
| SAB    | Simon Bacon                   | WFG   | Warwickshire Flora Group                    |
| SAT    | Simon Atkinson                | WH    | W Hayston                                   |
| SB     | Steven Bell                   | WIE   | Waterman Infrastructure & Environment Ltd.  |
| SBO    | Stefan Bodnar                 | WNHS  | Warwick Natural History Society             |
| SC     | Stephen Carter                | WW    | Will Watson                                 |
| SCA    | Sara Carvalho                 | WWTMS | Worcestershire Wildlife Trust Meadow Survey |
| SCO    | Sue Collingswood              | WYG   | WYG Environmental Planning Transport Ltd.   |
| SCR    | Sue Croxford                  |       |   |

## ABBREVIATIONS

|                         |   |
|-------------------------|---|
| <b>agg.</b>             | aggregate   |
| <b>BSBI</b>             | Botanical Society of Britain and Ireland  |
| <b>DM Kineton</b>       | Defence Munitions Kineton (previously CAD Kineton, (Central Ammunition Depot, Kineton)) |
| <b>ES</b>               | Status in England   |
| <b>GB</b>               | Great Britain   |
| <b>GBS</b>              | Status in Great Britain   |
| <b>GC</b>               | Garden Centre   |
| <b>HBA</b>              | Habitat Biodiversity Audit  |
| <b>L. Spa</b>           | Leamington Spa  |
| <b>pLWS</b>             | potential Local Wildlife Site   |
| <b>NR</b>               | Nature Reserve  |
| <b>sp.</b>              | species   |
| <b>SSSI</b>             | Site of Special Scientific Interest   |
| <b>subsp.</b>           | subspecies  |
| <b>WBRC</b>             | Warwickshire Biological Records Centre  |
| <b>Wellesbourne HRI</b> | Wellesbourne Horticultural Research International (now Warwick HRI)                     |
| <b>var.</b>             | variety   |
| <b>VC</b>               | Vice-county   |
| <b>WFG</b>              | Warwickshire Flora Group  |

## SPECIES ACCOUNTS

### ***Aconitum napellus***

Warwickshire Rare

**Monk's-hood**

Native

Mere Furlong Coppice                      SP2810336926    2012    JSW, MVW, JRR, VR    200 spikes, west end of wood

The Warwick Herbarium houses a specimen collected from Mere Furlong Coppice in 1835. Revisiting the site in 2012 (177 years later) it was amazing to see about 200 plants still flourishing there. The site is a small, isolated woodland by a stream, well away from gardens or human interference, possibly indicating a genuine native colony of subsp. *napellus*. There is a 1992 record of an obvious garden escape from Bermuda, near Nuneaton (SP354897), and another in the same year from Weston Park (SP276368) with no status details.

This plant is on the "Waiting List" in Stroh *et al.* (2014), as there is still some doubt as to whether any of the English population is truly native. In Cadbury *et al.* (1971) as *A. anglicum*.

### ***Adiantum capillus-veneris***

(Warwickshire Rare)

**Maidenhair Fern**

Native in GB, casual in Warwickshire

George Street, Leamington Spa    SP32136539    2014    JSW, MVW, JRR, VR  
 Railway Bridge, Foundry Wood    SP30996530    2014    JSW, MVW

This fern is only found as a casual in Warwickshire. A letter from Fred Rumsey, the BSBI fern referee, was discovered in the old herbarium at The Butts in 2013, confirming that the plants previously recorded as *A. capillus-veneris* from Portland Street, Leamington Spa (SP315657) in 1991 were in fact *A. raddianum*, a commonly grown houseplant.

### ***Aethusa cynapium* subsp. *agrestis***

Warwickshire Rare

**Fool's Parsley**

Archaeophyte

Beaudesert Church                      SP153661    1996    JMP  
 Compton Verney                      SP318637    1996    DN

This smaller subspecies of the common and widespread Fool's Parsley (*A. cynapium* subsp. *cynapium*) is limited to arable field margins and can be distinguished by its size, which is under 20 cms, and its comparatively shorter bracteoles. It was not recorded as a separate subspecies in Cadbury *et al.* (1971) and continues to be under-recorded. Stroh *et al.* (2014) has this plant on the "Waiting List" as there are doubts about its status.

### ***Agrostemma githago***

**Corncockle**  
 Probably extinct in GB as an archaeophyte, casual in Warwickshire

Sherbourne                      SP260622    2012    JRR, VR

Warwickshire has seventeen records of *A. githago*. Nearly all of these are either casuals of garden origin or are from intentionally planted seed mixes. The only possible exception is the Sherbourne site on the North side of the A46 where the disturbance caused by the new road construction may have turned old seed up to germinate (JRR). The plant was also seen growing on two seeded "brown roofs" in Birmingham by AB in 2007. Corncockle is reported as probably extinct as an archaeophyte in Stroh *et al.* (2014).

### ***Agrostis vinealis***

Warwickshire Scarce

**Brown Bent**

Native

|                            |            |      |          |                |
|----------------------------|------------|------|----------|----------------|
| Sutton Park                | SP08739723 | 2005 | MP       | Bog, heathland |
| Sutton Park                | SP092987   | 2005 | MP       | Damp heathland |
| Sutton Park                | SP10209774 | 2009 | MP       | Boggy margins  |
| Shelley Green              | SP146764   | 1997 | BD       |                |
| Little Packington          | SP203944   | 1998 | DP       |                |
| Bannerley Pool             | SP208861   | 1997 | DP       |                |
| Packington Park            | SP22528450 | 2014 | JSW, MVW |                |
| Cornets End                | SP226804   | 1998 | DP       |                |
| Aldermoor Fields, Coventry | SP363774   | 1993 | MJS      |                |
| Herald Way, Binley         | SP382771   | 1997 | PJC      |                |
| Brandon Wood               | SP395765   | 1997 | Anon.    |                |



A species of acid heathland with a northern and western distribution in the British Isles, *Agrostis vinealis* is limited in Warwickshire to the sandy soils that cross the county between Coventry and Birmingham. It can be overlooked or confused with Velvet Bent (*Agrostis canina*) which is very similar. Previously known as *A. canina* subsp. *montana* in Cadbury *et al.* (1971).

***Alisma lanceolatum***

Warwickshire Scarce

**Narrow-leaved Water-plantain**

Native

|                          |            |      |          |                                      |
|--------------------------|------------|------|----------|--------------------------------------|
| Alvecote Wood            | SK250036   | 2015 | JSW, MVW | One large plant in pond              |
| Birmingham/Fazeley Canal | SP19869630 | 2015 | JSW      | Two plants near Kingsbury Water Park |
| Fishers Mill Meadow      | SP202985   | 2009 | JJB      |                                      |
| Prologis Country Park    | SP330845   | 2016 | JJB      |                                      |
| Coventry Canal, Coventry | SP335802   | 1998 | JS       |                                      |
| Court Farm, Nuneaton     | SP357885   | 2013 | JJB      |                                      |
| Frankton Meadows         | SP421693   | 2009 | HBA      |                                      |
| Napton Junction          | SP46826248 | 1996 | MCB      | Several clumps                       |
| Newbold Quarry NR        | SP495770   | 2007 | JJB      |                                      |

Narrow-leaved Water-plantain is fairly common along the canal network to the west of Birmingham, but is less frequent in Warwickshire, where it may have been overlooked. It can resemble narrow-leaved versions of *Alisma plantago-aquatica* (Common Water Plantain) and although leaf shape is a guide, flowers and fruit are necessary for accurate identification.

***Allium ampeloprasum***

(Warwickshire Rare)

**Wild Leek**

Archaeophyte in GB, casual in Warwickshire

|                                |        |      |         |  |
|--------------------------------|--------|------|---------|--|
| Winterbourne Botanical Gardens | SP0583 | 2007 | JWP, MP |  |
|--------------------------------|--------|------|---------|--|

This record is of a seedling from a deliberately planted introduction.

***Allium oleraceum***

GBS: Vulnerable

Warwickshire Scarce

**Field Garlic**

Native

|                             |              |      |         |                |
|-----------------------------|--------------|------|---------|----------------|
| A3400 verge, Bearley        | SP1765559828 | 2010 | JRR, VR |                |
| Goldicote Cutting NR        | SP2411450836 | 2014 | PC      |                |
| Tredington Verge            | SP2539844133 | 2012 | PC      | 200-300 plants |
| Elder Tree Copse, Ettington | SP287493     | 1996 | HAR     |                |

This bulbous perennial is a specialist of limestone road verges and hedge-banks. The management of the large colony on the road verge at Tredington undertaken by Brian Laney, Phill Clayton and the Stour Valley Wildlife Group, includes the translocation of bulbils to help spread the plant. The plants at Goldicote were found growing on the edge of an arable field to the south of the nature reserve. More immature plants were seen nearby at SP2420350805.

***Alopecurus aequalis***

Warwickshire Scarce

**Orange Foxtail**

Native

|                                |          |      |          |                                       |
|--------------------------------|----------|------|----------|---------------------------------------|
| Earlswood                      | SP111741 | 1996 | DT       |                                       |
| Haselor                        | SP126576 | 1992 | JCB      |                                       |
| Ox Leys Pools                  | SP160951 | 1990 | JJB      |                                       |
| Molands Farm, Hampton-in-Arden | SP216818 | 2004 | JWP      | Pond margin, very local               |
| Haseley Gathering Grounds      | SP235684 | 2008 | JJB      |                                       |
| Allesley                       | SP275834 | 1996 | DP       |                                       |
| Hill Wootton                   | SP310690 | 1995 | JM       |                                       |
| Astley Castle moat             | SP312895 | 1996 | JS       | Damp earth, compact colony            |
| Burnthurst Wood                | SP378716 | 1992 | MJS      | Damp grassland near ride, very scarce |
| Wormleighton Reservoir         | SP458516 | 2000 | SJW, AJL |                                       |

Orange Foxtail is mostly found in the north and west of the county on muddy pond margins and the drawdown zones of reservoirs. Such a distinctive plant is unlikely to have been overlooked, so with few modern records it may be in decline. It was not seen at Wormleighton Reservoir or Astley Castle in 2014.

**Anacamptis morio**

GBS: Near Threatened

ES: Vulnerable

**Green-winged Orchid**

Native

|                             |              |      |            |                    |
|-----------------------------|--------------|------|------------|--------------------|
| Wootton Wawen railway line  | SP147646     | 1996 | JL, MrsSW  |                    |
| Ashleigh House tennis court | SP165653     | 2010 | SS         |                    |
| Preston Bagot               | SP167653     | 2012 | BL, LS, CN |                    |
| Yarningale Common           | SP190656     | 1996 | JH         |                    |
| Henley Meadows              | SP217653     | 2013 | JJB        |                    |
| A452, Balsall Common        | SP2219181680 | 2011 | BL         |                    |
| Midsummer Meadow            | SP2390241087 | 2014 | PC         | 100's of spikes    |
| Sherbourne                  | SP2461       | 1994 | VCC        |                    |
| Burmington                  | SP2837       | 1998 | AN         |                    |
| Ashorne House Grounds       | SP304577     | 2003 | BL         |                    |
| Loddington Hall Farm        | SP308503     | 2012 | AI         | 51 spikes          |
| Bishops Gorse               | SP3454       | 1997 | HAR        |                    |
| Bishops Bowl Lakes          | SP3797659055 | 2013 | OP         | One plant          |
| Offchurch, old railway      | SP380664     | 1996 | MJS        |                    |
| Fenny Compton               | SP423532     | 1997 | JJB        |                    |
| Tasker's Meadow, Stockton   | SP4390265075 | 2013 | JRR, VR    | One plant          |
| A4071/B4522 near Blooms GC  | SP4489871970 | 2004 | PH, BL     |                    |
| Draycote Meadows NR         | SP450707     | 2013 | WFG        | 25 – 30,000 spikes |
| Napton                      | SP4776159598 | 2012 | BL         |                    |
| Ashlawn Railway Cutting NR  | SP516739     | 1991 | DL         |                    |

*Anacamptis morio* was one of the BSBI's 2012 Threatened Plant Project species and some effort was put into re-finding the plant at its previously known sites. The sizeable colony at Draycote Meadows NR was counted by the WFG in 2012. Numbers are continuing to rise due to positive changes in management. This species can also be ephemeral. The plant seen at Ashlawn in 1991 has been searched for every year since, but without success.

**Anagallis arvensis subsp. foemina**

Warwickshire Scarce

**Blue Pimpernel**

Archaeophyte

|                                   |          |      |                   |                                |
|-----------------------------------|----------|------|-------------------|--------------------------------|
| Binton                            | SP143557 | 1992 | JJB               |                                |
| Wilmcote                          | SP153577 | 1993 | JCB               | Side of cornfield, occassional |
| Atherstone-on-Stour               | SP2050   | 2003 | JWP               |                                |
| Newbold-on-Stour                  | SP241459 | 2006 | WNHS              |                                |
| Goldicote, arable next to cutting | SP247505 | 2013 | JSW, MVW, JRR, VR | about 10 plants                |
| Walton                            | SP2853   | 2007 | JWP               |                                |
| Fossedene Manor, Combrook         | SP292508 | 1991 | JJB               | Pond spoilbank, one plant      |
| Combrook                          | SP304509 | 2012 | JRR, VR           |                                |
| Combrook                          | SP309521 | 1996 | HAR               | Woodland edge                  |
| Combrook                          | SP312515 | 2013 | WFG               | Six plants                     |

This subspecies of Scarlet Pimpernel is encountered only on the limestone of the northern end of the Cotswold Scarp, south of Alcester and west of Shipston-on-Stour. Like the more common orange-pink subsp. *arvensis*, it is a weed of cultivation and disturbed ground. It can be separated from the rare blue form of subsp. *arvensis* by the structure of the hairs on the end of the petals. For details see Stace (2010).

**Anagallis tenella**

Warwickshire Rare

**Bog Pimpernel**

Native

|             |            |      |       |                         |
|-------------|------------|------|-------|-------------------------|
| Sutton Park | SP09469827 | 2015 | BBCRG | Little Bracebridge Pool |
| Sutton Park | SP108967   | 1991 | JS    |                         |

More often found in western bogs and wetlands, this plant is rare in Warwickshire. It has been recorded from suitable habitats at both Longmoor and Little Bracebridge Pool in Sutton Park where wild ponies have been used to keep the sward open to encourage it to spread.

***Anthemis arvensis***

GBS: Endangered ES: Endangered Warwickshire Rare

**Corn Chamomile**

Archaeophyte in GB, casual in Warwickshire

|                              |            |      |          |               |
|------------------------------|------------|------|----------|---------------|
| Penmire Brook, Birch Coppice | SP26039959 | 2014 | JSW, MVW | One plant     |
| Europa Way, Leamington Spa   | SP3064     | 1990 | JWP      | Verge         |
| Ensors Pool, Nuneaton        | SP348903   | 1992 | PFAG     |               |
| Brandon Wood                 | SP401766   | 1997 | JS       | Path by field |

Like many of Warwickshire's arable weeds, *Anthemis arvensis* has declined dramatically over the last thirty years. Formerly widespread across the whole county, it was reported from 34 tetrads in Cadbury *et al.* (1971). It has now been reduced to just these four most recent records. In Birmingham, this plant is sometimes used in seed mixes to "soften" landscaping and this is probably the source of the record from the new Industrial Estate at Birch Coppice.

***Anthemis cotula***

GBS: Vulnerable ES: Vulnerable

**Stinking Chamomile**

Archaeophyte

|                     |            |      |           |                                       |
|---------------------|------------|------|-----------|---------------------------------------|
| Hockley             | SK232002   | 1995 | MAA       |                                       |
| Grove Hill NR       | SP116550   | 1991 | NMW       |                                       |
| Whitehouse Farm     | SP147605   | 1996 | JL, MrsSW |                                       |
| Newnham             | SP150591   | 1996 | PJC       |                                       |
| Woodhouse Farm      | SP183812   | 1999 | JL, MrsSW |                                       |
| Atherstone-on-Stour | SP2050     | 2003 | JWP       |                                       |
| Dosthill            | SP214992   | 1995 | MAA       |                                       |
| Burmington          | SP269379   | 1996 | ST        |                                       |
| Walton              | SP2852     | 2003 | JWP       |                                       |
| Fulready Coppice    | SP289468   | 1996 | HAR       |                                       |
| Woozeley Bridge     | SP298578   | 1995 | HAR       |                                       |
| Rough Bank          | SP307331   | 2013 | SS, CN    |                                       |
| Moreton Morrall     | SP311551   | 1992 | HAR       |                                       |
| Compton Verney      | SP319537   | 1995 | HAR       |                                       |
| Hospital Lane       | SP330966   | 1999 | JS        |                                       |
| Stoke Aldemoor      | SP360771   | 1996 | MJS       |                                       |
| Ufton Fields NR     | SP381615   | 1995 | JL, MrsSW |                                       |
| Warmington          | SP40634765 | 2016 | WFG       | A few plants, at edge of arable field |
| Mobbs Wood Lane     | SP428836   | 1996 | MJS       |                                       |

The map for Stinking Chamomile in Cadbury *et al.* (1971) shows that until recently the plant was widespread across the whole county, in arable fields, roadsides and other waste places. The mere four records in the new century may either indicate a real decline in its distribution, or reflect a drop in the level of systematic recording now taking place. It is probable that it has been overlooked or confused with other "Mayweed" type flowers.

***Anthriscus caucalis***

(Warwickshire Rare)

**Bur Chervil**

Native in GB, casual in Warwickshire

|                                   |          |      |           |                          |
|-----------------------------------|----------|------|-----------|--------------------------|
| Printing House Street, Birmingham | SP072873 | 1999 | MP        |                          |
| Damson Parkway                    | SP165821 | 1996 | JL, MrsSW |                          |
| Priors Marston                    | SP496565 | 1996 | MA        | On dumped heap of rubble |

This delicate annual relative of Cow-parsley is an East Anglian speciality that is common in hedge-banks and roadsides on sandy soils. A local plant in Warwickshire in the 19<sup>th</sup> century it became extinct as a native here in 1891. The three recent sightings appear to be just casual records.

***Apera spica-venti***

GBS: Near Threatened (Warwickshire Rare)

**Loose Silky-bent**

Archaeophyte in GB, casual in Warwickshire

|                       |          |      |     |  |
|-----------------------|----------|------|-----|--|
| Windmill Naps         | SP090720 | 2010 | MJS |  |
| Wolston Fields Quarry | SP401755 | 2014 | WYG |  |

A distinctive grass with a liking for dry, sandy soils, its centre of distribution is around London and the South-east of England. Occurring as an arable weed, a garden escape or a casual, populations are rarely long-lived.

***Apium graveolens***

Warwickshire Rare

**Wild Celery**

Native

|                           |          |      |     |
|---------------------------|----------|------|-----|
| River Sowe, Walsgrave     | SP383804 | 1997 | JS  |
| Bishops Bowl              | SP387589 | 1990 | LGT |
| The Tunnel, Fenny Compton | SP436523 | 2010 | JJB |

Wild Celery is mainly a coastal species, often of slightly brackish habitats, with only scattered records inland. In Warwickshire it has been reported from a riverside, a roadside ditch and a canal.

***Asperula cynanchica***

Warwickshire Rare

**Squinancywort**

Native

|                  |          |      |     |
|------------------|----------|------|-----|
| Greygoose Quarry | SP269288 | 1992 | PJC |
|------------------|----------|------|-----|

Just one plant was seen in dry calcareous grassland at the top of this quarry near Little Compton. A strict calcicole, it is unlikely to occur anywhere other than on the limestone in the far south of the county.

***Astragalus glycyphyllos***

Warwickshire Scarce

**Wild Liquorice**

Native

|                              |              |      |     |
|------------------------------|--------------|------|-----|
| Dosthill Quarry              | SP209997     | 2010 | MAA |
| Walton                       | SP2852       | 2003 | JWP |
| Blacklow Hill                | SP289676     | 1996 | MJS |
| Woozeley Bridge              | SP297581     | 1995 | HAR |
| Ashorne                      | SP305580     | 2000 | BL  |
| Kineton                      | SP327509     | 1995 | HAR |
| Fosseway, Harbury crossroads | SP3442960307 | 2010 | BL  |
| Ashlawn                      | SP514739     | 1995 | PP  |

Wild Liquorice is a sprawling perennial of calcareous banks, hedgerows and waste places with a distribution limited to the south and east of the county. The record from Dosthill is rather surprising and a 2010 record by JSW and MVW from Grendon Common (SP28059792) has been rejected as a misidentification.

***Atropa belladonna***

Warwickshire Scarce

**Deadly Nightshade**

Native

|                               |              |      |          |                       |
|-------------------------------|--------------|------|----------|-----------------------|
| Wootton Wawen Church          | SP153633     | 2014 | WFG      | Four separate patches |
| Shottery, Stratford-upon-Avon | SP185549     | 1997 | HBA      |                       |
| Sherbourne Church             | SP262613     | 2001 | PJC      |                       |
| Barford, Verdon Place         | SP272609     | 1992 | PJOT     |                       |
| Goodcrest Farm                | SP272721     | 1998 | RG       |                       |
| Mancetter Quarry              | SP3131494852 | 2010 | JH       |                       |
| Coventry Canal, Mancetter     | SP31759627   | 2014 | JSW, MVW |                       |
| Herbert Art Gallery, Coventry | SP3375178921 | 2005 | SJF      |                       |
| Calcutt Lane                  | SP471648     | 2014 | CL       |                       |

This uncommon species has always had a scattered distribution across the county and does not appear to be declining. In Mancetter the plants have spread to an adjacent canal bridge. The colony seen by Michael Senior at Manor Road, Coventry, not far from the Herbert Art Gallery, has died out. It was encouraging to see the plant being left to flower at Wootton Wawen churchyard. Stace (2010) suggests that the plant is only truly native on chalk and limestone which may leave the status of many of these records in doubt.

***Avenula pratensis***

Warwickshire Scarce

**Meadow Oat-grass**

Native

|                                   |            |      |          |
|-----------------------------------|------------|------|----------|
| Cress Hill                        | SP140514   | 2011 | JJB      |
| Solihull Riding Club              | SP156767   | 2000 | JW       |
| Midsummer Meadow                  | SP239411   | 1997 | HAR      |
| Loxley Church Meadow NR           | SP259532   | 1992 | JAH, VCC |
| Morton Hall Meadow                | SP302555   | 2011 | JJB      |
| Lighthorne Quarry                 | SP346563   | 2011 | JJB      |
| Burton Dassett Hills Country Park | SP396520   | 1992 | Anon.    |
| Draycote Meadows NR               | SP45197087 | 1994 | CJK      |

This grass is a fairly strict calcicole favouring grassland that is not too overgrown. We have rejected a 1994 record from Whitacre Heath NR (SP208931) as a probable misidentification of *A. pubescens* which can tolerate a wider habitat range. *A. pratensis* was recorded in Cadbury *et al* (1971) from 22 tetrads, all of them south of Warwick.

***Baldellia ranunculoides***

Warwickshire Rare

**Lesser Water-plantain**

Native

Alvecote Wood SK25250363 2014 JSW, MVW

A few plants were seen in flower in one of the pools near the canal on an Open Day in late September 2014. Although these pools were created only five years ago, they support a rich flora including Bladderwort (*Utricularia sp.*) and Curled Pondweed (*Potamogeton crispus*). The banks of the ponds were seeded with common waterside plants such as Common Fleabane (*Pulicaria dysenterica*) and Ragged Robin (*Silene flos-cuculi*), but no aquatics were introduced by the owner. This species can be separated from the two more common *Alisma* species by their distinctive buttercup-shaped fruiting heads and the smell of coriander when the leaves are crushed.

***Blysmus compressus***

GBS: Vulnerable

ES: Vulnerable

Warwickshire Rare

**Flat-sedge**

Native

Lower Lark Stoke SP196435 1998 SG

The only Warwickshire population of about six plants was found growing in spring-fed, wet grassland in a valley near Ilmington. A thorough search of site in 2013 to re-find the plants was not successful. Previously it had been seen near a stream at Warwickshire Moor, Tamworth in 1962 (SK219046) and by the River Avon near Binton in 1963 (SP1453). When these sites were revisited in 1983 the plant was not re-found. A review of the plant's national population was carried out by the BSBI as part of its Threatened Plants Project in 2008. Information received showed *Blysmus compressus* to be in serious decline nationally from drainage, poor management of grazing and eutrophication. It had been lost from more than half of its pre-1930 10km squares by 1962 and has lost 40% of its post-1930 10 km squares since then. It is now extinct in Staffordshire and Leicestershire. (Walker & Braithwaite, 2013).

***Bolboschoenus maritimus***

Warwickshire Rare

**Sea Club-rush**

Native

Alcester Warren Farm SP054611 1997 JRi  
 Quinton Pool SP337774 1995 MJS  
 Southam Holt Salt Spring SP44626052 2011 JSW, MVW

Sea Club-rush was first discovered in Warwickshire at a salt spring pool near Flecknoe in 1873 and at the Southam site a year later. The Flecknoe plant was not re-found on a visit in 1983 but the Southam colony is still flourishing well alongside *Schoenoplectus tabernaemontani* (Grey Club-rush) and until recently, *Juncus compressus* (Round-fruited Rush) making an important and special community. The area where it occurs, which is a de-notified SSSI and now a potential Local Wildlife Site (pLWS) and Ecosite lies in the middle of a large poplar plantation. Current threats are from dumping, the overuse of fertilisers and a lack of management leading to a gradual shrinking of the open water area by natural succession. The plants at Quinton Pool may have been planted but were not seen on a visit in 2013.

There are further earlier records from Ryton Pool in 1986 (SP3772) and from a wet road verge, possibly associated with road-salting, near Churchover in 1988 (SP5080).

***Botrychium lunaria***

ES: Vulnerable

Warwickshire Rare

**Moonwort**

Native

Draycote Meadows NR SP4501770761 2013 WFG

Val Roberts found just one frond of this exotic-looking fern on a Warwickshire Flora Group trip to Draycote Meadows SSSI in 2012. This was a very good find as it had not been seen there for several years. A few days later she found another plant. Two plants were also seen the following year. The Draycote plants are only 5 cms tall and very easy to overlook in a large meadow. *Anacamptis morio* (Green-winged Orchids) have been increasing in the field next to the road where the Moonwort grows thanks to recent management changes, so hopefully this tiny fern will benefit too. It was first found in the county by the botanist John Ray in 1662 in Sutton Park in rough grassland where it continued to be seen up until 1971.

***Bromus secalinus***

GBS: Vulnerable ES: Near Threatened Warwickshire Scarce

**Rye Brome**  
Archaeophyte

|                       |              |      |          |
|-----------------------|--------------|------|----------|
| Bodmoor Heath         | SP20449508   | 2016 | JSW, MVW |
| Walton                | SP2852       | 2003 | JWP      |
| Long Itchington       | SP396651     | 1991 | JCB      |
| Fenny Compton         | SP4194252417 | 2011 | RSKCE    |
| King's Newnham        | SP44787761   | 2016 | DL       |
| Draycote Meadows NR   | SP448708     | 2015 | LG       |
| Montilo Lane, Pailton | SP486804     | 2016 | JSW, MVW |

A widespread plant at the end of the 19<sup>th</sup> century, it has declined recently like many other annual arable weeds. It now mainly occurs as a casual rather than a seed contaminant. It was recorded by JSW and MVW, less than 100 metres away from the county border in Leicestershire during a BSBI meeting in 2015. Since then it has been seen four times in Warwickshire. It is able to tolerate a variety of different soils and could occur anywhere in the whole county. The three 2016 records were from the edge of wheat fields. The 2015 record was found by Lucy Gardiner as part of a project on Plant Identification and was verified by Sarah Whild. There are only three records in Cadbury *et al.* (1971) which includes one record for *var. hirtus*.

***Bupleurum rotundifolium***

GBS: Critically Endangered ES: Critically Endangered (Warwickshire Rare)

**Thorow-wax**

Archaeophyte in GB, casual in Warwickshire

|           |          |      |    |
|-----------|----------|------|----|
| Edgbaston | SP062858 | 2013 | NA |
|-----------|----------|------|----|

Nik Aspey found two plants in the garden in Edgbaston. The owner said that the plants had probably come from a wildflower seed mixture.

***Calamagrostis canescens***

Warwickshire Rare

**Purple Small-reed**  
Native

|                           |              |      |     |                                      |
|---------------------------|--------------|------|-----|--------------------------------------|
| Long Spinney, Binley Bogs | SP3813076560 | 1996 | MJS | Shaded marshy area                   |
| Piles Coppice             | SP3837076970 | 1996 | MJS | In wet area, under electricity pylon |

This is an infrequent plant in the Midlands, with strongholds in the east and in the Welsh Marches. With a preferred habitat of marsh and wet woodland it has always been a rarity in Warwickshire. The more common *C. epigejos* (Small Wood-reed) occurs in similar habitats and *C. canescens* may be under-recorded. The future of this perennial grass may improve as Piles Coppice is now a Woodland Trust Reserve, although many areas are in need of management.

***Callitriche brutia* subsp. *brutia***

Warwickshire Rare

**Pedunculate Water-starwort**  
Native

|                            |          |      |         |
|----------------------------|----------|------|---------|
| Hill House Farm, Berkswell | SP255798 | 1997 | JRR, VR |
|----------------------------|----------|------|---------|

There are seven records at scattered locations across the county from 1950 -1990. This sole modern record from a farm near Berkswell does not necessarily indicate a decline in the species as all Water-starworts are extremely difficult to identify. It may instead show a drop in the number of botanists prepared to tackle them with only a handful of post 2000 records for the genus. There are up to date keys in Stace (2010) and Rich & Jermy (1998). Stace (2010) suggests that historical records should be treated with caution as the taxonomy was not clarified until the late 1950s. Their habitat, small ponds with clean water, is one of the most threatened in Warwickshire. This species was previously recorded as *C. intermedia* subsp. *pedunculata* in Cadbury *et al.* (1971).

***Callitriche brutia* subsp. *hamulata***

Warwickshire Scarce

**Intermediate Water-starwort**  
Native

|                         |          |      |         |
|-------------------------|----------|------|---------|
| Bull's Lane Pool        | SP153947 | 1990 | JJB     |
| Ladywalk Nature Reserve | SP215920 | 2013 | JJB, CN |
| Penmire Lake, Dordon    | SP258996 | 2012 | JJB     |
| Whitnash Brook          | SP335643 | 2012 | JJB     |
| Court Farm              | SP357885 | 2012 | JJB, CN |
| Binley Bogs             | SP381765 | 1990 | MJS     |
| Lower Shuckburgh        | SP488604 | 1991 | JC      |

Found in shallow water in small ponds. Four other records exist from the 1950s, three of them from the north of the county. Nationally it is one of the more common *Callitriche* species and it is probably overlooked in the county. Recorded as *C. intermedia* subsp. *hamulata* in Cadbury *et al.* (1971) and as *C. hamulata* in Falk (2009).

***Callitriche hermaphroditica***

**Autumnal Water-Starwort**

Warwickshire Rare

Native

Sutton Park, Longmoor Pool      SP095957      2006      JWP

First seen at Sutton Park in 1990 where it was found to be abundant at the edge of the lake in deep water. The only other record for Warwickshire was from the Fazeley canal (SK2102) in 1971 by MAA.

This is a mainly northern species within Great Britain and the Warwickshire records are right on the southern limit of its distribution. No subspecies was given with the original record, although Falk (2009) records it as subsp. *hermaphroditica*

***Callitriche obtusangula***

**Blunt-fruited Water-Starwort**

Warwickshire Scarce

Native

|                    |          |      |     |
|--------------------|----------|------|-----|
| Aston Cantlow      | SP137598 | 1990 | PJC |
| Haseley Green Pond | SP236695 | 1996 | JCB |
| Inchford Brook     | SP263707 | 1990 | JCB |
| Hill Wootton       | SP303685 | 1997 | JT  |
| Radway             | SP368478 | 1990 | JCB |
| Knightcote         | SP404556 | 1993 | JCB |

Considered rare in Cadbury *et al.* (1971), this species is widespread in southern Britain and tolerates both calcareous and acidic habitats. There were 6 records between 1950 and 1990.

***Callitriche platycarpa***

**Various-leaved Water Starwort**

Warwickshire Scarce

Native

|                                |              |      |         |
|--------------------------------|--------------|------|---------|
| Dosthill Park                  | SK212008     | 2014 | WFG     |
| Stoneydelph Lakes, Kettlebrook | SK2321101673 | 1997 | MAA     |
| Hodge Lane NR                  | SK239043     | 1998 | RA      |
| Alvecote                       | SK244044     | 1995 | MAA     |
| Barford Bridge                 | SP268610     | 1995 | RT, LSL |
| Whitnash                       | SP335637     | 1998 | JT      |
| Napton                         | SP463620     | 1991 | JCB     |

The 2014 record was from a well-established, shallow pond that had been created by the Friends of Dosthill Park and may possibly have been introduced with plantings. Nationally, this is a fairly common species that has again been under-recorded in Warwickshire. It was found in nine different localities in the survey for the *Computer-Mapped Flora* (Cadbury *et al.*, 1971).

***Campanula glomerata***

**Clustered Bellflower**

Warwickshire Rare

Native

|                                   |          |      |      |
|-----------------------------------|----------|------|------|
| Copmill Hill SSSI                 | SP152576 | 1999 | MB   |
| Guy's Cliffe Fields               | SP291670 | 1998 | WNHS |
| Burton Dassett Hills Country Park | SP396522 | 1995 | MJS  |

This is a handsome species of limestone grassland, with the Burton Dassett plants growing in short turf on a steep west facing slope. It has been searched for recently, but without success. The Guy's Cliffe record is likely to be a garden escape.

***Campanula patula***

**Spreading Bellflower**

GBS: Endangered

ES: Critically Endangered

Warwickshire Rare

Native

|                   |            |      |          |
|-------------------|------------|------|----------|
| Nether Whitacre   | SP22019151 | 2011 | JBA      |
| Daw Mill Colliery | SP25559007 | 2017 | JSW, MVW |

The Nether Whitacre population grows on waste ground beside the Birmingham-Leicester railway line near Shustoke Reservoir a dozen yards or so from a railway crossing point. First seen in 1999 by local naturalist

Harry Morrell, the site has since been monitored by John Bates. The plants continue to thrive but without any significant spread. Recently the crossing has been closed making access more difficult. The other site, discovered in 2013, is beside the footpath between the main railway line and the sidings of Daw Mill Colliery. Seven plants were found there. There are many Warwickshire records from the 19<sup>th</sup> century, but a serious decline since then throughout its range is reflected in the plant's current Endangered status. It has a strange national distribution centred on the Welsh Marches. It is thought to be a biennial or short lived perennial. Stroh *et al* (2014) states that the English population may consist of as few as 250 mature plants.

**Carex binervis**

Warwickshire Scarce

**Green-ribbed Sedge**

Native

|                                 |            |      |              |
|---------------------------------|------------|------|--------------|
| Sutton Park                     | SP085963   | 2005 | MP, ITR, JHA |
| Sutton Park                     | SP096969   | 1999 | CP           |
| Sutton Park                     | SP0998     | 1995 | SWO          |
| Sutton Park                     | SP1097     | 2015 | BBCRG        |
| Sutton Park                     | SP110971   | 2005 | ITR, EC, SMP |
| Sutton Park                     | SP1197     | 2015 | BBCRG        |
| Windmill Naps SSSI              | SP0972     | 2016 | WFG          |
| Priory Fields NR                | SP099787   | 2001 | JW           |
| Clowes Wood NR                  | SP101739   | 2000 | SWO          |
| Hay Wood                        | SP210713   | 2009 | JJB          |
| Frogmore Wood                   | SP230748   | 2015 | JJB          |
| Arley Wood                      | SP27669108 | 2011 | JSW, MVW     |
| Piles Coppice                   | SP355770   | 1996 | JL, Mrs SW   |
| Brandon Wood, near Jubilee Pool | SP392768   | 2015 | JSW, MVW     |
| Depper's Bridge                 | SP398586   | 1999 | Anon.        |

Green-ribbed Sedge, a species of acid soils is restricted mainly to the north and west of the county. The Sutton Park plants were found growing in heathy grassland while those from Arley and Clowes Wood NR were growing in shady wet woodland. Recorded from 7 tetrads in Cadbury *et al.* (1971), it does not seem to be declining.

**Carex canescens**

Warwickshire Rare

**White Sedge**

Native

|                        |              |      |          |                         |
|------------------------|--------------|------|----------|-------------------------|
| Sutton Park, Longmoor  | SP09449588   | 2011 | ITR, JOB |                         |
| Sutton Park            | SP09879819   | 2015 | BBCRG    | Little Bracebridge Pool |
| Sutton Park, Blackroot | SP1097       | 2015 | BBCRG    |                         |
| Coleshill Pool         | SP1988685935 | 2010 | BL       |                         |

Although this is a very common species of *Sphagnum* bogs in the north of Britain, the first British record was described by Ray in 1670 as being "not far from Middleton" (Warwickshire). Nowadays *C. canescens* is limited to wet birch woodland and mire in Sutton Park where it is locally common, and to two separate patches at Coleshill Pool. Previously known as *C. curta* in Falk (2009) and Cadbury *et al.* (1971). There is a 1965 record from Tile Hill Wood and another from the 1950's from the Earlswood area.

**Carex diandra**

GBS: Near Threatened

ES: Vulnerable

Warwickshire Rare

**Lesser Tussock-sedge**

Native

|                            |            |      |    |                            |
|----------------------------|------------|------|----|----------------------------|
| Longmoor Pool, Sutton Park | SP09399596 | 2012 | TH | Widespread, base-rich mire |
|----------------------------|------------|------|----|----------------------------|

This is a scarce species in the Midlands which grows in wet, peaty soils and alder carr. It has recently been rediscovered near Longmoor Pool. There is also a 1960 record from the marsh in Packington Park. Another record from near Brinklow in 1998, found in a report submitted by the Habitat Biodiversity Audit, has been rejected as it is from an unlikely habitat and there is no supporting specimen.

**Carex dioica**

Warwickshire Rare

**Dioecious Sedge**

Native

|                       |            |      |   |
|-----------------------|------------|------|---|
| Sutton Park, Longmoor | SP09379605 | 2011 | ITR (another colony nearby at SP09329634) |
|-----------------------|------------|------|---|

Another common northern and western species that in Warwickshire is limited to Sutton Park. Ian Trueman rediscovered this sedge at Longmoor in 2011 where it had not been seen for 26 years. The last sighting of this species at Little Bracebridge Pool was in 1987 by John Bowra.



**Carex distans**  
Warwickshire Rare

**Distant Sedge**  
Native

Cuttle Pool NR                      SP202754                      2009                      JJB

In Great Britain this species can be found in rocky and sandy places by the coast, and in brackish marshes and inland wet meadows. There is a 1988 record of just one plant from the Southam Salt Spring (SP3557) and a 1981 record from Kingston Manor Farm (SP446605). Cadbury *et al.* (1971) reports it from 10 sites, all in the south of the county.

**Carex divulsa subsp. leersii**  
Warwickshire Rare

**Grey Sedge**  
Native

Welcombe Hills Country Park                      SP207564                      1998                      MJS  
Cross Hands Quarry                      SP269291                      2014                      JRR, VR (confirmed M. Porter)

This strictly calcareous subspecies differs from subsp. *divulsa* in its yellow-green foliage, early flowering season and more robust habit. The only other record of the plant in Warwickshire was from James Partridge who found it growing on a roadside near Loxley in 1987 (SP265529)

**Carex echinata**

ES: Near Threatened                      Warwickshire Rare

**Star Sedge**  
Native

|                           |              |      |                  |                         |
|---------------------------|--------------|------|------------------|-------------------------|
| Sutton Park               | SP08979573   | 2005 | MP, ITR, EC, JHA | Open woodland           |
| Sutton Park, Longmoor     | SP0934296392 | 2012 | JH               |                         |
| Sutton Park, Longmoor     | SP09389583   | 2005 | MP, ITR          |                         |
| Sutton Park,              | SP09469827   | 2015 | BBCRG            | Little Bracebridge Pool |
| Sutton Park, Windley Pool | SP111958     | 2007 | ITR, MP          |                         |

*C. echinata* can be found in both acidic and base-rich sites. It was recorded in 9 tetrads in Cadbury *et al.* (1971), but has disappeared from places such as Hay Wood, Coleshill Pool and Temple Balsall since that survey was carried out. In 1976 it was also found near Ufton.

**Carex elata**

ES: Near Threatened                      Warwickshire Rare

**Tufted-sedge**  
Native

Coombe Abbey Country Park                      SP405803                      2010                      MJS

Michael Senior's record from beside a ditch in Coombe Abbey Country Park is one of just a handful of records for this species in the Midlands. Its national distribution is centred on the fenland of East Anglia and central Ireland where it is an important component of reed swamp.

**Carex elongata**

ES: Near Threatened                      Warwickshire Rare

**Elongated Sedge**  
Native

Clowes Wood NR                      SP098740                      1992                      BD

*C. elongata* may now be extinct in the county. The Clowes Wood plant used to grow on a piece of wood lying in the centre of a woodland pool. This, strangely, is the plant's preferred habitat, albeit a rather precarious one. When the warden Ron Hill and the Warwickshire Flora Group visited the wood in 2011 the wood had rotted and the sedge could not be found. There is a possibility that some seeds may have germinated nearby but any new plants may not be noticed until a flowering spike is produced.

There are previous records from nearby at Earlswood Reservoir in 1970 (SP112743) and from Dickens Heath in 1979 (SP106762).

**Carex hostiana**

Warwickshire Rare

**Tawny Sedge**  
Native

|                       |            |      |          |                         |
|-----------------------|------------|------|----------|-------------------------|
| Sutton Park, Longmoor | SP093964   | 2011 | ITR, PCo |                         |
| Sutton Park           | SP09469827 | 2014 | BSBI     | Little Bracebridge Pool |

This is another common species of northern and western Britain whose Warwickshire distribution is now limited to the base-rich flushes in Sutton Park. James Partridge found some plants at Hampton Coppice

(SP167808) in 1989. There are earlier records in Cadbury *et al.* (1971) from Browns Coppice (SP1380) and Hatton (SP2266).

**Carex laevigata**

**Smooth-stalked Sedge**

Warwickshire Rare

Native

|                          |            |      |         |
|--------------------------|------------|------|---------|
| Clowes Wood NR           | SP09957389 | 2013 | MVW     |
| Sutton Park, Bracebridge | SP106976   | 2005 | MP, ITR |
| Sutton Park              | SP10719754 | 2015 | BBCRG   |
| Merevale Lake woodlands  | SP298866   | 1998 | AG      |

This is a typical species of wet acid woodland and can be found growing in deep shade. Another plant was seen in Clowes Wood NR at SP1008674006 (a different tetrad) in 2011 by the Warwickshire Flora Group, a finding that agrees with Cadbury *et al.* (1971) which has this sedge recorded from five different tetrads in the Earlswood area. There is another 1971 record from Yarningale Common.

**Carex pulicaris**

**Flea Sedge**

ES: Near Threatened

Warwickshire Rare

Native

|                       |            |      |          |                         |
|-----------------------|------------|------|----------|-------------------------|
| Sutton Park, Longmoor | SP093963   | 2006 |          |                         |
| Sutton Park           | SP09459829 | 2011 | ITR, JOB | Little Bracebridge Pool |

This is another speciality of the base-rich flushes in Sutton Park that has been found nowhere else in the county. Nationally it is a common species of the wetter western and northern parts of the British Isles with only a scattering of records in the Midlands. The Longmoor record was reported in Trueman *et al.* (2013) without a recorder's name. It was considered to be declining in Cadbury *et al.* (1971).

**Carex strigosa**

**Thin-spiked Wood-sedge**

Warwickshire Rare

Native

|                              |          |      |     |
|------------------------------|----------|------|-----|
| Watery Lane, Baddesley Ensor | SP264986 | 2010 | JSW |
| Thickthorn Wood, Kenilworth  | SP304708 | 1995 | RCP |

This sedge has a national distribution centred on the Weald and the Severn Valley. The Baddesley plant was seen beside a stream in wet woodland.

**Carex vesicaria**

**Bladder-sedge**

ES: Vulnerable

Warwickshire Scarce

Native

|                        |          |      |     |
|------------------------|----------|------|-----|
| Box Tree Farm          | SP140739 | 1998 | IT  |
| Porters Croft Pit Wood | SP146764 | 2000 | JW  |
| Coleshill Pool         | SP198863 | 2010 | ALA |
| Hampton-in-Arden       | SP213801 | 2004 | JWP |
| Sowe Valley, Coventry  | SP3676   | 1996 | HBA |
| Wolfhampcote           | SP529655 | 1994 | EN  |

In Warwickshire Bladder-sedge has been reported from riverside marsh and the edge of ponds. It is very similar to *C. rostrata* but has a long pointed ligule and "rustles" in the wind when growing in sizeable stands. In the survey for Cadbury *et al.* (1971) it was found in 15 tetrads mainly in the west of the county.

**Carum carvi**

**Caraway**

GBS: Endangered

ES: Critically Endangered

(Warwickshire Rare)

Archaeophyte in GB, casual in Warwickshire

|                 |          |      |     |
|-----------------|----------|------|-----|
| Bidford-on-Avon | SP1050   | 1990 | DB  |
| Leamington Spa  | SP321652 | 2007 | JWP |

This species is only seen as a casual in the county, probably as an escape from cultivation. It was not reported in the survey for Cadbury *et al.* (1971), but was seen in four different sites during the 19<sup>th</sup> century.

***Catabrosa aquatica***

ES: Vulnerable

Warwickshire Scarce

**Whorl-grass**

Native

|                       |          |      |            |                         |
|-----------------------|----------|------|------------|-------------------------|
| Sutton Park           | SP093962 | 2006 | JWP        |                         |
| Sutton Park           | SP0998   | 1995 | SWO        | Little Bracebridge Pool |
| Middleton             | SP171985 | 1990 | JL, Mrs SW |                         |
| Lighthorne Quarry     | SP346563 | 2011 | JJB        |                         |
| Bramcote, Ashby Canal | SP401889 | 1996 | MJS        |                         |

A stoloniferous grass with a liking for muddy puddles and the edges of ponds and ditches, it is uncommon but widespread. It does not seem to be limited by soil type occurring at both acidic and limestone sites. Cattle are particularly fond of its succulent leaves and rhizomes (Cope & Gray 2009) and as it is a late flowering species it is probably overlooked. There is a 1989 record from Hill Wootton and an earlier one from 1978 on the Burton Dassett Hills.

***Centaurium pulchellum***

Warwickshire Scarce

**Lesser Centaury**

Native

|                          |          |      |         |                 |
|--------------------------|----------|------|---------|-----------------|
| Orchard Colliery, Dordon | SK264002 | 2010 | JJB     |                 |
| Weethley                 | SP046644 | 1996 | DH      |                 |
| Wilmcote Rough           | SP153577 | 1993 | JCB     |                 |
| Hams Hall, Ladywalk      | SP205917 | 1997 | MAA     |                 |
| Edge Hill Wood Spoilheap | SP236983 | 2010 | JJB, SS |                 |
| Bowshot Wood, Combroom   | SP302531 | 1990 | FHU     |                 |
| Coventry Power Station   | SP364841 | 2014 | WFG     | 100's of plants |

This annual species is similar to the common *C. erythraea* (Common Centaury), but is shorter, more branched and has smaller flowers. In Great Britain it is a mainly coastal species, but in Warwickshire it can be found in wet grassland, woodland rides and on mine spoilheaps in the west of the county. It may also occur on the abandoned coalfields in the Baddesley/Grendon and Alvecote areas, the quarries near Nuneaton and Bishop's Itchington, as well as in woodland sites. There is a 1972 record from Aston Grove (SP1357).

***Cephalanthera longifolia***

GBS: Vulnerable

ES: Endangered

Warwickshire Rare

**Narrow-leaved Helleborine**

Native

|               |              |      |          |  |
|---------------|--------------|------|----------|--|
| Oversley Wood | SP1038555990 | 2013 | JSW, MVW |  |
| Oversley Wood | SP1088556631 | 2013 | JSW, MVW |  |

This is probably Warwickshire's rarest, but oddly enough, most recorded orchid. Many records are sent in every year, often misidentified as *C. damasonium* (White Helleborine).

The site has also been monitored for many years by the naturalist Roger Jukes and in 2010 Brian Laney carried out a thorough survey of all the known sites in the wood, for Ecoline. After extensive searching, he found a total of 149 plants, including many easily overlooked non-flowering leaf rosettes. Each one was given a 10 figure grid reference and an individual management plan.

The main threat to the orchids is from competition as many of the woodland rides have become nutrient-enriched and are now overgrown with common species such as *Urtica dioica* (Common Nettle) and *Heracleum sphondylium* (Hogweed). The status of the orchid seems to be fairly stable at the moment, but the number of flowering spikes can vary from year to year.

In 1975 John and Val Roberts found a single plant in full flower in Alcock's Arbour, the wood just to the east of Oversley Wood at SP114566. The species has not re-appeared there in spite searching over many years.

*C. longifolia* was seen at Oversley by Thomas Purton in 1817 and James Bagnall described it as "very abundant" in 1883. It was also reported from Ragley Woods in 1817 by Purton and later in Cadbury *et al* (1971) as part of their survey, but with no information about the finder or the year in which the plants were found.

***Cerastium diffusum***

Warwickshire Scarce

**Sea Mouse-ear**

Native

|                        |            |      |            |           |
|------------------------|------------|------|------------|-----------|
| Old Forge Drive        | SP05916680 | 2009 | JD         |           |
| Danzey Green Station   | SP122697   | 1996 | JL, Mrs SW |           |
| Darley Green           | SP180740   | 1996 | JWP        |           |
| Boon's Quarry          | SP344932   | 1996 | BP         |           |
| Coventry Power Station | SP365842   | 2009 | JJB        | Grassland |
| Brandon Village        | SP40877613 | 2015 | JSW, MVW   |           |

As a low-growing annual that flowers early (from April onwards), this plant is easy to overlook. Nationally, it is common and found all around the British coast, but is limited in Warwickshire to sandy soil and railway ballast. Cadbury *et al.* (1971) reported the plant from 25 tetrads “mainly on railway ballast” and since then, the number of sites has seriously declined. This could be due to the increased use of weedkillers on the track or the replacement of steam engines leading to less accidental fires and hence greater competition on railway banks (Gent & Wilson, 2012). Recent difficulties with access to tracksides (increased security/CCTV) has limited recording. Preston *et al.* (2002) suggested that the plant has been spreading along salt-treated roadsides. The first Warwickshire record from this habitat, the road edge opposite the Royal Oak pub, in Brandon Village, was not until 2015.

### ***Cerastium semidecandrum***

Warwickshire Scarce

**Little Mouse-ear**

Native

|                                   |              |      |                   |                        |
|-----------------------------------|--------------|------|-------------------|------------------------|
| Arrow Valley                      | SP059669     | 2001 | JD                | Lakeside car park      |
| Sutton Park                       | SP094976     | 2014 | JSW, MVW          |                        |
| Sutton Park                       | SP09649590   | 2005 | ITR, MP           | Dry banks              |
| Sutton Park                       | SP1025996013 | 2014 | JSW, MVW          |                        |
| Sutton Park                       | SP1097       | 2015 | BBCRG             |                        |
| Sutton Park                       | SP10369590   | 2005 | MP, ITR           | Short, sandy grassland |
| Heathcote Lane                    | SP2927764163 | 2006 | DLW               |                        |
| Foleshill Gasworks                | SP343833     | 1996 | HBA               |                        |
| Ensors Pool, Nuneaton             | SP348903     | 1992 | PFAG              |                        |
| Ufton Fields NR                   | SP379614     | 1996 | JT                |                        |
| Burton Dassett Hills Country Park | SP397521     | 2014 | JSW, MVW, JRR, VR |                        |
| Elliot's Field, Rugby             | SP502768     | 2016 | WIE               |                        |

Like the previous species, this is an early flowerer that may have disappeared completely by May. It is typically a species of short vegetation on sandy soil on roadsides and quarries. JSW and MVW's Sutton Park record was originally discovered by Brian Laney in 2010 on a grassy island spit in the middle of a car park. A few small patches were also seen growing in short grass beside the main road across the park near the monument on a visit in May 2014.

The plant was recorded as being “occasional” in a 1978 survey of Burton Dassett Hill Country Park (Bowra, 1979), and it was rediscovered there in 2014 in the short limestone sward in an early-flowering community of chickweed-like plants alongside *Stellaria pallida* and *C. glomeratum*.

In other counties it has been seen growing in mown grass in urban parks. Recorded from 10 tetrads in Cadbury *et al.* (1971) and it could also occur in the Brandon area and the quarries at Middleton.

### ***Ceratocarpus claviculata***

Warwickshire Scarce

**Climbing Corydalis**

Native

|                            |              |      |         |                          |
|----------------------------|--------------|------|---------|--------------------------|
| Dumble Wood, Maxstoke      | SP241998     | 1995 | MJS     |                          |
| Birchley Hayes Wood        | SP26938457   | 1994 | SJF     |                          |
| Elkin Wood, Allesley       | SP282939     | 2012 | MJS     | One patch a metre square |
| St. John's Museum, Warwick | SP2871365095 | 2010 | SJF     |                          |
| Coventry Wood              | SP343888     | 2012 | JJB     |                          |
| Arbury Rough               | SP346894     | 2013 | JJB, CN |                          |
| Griff Hollows              | SP364896     | 1996 | MB      |                          |

This very distinctive annual species can be found entwined amongst low-growing vegetation in acidic, nutrient poor woodland and heathland. With the exception of the Warwick record, it is limited to the north of the county and has surprisingly not been reported from Sutton Park. It has been a rare plant in Warwickshire, ever since William Withering found it “in some of the least frequented roads in Birmingham” in 1787. It is mentioned in Cadbury *et al.* (1971) as *Corydalis claviculata*, but was not recorded in that survey. Both the Allesley and Maxstoke sites are small and very vulnerable.

### ***Ceratophyllum submersum***

Warwickshire Scarce

**Soft Hornwort**

Native

|                          |          |      |     |             |
|--------------------------|----------|------|-----|-------------|
| Oakenshaw Wood Pond      | SP042654 | 1998 | WW  |             |
| Bentley Heath, Dorridge  | SP162758 | 1991 | JWP |             |
| Packington Park          | SP224836 | 1998 | DP  |             |
| Maxstoke                 | SP2288   | 2003 | JWP | Castle Moat |
| Hatton                   | SP261683 | 1997 | MJS |             |
| Wedgenock Range          | SP274674 | 1992 | JCB |             |
| Middle Woodloes, Warwick | SP282673 | 1992 | JCB |             |

The Warwickshire records are particularly important as the national distribution of this submerged aquatic is limited to the south-east coast of England and to the counties surrounding the River Severn. The first county record was discovered by John Bowra near Leek Wootton as late as 1985 (SP276686). It is able to tolerate high nutrient levels and because of this it should not be declining. All records were from ponds, many of them in arable land.

***Chenopodium bonus-henicus***

GBS: Vulnerable ES: Vulnerable Warwickshire Scarce

**Good-King-Henry**  
Archaeophyte

|                                |              |      |     |                |
|--------------------------------|--------------|------|-----|----------------|
| Alcester-Broom disused railway | SP086540     | 2009 | JJB |                |
| Shirley                        | SP103779     | 1996 | DT  |                |
| Aston Cantlow                  | SP1460       | 1997 | HBA |                |
| Dosthill, railwayside          | SP218997     | 2009 | MAA |                |
| Leamington Spa                 | SP328645     | 2006 | JWP | Longfield Road |
| Baginton Castle                | SP342748     | 1994 | LCD |                |
| The Nook                       | SP344869     | 1996 | JS  |                |
| Hornnton Quarry                | SP3747       | 1992 | AU  |                |
| Stockton Cutting NR            | SP440650     | 1994 | CJK |                |
| Thurlaston                     | SP464709     | 1996 | JB  |                |
| Gate Farm, Willoughby          | SP5206167766 | 2016 | GPR |                |

Recorded from 44 tetrads in Cadbury *et al.* (1971), it has declined markedly since the 1980's when it used to be grown as a crop. It is now less likely to spread to form self-supporting colonies. It has been reported from waste ground, pavement edges and grass verges.

***Chenopodium hybridum***

Warwickshire Scarce

**Maple-leaved Goosefoot**  
Archaeophyte

|                              |              |      |           |
|------------------------------|--------------|------|-----------|
| Stratford-upon-Avon          | SP197544     | 1992 | HAR       |
| Loxley                       | SP254529     | 1993 | HAR       |
| Shipston-on-Stour            | SP260405     | 1996 | HAR       |
| A46/M40 junction, Longbridge | SP2650562804 | 2010 | BL        |
| Leamington Spa               | SP331655     | 1995 | JL, MrsSW |
| Kingston Grange              | SP359560     | 1993 | JL, MrsSW |

A handsome annual of nutrient-rich soil, waste ground and arable, it is absent from the north and east of the county. There are also some 1980's records from Walton (SP268562), Wellesbourne (289537) and Gallows Hill, Warwick (SP289587). It has always been a scarce plant with only 11 tetrads mentioned in Cadbury *et al.* (1971). The two plants that were found in 2010 at the roadworks for the new link roads to the M40 may have arisen from the freshly disturbed seed bank or from imported soil.

***Chenopodium urbicum***

GBS: Critically Endangered ES: Critically Endangered (Warwickshire Rare)

**Upright Goosefoot**

Archaeophyte in GB, casual in Warwickshire

|                             |              |      |     |
|-----------------------------|--------------|------|-----|
| Grove St/Regent St, L. Spa  | SP3139965892 | 2006 | JWP |
| Dale St/Church Hill, L. Spa | SP315658     | 2004 | JWP |

This species is an arable weed that used to thrive as a seed impurity. Nowadays it is only seen as a rare casual. The Grove Street plants were found in an alleyway and had been "established for at least five years and were spreading" (JWP). The only other Warwickshire record for the plant is from Rev. W.T. Bree, in 1835, without location.

***Chrysosplenium alternifolium***

Warwickshire Scarce

**Alternate-leaved Golden-saxifrage**  
Native

|                   |              |      |          |
|-------------------|--------------|------|----------|
| Packwood          | SP173719     | 1998 | DT       |
| Temple Balsall NR | SP20347582   | 2014 | AS       |
| Haseley           | SP235684     | 2005 | JRR, VR  |
| Whichford Wood    | SP3084834116 | 2011 | JSW, MVW |

*Chrysosplenium alternifolium* is an important ancient woodland indicator species with distinctive leaves that is only found in wet woodland in Warwickshire. The Temple Balsall colony is very small and vulnerable while the

colonies at Whichford Wood are quite widespread and located in different parts of the wood. The only other Warwickshire records for the plant are from the nineteenth century.

***Cirsium dissectum***

Warwickshire Scarce

**Meadow Thistle**

Native

|                        |              |      |       |
|------------------------|--------------|------|-------|
| Sutton Park            | SP09469827   | 2015 | BBCRG |
| Monkspath Meadow       | SP145764     | 1996 | BD    |
| Clowes Wood NR         | SP1014873996 | 2011 | WFG   |
| Shadowbrook Meadows NR | SP18848162   | 2010 | GT    |
| Asbury's Coppice       | SP191806     | 1999 | LSC   |
| Packington             | SP221865     | 1994 | NRRR  |
| Glasshouse Spinney NR  | SP304714     | 1991 | SB    |

This is a local plant of acidic, unimproved wet meadows and heathland, with most sites occurring on the west side of the county. Recorded from 17 sites in Cadbury *et al.* (1971) and is now declining due to drainage and nutrient enrichment. The Wildlife Trust Reserves Booklet (Roberts, 2011) also reports the plant from Brook Meadow NR (with no date given). This site and the nearby Shadowbrook Meadows NR were both surveyed in 2013 but no Meadow Thistles were seen. The species was previously found from three tetrads in Sutton Park, (Readett, 1971), but it now occurs only in the Little Bracebridge Pool area.

***Clinopodium acinos***

GBS: Vulnerable

ES: Vulnerable

Warwickshire Scarce

**Basil Thyme**

Native

|                              |            |      |     |                       |
|------------------------------|------------|------|-----|-----------------------|
| Copmill Hill SSSI            | SP1557     | 1996 | AN  |                       |
| Little Wolford               | SP23       | 1996 | AN  |                       |
| Cross Hands Quarry           | SP27112911 | 2014 | WFG | Many plants, frequent |
| Lighthorne                   | SP326558   | 2012 | NA  |                       |
| Offchurch/Hunningham railway | SP384666   | 2012 | JJB |                       |
| Long Itchington              | SP396656   | 1995 | MJS |                       |

An annual species found in dry, open areas of calcareous grassland, such as quarries and railway banks. It was reported from Harbury Spoilbank NR in 1979. It is fairly common at Cross Hands Quarry where it can even be seen growing in the car park. In Cadbury *et al.* (1971) as *Acinos arvensis*, where it was recorded from only six sites.

***Colchicum autumnale***

GBS: Near Threatened

Warwickshire Scarce

**Meadow Saffron**

Native and casual in Warwickshire

|                                 |              |      |          |                              |
|---------------------------------|--------------|------|----------|------------------------------|
| Weethley Wood                   | SP045566     | 1990 | JRR      | Wet ride near woodland edge  |
| Winterbourne Botanic Gardens    | SP0583       | 2005 | SJW, AJL |                              |
| Wootton Wawen                   | SP14936324   | 2010 | SJF      |                              |
| Turner's Green, The Long Meadow | SP192698     | 2014 | SS, CN   | About 100 plants             |
| Baddesley Clinton               | SP1997371467 | 2008 | SJF      |                              |
| Snitterfield Bushes NR          | SP20106053   | 2013 | BSBI     | "A good patch"               |
| Alveston Pastures               | SP233525     | 1990 | JB       | Conifer woodland, two plants |
| Chesterton Wood                 | SP341572     | 1998 | PJC      | Two groups                   |

This plant was far more frequent in the nineteenth and early twentieth centuries, but it is now declining mainly because of the loss of its preferred habitat which is open wet woodland and damp meadows. The colony at Snitterfield Bushes NR however, is continuing to thrive in quite dense deciduous woodland. Also known as "Naked Ladies" this plant is commonly planted in churchyards, gardens and parks and some of the records above may be deliberate introductions, garden escapes or throw-outs.

There are ten sites in Cadbury *et al.* (1971), all of which are in the south-west of the county.

**Comarum palustris**

ES: Near Threatened

Warwickshire Scarce

**Marsh Cinquefoil**

Native

|                  |              |      |              |                                 |
|------------------|--------------|------|--------------|---------------------------------|
| Sutton Park      | SP0933195961 | 2010 | JH           |                                 |
| Sutton Park      | SP09499824   | 2014 | BSBI meeting |                                 |
| Sutton Park      | SP1096       | 2015 | BBCRG        |                                 |
| Sutton Park      | SP1097       | 2015 | BBCRG        |                                 |
| Palmers Rough    | SP123799     | 1997 | RH           | Woodland pool, two patches      |
| Chambers Coppice | SP125725     | 2005 | DC           | Frequent in marsh               |
| Arnold Wood West | SP130729     | 2005 | DC           |                                 |
| Coleshill Pool   | SP1987785997 | 2010 | BL           |                                 |
| Berkswell Pond   | SP254794     | 1997 | REE          | Marsh in arable field, abundant |
| Close Wood       | SP255843     | 2010 | IT           |                                 |

*Comarum palustris* is another species limited to the north western side of the county with its stronghold in Sutton Park. The map in Trueman *et al.* (2013) reports it from eight different tetrads within the park, without dates and also shows another record from the early 1990's from Fox Hollies, just inside the VC38 border.

There are two 1981 records from the River Leam near Birdingbury (SP430690) and Offchurch (SP358661) and another from the small area of *Sphagnum* bog at Tilehill Wood (SP2279) in 1987. In Cadbury *et al.* (1971) as *Potentilla palustris* where it was found in 19 tetrads.

**Crepis biennis**

Warwickshire Scarce

**Rough Hawk's-beard**

Native

|                                |          |      |           |                     |
|--------------------------------|----------|------|-----------|---------------------|
| Preston Fields, Yarningale     | SP182661 | 1996 | JL, MrsSW | Two or three plants |
| Shipston                       | SP260412 | 1999 | LSL       |                     |
| Stratford disused railway line | SP297543 | 1994 | Anon.     |                     |
| Little Kineton                 | SP335500 | 1996 | MJS       | Two plants          |

This is a species that favours calcareous grassland and all Warwickshire records are from this habitat.

There are only 7 tetrads for this species in Cadbury *et al.* (1971) with a concentration around the Kineton area, but the plant was not seen at BAD Kineton, a possible site, on two recent WFG surveys. There are also thirteen records of this species by BP for various sites around Nuneaton and Bedworth that have been rejected as misidentifications.

**Cynoglossum officinale**

GBS: Near Threatened

ES: Near Threatened

Warwickshire Scarce

**Hound's-tongue**

Native

|                              |              |      |         |                     |
|------------------------------|--------------|------|---------|---------------------|
| Grove Hill NR                | SP115549     | 2012 | WFG     | Two plants only     |
| Gypsy Hill Quarry            | SP151593     | 1997 | PJC     |                     |
| Drayton EHF                  | SP167551     | 1992 | JB      |                     |
| Darley Green                 | SP189733     | 1997 | AS      |                     |
| Dene Meadow, Wellesbourne    | SP274555     | 2011 | JJB     |                     |
| Weston Mill Farm, Cherington | SP2812336501 | 2012 | JRR, VR | One plant in arable |
| Kenilworth                   | SP284874     | 2012 | MJS     |                     |
| Fossedene Manor              | SP29515098   | 2017 | WFG     |                     |
| Lobbington Farm              | SP306502     | 1997 | DN      |                     |
| Moreton Wood                 | SP306554     | 2011 | JJB     |                     |
| Newton                       | SP529785     | 1993 | PP      | One plant           |

This handsome biennial can be found growing in the dry limestone grassland of the south-west of the county. It is only found in small numbers and is particularly vulnerable. The Cherington specimen was seen at the edge of an arable field sown with *Trifolium hybridum*, *Onobrychis viciifolia*, *Lotus pedunculatus* and *Medicago sativa* and may have come from a seed mix. The survey for Cadbury *et al.* (1971) reported the plant from 22 tetrads with its stronghold to the west of Stratford-upon-Avon.

**Cystopteris fragilis**

Warwickshire Scarce

**Brittle Bladder-fern**

Native

|                              |          |      |          |                |
|------------------------------|----------|------|----------|----------------|
| Winterbourne Botanic Gardens | SP0583   | 2005 | SJW, AJL |                |
| Tanworth-in-Arden            | SP122709 | 2016 | DC       |                |
| Dosthill High Street         | SP217999 | 2009 | MAA      |                |
| Kenilworth Common NR         | SP296728 | 2017 | GC       | Railway Bridge |
| Snowford Bridge              | SP391662 | 1998 | JT       | Occasional     |
| Monks Kirby churchyard       | SP462832 | 1991 | JCB      | Only one plant |

A delicate fern that has been recorded from shaded walls, favouring the cracks in mortar. The only extensive colony is at Kenilworth Common Railway Bridge. On a visit to Monks Kirby churchyard in 2012 we failed to find the plant. The plants seen in 1989 on a wall near the level crossing at Berkswell (SP244776, JCB) are no longer there. The station has been rebuilt and the level crossing and all of the walls nearby have been replaced. Found in seven tetrads in Cadbury *et al.* (1971).

***Dactylorhiza incarnata***

Warwickshire Rare

**Early Marsh-orchid**

Native

|                    |          |      |         |
|--------------------|----------|------|---------|
| Depper's Bridge    | SP400593 | 2004 | JRR, VR |
| Tasker's Meadow NR | SP438651 | 2008 | JS      |

*Dactylorhiza incarnata* has always been a very rare plant in the county. With five subspecies nationally and a re-organization of the genus currently being undertaken, identification can be rather challenging.

The record from Tasker's Meadow was not reported until 2011 so as to protect the plant. A fresh floret was collected by the Vice-county Recorder James Partridge but unfortunately he was unable to decide on a subspecies. From the description given by Jane Sells it is likely to be subsp. *incarnata*. Although the site was monitored over the next few years the orchid did not reappear.

The Depper's Bridge orchids were first spotted by Louise Slack in 2002 as she cycled past. John and Val Roberts then visited the site and found a large number growing in a wet corner of the field with *D. praetermissa* (Southern Marsh-orchid). As some of these were rather tall and the population showed some variability they thought they had a hybrid swarm of *D. incarnata* x *praetermissa* (*D. wintoni*). Two years later they returned and discovered that the *D. praetermissa* had disappeared and there were only some rather large "hybrid" *D. incarnata* present. Luckily John took some photos and these were sent to BSBI referee Ian Denholm who confirmed the orchids as *D. incarnata* subsp. *incarnata* and not the hybrid.

In spite of much effort to protect the site, the landowner went ahead and planted *Salix alba* var. *caerulea* (Cricketbat Willow) and the orchids have not been seen recently.

There is a record from 1964 from Halford at probably the same site that Bagnall reported it from in his 1891 Flora. Cadbury *et al.* (1971) recorded it as subsp. *pulchella* even though this subspecies is usually only found in heathland and *Sphagnum* bogs.

***Deschampsia cespitosa* subsp. *parviflora***

Warwickshire Rare

**Tufted Hair-grass**

Native

|                |          |      |           |
|----------------|----------|------|-----------|
| Deans Green NR | SP131682 | 1996 | JL, MrsSW |
| Walton         | SP2852   | 2003 | JWP       |

This is an easily overlooked subspecies of *D. cespitosa* found in mixed woodlands and hedgerows on wet, heavy soil. It is separated from the more common subsp. *cespitosa* by its narrower leaves, that are not as rough to the touch, and its smaller spikelets that are less than 3.5 mm. long. It was not recognized as a separate subspecies in Cadbury *et al.* (1971).

***Descurainia sophia***

(Warwickshire Scarce)

**Flixweed**

Archaeophyte in GB, casual in Warwickshire

|                              |          |      |              |                         |
|------------------------------|----------|------|--------------|-------------------------|
| Langley Hall                 | SP150956 | 2006 | ITR, JWP, MP |                         |
| Belfry Golf Course, Wishaw   | SP179955 | 1995 | JL, MrsSW    |                         |
| Stratford Cemetery extension | SP194541 | 1996 | PJC          |                         |
| Heritage Farm                | SP233856 | 1998 | DP           |                         |
| Leamington Spa               | SP325657 | 2004 | JWP          | Eagle Recreation Ground |

This annual yellow crucifer is more likely to be seen in a sandy arable field in East Anglia than on waste ground in Warwickshire where it occurs as a scarce casual. In Northamptonshire it is strongly associated with the brick-making industry (Gent and Wilson, 2012). Cadbury *et al.* (1971) has records from the west of Rugby near the cement works and from 5 other tetrads.

***Dianthus armeria***

GBS: Endangered

ES: Endangered

(Warwickshire Rare)

**Deptford Pink**

Native in GB, casual in Warwickshire

|                     |          |      |     |
|---------------------|----------|------|-----|
| Water Orton Sidings | SP166913 | 1992 | HHF |
|---------------------|----------|------|-----|



As an annual species of dry, grassy places this was a frequent plant in central Warwickshire between 1817 and 1871 when it became extinct. The Water Orton plants were discovered in 1980 and may have been an introduction. Unfortunately this area has since been built on.

***Diplotaxis tenuifolia***

Warwickshire Rare

**Perennial Wall-rocket**

Archaeophyte

Ford Foundry, Leamington Spa      SP3165      2006      BL

*D. tenuifolia* is a plant of old walls, waste ground and pavement cracks and this record is probably of an introduction. It was first seen by James Partridge in 1989 when he found it at Landor Street Railway Sidings (SP087874) and Lower Clopton, Stratford-upon-Avon (SP196575). Cadbury *et al.* (1971) has a record from Wootton Wawen.

***Drosera rotundifolia***

ES: Near Threatened

Warwickshire Rare

**Round-leaved Sundew**

Native

Sutton Park, Longmoor      SP093964      2011      ITR, PCo  
Sutton Park, Pool Hollies      SP102977      2009      ITR, MP, PR, PCo  
Sutton Park, Blackroot Pool      SP108971      1998      SPG

This common, insectivorous plant of upland Britain is limited in Warwickshire to just three separate areas of Sutton Park. It was found during the nineteenth century at Coleshill Pool and Bog but has not been re-discovered there in recent surveys.

***Elatine hexandra***

Warwickshire Rare

**Six-stamened Waterwort**

Native

Coleshill Pool      SP198863      1992      DP      Twenty plus plants

The Six-stamened Waterwort is a specialist annual of the exposed muddy edges of lakes. It is usually only found following droughts with the seed able to survive submerged for many years. It was first reported by both James Bagnall and H.S.Thompson from Coleshill Pool in 1893 when it was also seen at Olton Reservoir. Cadbury *et al.* (1971) reports that it was still at Coleshill Pool in 1964 (SP2086).

***Eleocharis acicularis***

ES: Near Threatened

Warwickshire Rare

**Needle Spike-rush**

Native

Astley Hall Farm      SP331868      2007      JWP  
Paget's Pool, Ryton      SP37377204      1998      EF      Several plants

*E. acicularis* is a species that has declined sharply. Partridge (1995) states that there were only five sites for the species in 1970 but eleven in the nineteenth century. He cites drainage, competition and water pollution as the main threats. The plant can be found at the edge of sandy and muddy pools where it can grow for many years without flowering. There are records from Earlswood Lakes (SP114741) in 1986 and Sutton Park in 1987.

***Eleocharis palustris* subsp. *palustris***

Warwickshire Rare

**Common Spike-rush**

Native

Langley Hay Meadow      SP195629      1996      JL, MrsSW

This subspecies can only be separated from the widespread subsp. *vulgaris* by the smaller nuts and glumes and the larger number of flowers. James Partridge found it at Middle Hunscombe Farm (SP243554) in 1988 and the survey for Cadbury *et al.* (1971) found it at four other sites.

***Eleocharis quinqueflora***

Warwickshire Rare

**Few-flowered Spike-rush**

Native

Sutton Park, Longmoor      SP093962      2006      JWP  
Sutton Park      SP09469827      2014      BSBI      Little Bracebridge Pool

This species likes base-rich seepages and wet peat and is currently limited to the two richest areas of Sutton Park. There are nineteenth century records from SP25 and SP37.

***Eleocharis uniglumis***

Warwickshire Scarce

**Slender Spike-rush**

Native

|                      |          |      |     |                            |
|----------------------|----------|------|-----|----------------------------|
| Packington Park      | SP226846 | 1998 | DP  |                            |
| Lighthorne           | SP344559 | 1990 | JWP |                            |
| Wyken Slough NR      | SP364835 | 1997 | JS  | One large patch, waterside |
| Southam Holt, Napton | SP446605 | 1991 | JCB | One plant                  |

The national distribution of this plant is mainly coastal, but it can also be found inland in marshes and wet meadows. It was not seen on a survey at Southam Holt in 2011, one of only two tiny areas of saltmarsh within the county. Cadbury *et al.* (1971) reported it from three other tetrads.

***Eleogiton fluitans***

Warwickshire Rare

**Floating Club-rush**

Native

|            |          |      |     |  |
|------------|----------|------|-----|--|
| Bickenhill | SP204843 | 1997 | MJS |  |
|------------|----------|------|-----|--|

This is another fairly common species in upland Britain that struggles to find suitable habitat in the county. It prefers to grow on the edges of peaty pools and on muddy lake shores.

It was much more common in the nineteenth century and specimens were collected from Coleshill Bog and Sutton Park as well as other sites, and it could easily be overlooked. The species is in Cadbury *et al.* (1971) as *Scirpus fluitans*.

***Empetrum nigrum* subsp. *nigrum***

Warwickshire Rare

**Crowberry**

Native

|             |              |      |      |                       |
|-------------|--------------|------|------|-----------------------|
| Sutton Park | SP0898198487 | 2009 | BL   | Not refound in 2014   |
| Sutton Park | SP10209775   | 2014 | BSBI | Several square metres |

The Warwickshire records for this plant are on the extreme limit of its national distribution, being a common heathland plant of upland Britain. The 2009 site was visited by Nik Aspey in 2014 but the plant could not be found. The area had a very open sward which may stem from the grazing regime. It has only ever been found at Sutton Park. In Cadbury *et al.* (1971) it was reported from 5 different tetrads, so it is clearly declining.

***Epilobium lanceolatum***

Warwickshire Rare

**Spear-leaved Willowherb**

Native

|                      |            |      |     |                                    |
|----------------------|------------|------|-----|------------------------------------|
| Elmdon Manor NR      | SP165826   | 2006 | DC  |                                    |
| Outwoods, Atherstone | SP306958   | 1990 | JWP | Quarry pool edge, 2 metres square  |
| Caldecote Lane       | SP34929456 | 2012 | JSW | Four plants in gravel edge of lane |

There is also a 1997 record from SP39 (no location) from AN, that may or may not refer to the Outwoods plants. Although this plant is quite particular in its habitat of waste ground, walls and roadsides, nationally its main population is in the south, especially in Devon and Cornwall where it can be a garden weed. A 1963 record from Stratford-upon-Avon racecourse by MCC was the first county record. This is a very easy plant to overlook and is probably under-recorded.

***Epipactis dunensis***

Warwickshire Rare

**Dune Helleborine**

Native

|                            |          |      |     |  |
|----------------------------|----------|------|-----|--|
| Cuttle Pool Nature Reserve | SP201754 | 2017 | WFG |  |
|----------------------------|----------|------|-----|--|

This was a complete surprise! The buds were first noticed by the warden, Adrian Smith in early July 2016. Jo Hamer then posted a photo of a spike on Facebook Wildflowers which caused some excitement amongst the large band of orchid enthusiasts. They were eventually identified as Dune Helleborine by Mark Lynes and Sean Coles on various flower and leaf characteristics and the behaviour of the pollinia. Sean Coles has written a short article explaining *Epipactis* pollination strategies in more detail, with excellent photos. This is available on the Warwickshire BSBI webpage [www.bsbi.org/warwickshire](http://www.bsbi.org/warwickshire). One hundred and thirty-two flower spikes were seen in 2016 and their positions were measured using a nearby birch tree as a reference point. In 2017 two hundred and seventy-nine spikes were counted, and with the 71 plants that flowered in 2016 but did not appear in 2017, this makes a total of 350 plants. The nearest colony to this one is near Wrexham, about eighty miles away.

***Epipactis palustris***

Warwickshire Rare

**Marsh Helleborine**

Native

|                         |              |      |     |                         |
|-------------------------|--------------|------|-----|-------------------------|
| Ladywalk Nature Reserve | SP2134092021 | 2012 | WFG | Many hundreds of plants |
|-------------------------|--------------|------|-----|-------------------------|

Warwickshire is lucky enough to have a very large colony of this nationally rare orchid. It was first observed in 1986 at a gravel pit that had been filled with PFA (Pulverised Fuel Ash) from the nearby coal-fired power station at Hams Hall. This material initially produces a highly alkaline substrate that is both low in nutrients and saline, keeping competition low and enabling the plant to become quickly established. After 10 or more years of weathering these high alkaline levels diminish and natural succession occurs.

The first record was of just 27 plants, but a count in 2013 found over 1,000 stems and the plants have spread themselves from their original area, which is now wet birch and alder woodland, on to the open marsh. Steve Cawthray, a warden for many years at this West Midland Bird Club nature reserve, keeps an eye on the annual management plan which involves mowing every winter to keep down the rough grasses, and thinning of the woodland to keep the canopy open. The plants at Ladywalk are of the rarer var. *ochroleuca* that has a green stem and ovary and mainly whitish-green flowers. The only other record in the county is from 1817 in Oversley Wood.

***Epipactis phyllanthes***

Warwickshire Rare

**Green-flowered Helleborine**

Native

|             |          |      |    |
|-------------|----------|------|----|
| Walton Hall | SP283523 | 2002 | BL |
|-------------|----------|------|----|

This is a late flowering species with flowers that often remain closed. It was discovered by Paul Hodges and Richard Penson under an overhanging willow growing near the edge of the ornamental lake in the grounds of Walton Hall. Brian Laney checked up on the orchid later in the year and found three flowering spikes.

John and Val Roberts also visited the site thoroughly in 2005/6 as part of a BSBI survey and continued to look for the orchid in subsequent years without success. Nationally, it is found growing in shaded woodland but it is not an ancient woodland indicator and could turn up in secondary habitats such as pine plantations and hawthorn scrub. The only other record is from Charlecote in 1857.

***Epipactis purpurata***

Warwickshire Rare

**Violet Helleborine**

Native

|              |              |      |     |
|--------------|--------------|------|-----|
| Wolford Wood | SP2380733346 | 2010 | SJF |
|--------------|--------------|------|-----|

This orchid has declined dramatically in the county during the last century. It can be distinguished from its more common relation *Epipactis helleborine* (Broad-leaved Helleborine) by the brighter, paler flowers and the purplish stem-leaf undersides. In southern Britain it is frequently found in beechwoods on limestone and chalk, but is also tolerant of more acid soils. It is often found in deep shade and is an ancient woodland indicator. In Warwickshire it is mainly found under oak.

During the 1960's and 70's John Roberts regularly found this species at Bannam's Wood (SP115640), however, since Dutch Elm Disease killed the elms and opened up the canopy it has not been seen again.

We have quite a few twentieth century records for this species from Moreton Morrell (1979, SP298553, MCC), and Oversley Wood (1968, SP1056, MCC). Cadbury *et al.* (1971) has additional sightings from Rough Hill Wood (SP06), Coughton Park (SP06) and Edgbaston Park (SP08). In the nineteenth century there were even plants in the far north at Kingsbury Wood (SP2397) and Maxstoke. However, many of these records are without an accurate grid reference so refinding them is very difficult.

***Equisetum sylvaticum***

Warwickshire Scarce

**Wood Horsetail**

Native

|                          |              |      |          |                             |
|--------------------------|--------------|------|----------|-----------------------------|
| Moseley Golf Course      | SP0881       | 2007 | JWP      |                             |
| Sutton Park              | SP09469831   | 2014 | BSBI     | Little Bracebridge Pool     |
| Clowes Wood NR           | SP1014573996 | 2013 | JRR      |                             |
| Snitterfield             | SP212582     | 1999 | LCD      |                             |
| Belchers Wood, Allesley  | SP2882       | 2003 | JWP      |                             |
| Monks Park Wood          | SP297962     | 2017 | JSW, MVW |                             |
| Moorwood Farm, Hartshill | SP3117094155 | 2013 | JH       | Seventy plants in hedgebank |
| Leam Valley NR           | SP330656     | 2003 | JS       |                             |

This is Warwickshire's most delicate and graceful horsetail and the only species whose branches are branched again. It is easy to confuse it with luxuriant shade-dwelling *Equisetum arvense* (Field horsetail)

which can also have long droopy branches. It seems to be tolerant of a variety of soil types as long as they remain damp. The population at Snitterfield was seen between the golf course and the reservoir.

The large colony at Moorwood Farm was found in the spring growing underneath a hawthorn hedge. They were difficult to find two months later when the surrounding vegetation was taller. David Porter found a colony at Hawkes End (SP2882) in 1987 and there are extra records from Trickle Coppice (SP1599) and Wasperton (SP2759) in Cadbury *et al.* (1971).

### ***Equisetum x litorale***

Warwickshire Scarce

### **Hybrid Horsetail**

Native

|                        |          |      |       |
|------------------------|----------|------|-------|
| River Arrow            | SP068450 | 1994 | JD    |
| Ipsley Alders          | SP080676 | 1994 | JD    |
| Shirley                | SP102782 | 1996 | CW    |
| Sutton Park, Blackroot | SP1097   | 2015 | BBCRG |
| Warwick                | SP274656 | 1995 | JWP   |

This species is a hybrid between *E. fluviatile* (Water Horsetail) and *E. arvense* (Field Horsetail) and is the most common *Equisetum* hybrid found in the county. A useful distinguishing characteristic is its long whip-like top. It is included in the *Equisetum* key in Stace (2010). The first county record was seen by JA in 1987 at Hill Hook NR, Sutton Coldfield, and it is easily overlooked.

### ***Erica cinerea***

ES: Near Threatened

Warwickshire Rare

### **Bell Heather**

Native

|                     |            |      |          |
|---------------------|------------|------|----------|
| Sutton Park         | SP0896     | 2002 | PCo      |
| Sutton Park         | SP108974   | 1996 | MJH      |
| Coleshill Pool Wood | SP199861   | 1996 | NNB, VN  |
| Baddesley Common    | SP27579773 | 2014 | JSW, MVW |

Bell Heather has always been rare in the county but its loss from all six tetrads in Sutton Park within forty years is very worrying (Readett, 1971). At the 2011 Warwickshire Flora Group meeting to Sutton Park, Ian Trueman suggested that its decline was caused by a general drying out of the whole park. The Baddesley Common plants have thankfully regenerated after a fire a few years ago, but the colony is only 5 metres square and obviously quite vulnerable. There is a Friends of Baddesley Common group that manages the site and ensures that the colony doesn't get too overgrown. This may now be the only site in the county, as it was not seen in the survey at Coleshill Pool in 2010. There is a record from Wirehill just north of Rough Hill Wood NR in Redditch in Cadbury *et al.* (1971).

### ***Erica tetralix***

ES: Near Threatened

Warwickshire Scarce

### **Cross-leaved Heath**

Native

|                              |              |      |              |  |
|------------------------------|--------------|------|--------------|--|
| Sutton Park, Streetly Clumps | SP0887298544 | 2013 | JSW, MVW     | Frequent amongst heather                                       |
| Sutton Park                  | SP0942982    | 2015 | BBCRG        | Near Little Bracebridge Pool, common south-east of the railway |
| Sutton Park                  | SP1019497762 | 2010 | BL           |  |
| Sutton Park, Blackroot       | SP1097       | 2015 | BBCRG        |  |
| Coleshill Pool               | SP1988885978 | 2010 | BL           |  |
| Baddesley Common             | SP27279763   | 2013 | BL, JSW, MVW | Three plants on spoilheap                                      |

As heathland is such a rare habitat in the county, it is perhaps not surprising that this species grows at the same sites as the previous one. It is still present and thriving in some areas of Sutton Park, but the six tetrads reported in Cadbury *et al.* (1971) have now shrunk to three. Cadbury also has records from Trickle Coppice (SP1498) and Foreshaw Heath (SP0872). We were pleased that the Baddesley Ensor plants managed to survive the bulldozer when drainage work was carried out in the winter of 2012/13.

### ***Eriophorum angustifolium***

ES: Vulnerable

Warwickshire Scarce

### **Common Cotton-grass**

Native

|                              |            |      |              |                         |
|------------------------------|------------|------|--------------|-------------------------|
| Sutton Park, Longmoor Pool   | SP08729731 | 2005 | MP, ITR, JHA | Damp heathland, mire    |
| Sutton Park                  | SP09249568 | 2005 | MP, ITR      | Marsh/bog               |
| Sutton Park, Longmoor        | SP093964   | 2011 | ITR, PCo     |                         |
| Sutton Park, Longmoor Valley | SP09109627 | 2006 | MP, ITR, PR  |                         |
| Sutton Park                  | SP092982   | 2015 | BBCRG        |                         |
| Sutton Park                  | SP09469827 | 2014 | BSBI         | Little Bracebridge Pool |
| Sutton Park                  | SP1096     | 1996 | SPG          |                         |

|                        |              |      |          |                                |
|------------------------|--------------|------|----------|--------------------------------|
| Sutton Park            | SP102979     | 1998 | JS       |                                |
| Sutton Park, Blackroot | SP1097       | 2015 | BBCRG    |                                |
| Coleshill Pool         | SP1995785813 | 2010 | BL       |                                |
| Packington             | SP2284       | 1998 | HBA      |                                |
| Edge Hill, Wood End    | SP2377298359 | 2013 | JSW, MVW | About 40 plants in two patches |

Like many of Warwickshire's rarest plants this is a moorland and heathland specialist commonly found in acid communities in the rest of the country. Although its distribution at Sutton Park has declined since Cadbury *et al.* (1971), at Wood End the plant has managed to colonize a *Typha latifolia* (Common Bulrush) marsh fed by a stream in an area of mineral spoilheaps. There is a 1986 record from a similar habitat at Bishops Itchington Quarry (SP368588) seen by MF.

***Eriophorum vaginatum***  
Warwickshire Rare

**Hare's-tail Cotton-grass**  
Native

|                               |              |      |         |  |
|-------------------------------|--------------|------|---------|--|
| Sutton Park                   | SP0864196316 | 2010 | BL      |  |
| Sutton Park, Longmoor Pool    | SP092956     | 2005 | ITR, MP |  |
| Sutton Park                   | SP092982     | 2015 | BBCRG   |  |
| Sutton Park, Bracebridge area | SP10209775   | 2014 | BSBI    |  |
| Sutton Park, Blackroot        | SP1097       | 2015 | BBCRG   |  |
| Coleshill Pool                | SP1988885978 | 2010 | BL      |  |
| Bodymoore Heath               | SP202971     | 2002 | MAA, EH |  |

The single, upright fluffy seedheads of this species easily separate it from the previous one. Cadbury *et al.* (1971) also reported it from five tetrads within the park. The plants reported from Bodymoore Heath have gone. In 2002 ten plants were discovered growing in vegetation beside the Birmingham and Fazeley canal, just north of the path to the SITA hide, to the west of Kingsbury Water Park. This is a route regularly walked by the authors who, alas, have yet to see it.

***Erodium moschatum***  
Warwickshire Scarce

**Musk Stork's-bill**  
Archaeophyte

|                              |            |      |                   |                          |
|------------------------------|------------|------|-------------------|--------------------------|
| University of Birmingham     | SP051846   | 2002 | DW                |                          |
| Barton Farm, Bidford-on-Avon | SP117509   | 1997 | PJC               | Arable field edge        |
| Welford-on-Avon              | SP14605195 | 1996 | DH                | One plant, allotment     |
| Sheldon                      | SP15028594 | 2017 | JSW, MVW          | Probably a garden escape |
| Minworth Sewage Works        | SP170920   | 2001 | CNHS              |                          |
| Kenilworth                   | SP296735   | 2012 | MJS               |                          |
| Leamington Spa               | SP32176566 | 2014 | JSW, MVW, JRR, VR | Jephson Gardens          |

This annual plant can be found growing in arable fields, sandy places with a short sward and in urban mowed lawns where it can be very small. The colony in Jephson Gardens, growing in a lawn, had been left to flower when it was last checked in April 2014. The Sheldon plants were found on the corner of Mickleton Avenue and Garrett's Green Lane and had spread to other nearby gardens. The leaves give off a musky smell when bruised and the leaflets are less cut than on the more frequent *Erodium cicutarium* (Common Stork's-bill). It was not recorded in the survey for Cadbury *et al.* (1971).

***Erophila glabrescens***  
Warwickshire Scarce

**Glabrous Whitlowgrass**  
Native

|                             |              |      |                   |                 |
|-----------------------------|--------------|------|-------------------|-----------------|
| Kettlebrook Park            | SK224023     | 1991 | GAA, MAA          |                 |
| Upton                       | SP121577     | 1998 | PJC               | Road embankment |
| Stratford-upon-Avon         | SP204554     | 1993 | JCB               |                 |
| Hammerton Way, Wellesbourne | SP2714054440 | 2002 | PJC               |                 |
| Walton                      | SP2852       | 2003 | JWP               |                 |
| Hampton-in-Arden            | SP207809     | 1997 | DP                |                 |
| Morrison's, Binley          | SP383780     | 2012 | JS                |                 |
| Barnacle                    | SP38818464   | 2016 | JSW, MVW          |                 |
| Long Itchington             | SP41506526   | 2015 | JSW, MVW, JRR, VR |                 |
| GEC Rugby                   | SP508766     | 1994 | PP                |                 |

It can be very difficult to identify plants of the *Erophila* aggregate to species level. There are some Warwickshire specimens in the Warwick Herbarium determined by S.A. Filfilan and T.T. Elkington, the two botanists who carried out the most recent cytotaxonomic analysis of the genus. Their key is in *The Plant Crib* (Rich and Jermy, 1998) and available free on the BSBI website. It has been found growing on a wide range of



found amongst alpiners and may have been introduced with other plantings. However, this is an established colony with plants continuing to appear annually.

## **EUPHRASIA**

The English name of *confusa* (Confused Eyebright) could easily be applied to the whole *Euphrasia* genus because eyebrights are a collection of extremely variable microspecies that are very difficult to identify. *Euphrasia* hybrids are now considered to occur more frequently than in the past and large hybrid swarms may be found at some sites making identification even more of a challenge.

In 2014 a BSBI *Euphrasia* Study Group was set up with a series of workshops held to encourage people to look more closely at these plants. The workshops were led by Chris Metherell, the BSBI referee, and author of the coming *BSBI Euphrasia Handbook*.

In the summer of 2015, eight collections were made from various sites within the county, and material sent to Chris for determination. They were then sent to join the many specimens in the Warwick herbarium from the 1960's and 1970's which had been checked and confirmed by P. Yeo. For accurate identification by the BSBI referee it is necessary to collect at least five specimens with both seeds and flowers present. Material from the two largest Warwickshire populations at Tasker's Meadow and Oldbury was also sent to Alex Twyford at the University of Edinburgh who is working on the genetics of the group. Records that have not been named to microspecies are included in the *E. officinalis* aggregate below.

All of the 2015 and 2016 records below have been determined by Chris Metherell.

### ***Euphrasia arctica* × *confusa***

Warwickshire Rare

**Hybrid Eyebright**

Native

Windmill Hill Nature Area                      SP3415693457    2016    JSW

This colony of about seventy plants was brought to our attention by Jon Bowley and John Harris in 2015.

A collection was made from a small area of grassland in July 2016 and sent to Chris Metherell for identification. This hybrid is mainly a western and northern species and is the first to be found in the whole of central, southern and eastern England.

### ***Euphrasia arctica* × *nemorosa***

Warwickshire Rare

**Hybrid Eyebright**

Native

Ufton Fields NR                                      SP37906158        2015    JSW, MVW        Limestone grassland

The colony occurs in the limestone grassland at the north end of the reserve near the bird hide and contains many hundreds of plants. This record may be of the same plants reported as *E. nemorosa* by S. Falk in 2008. There are no previous records of this hybrid. There were three records of *E. arctica* mentioned in Cadbury *et al.* (1971) from Elder Tree Copse (SP1382), Kineton (SP3449) and Lighthorne (SP3455) and *E. arctica* may be found again with more intensive surveying. There is a specimen of *E. arctica* in the Warwick herbarium made by R. C. Readett from near Pillerton Hersey in 1969 (SP268498).

### ***Euphrasia confusa***

ES: Vulnerable

Warwickshire Scarce

**Confused Eyebright**

Native

|                                   |              |      |          |                              |
|-----------------------------------|--------------|------|----------|------------------------------|
| Lea Marston Quarry                | SP2071794271 | 2016 | JSW      |                              |
| Little Wolford                    | SP23         | 1996 | AN       |                              |
| Oldbury, Hartshill                | SP313951     | 2013 | JSW, MVW |                              |
| Burton Dassett Hills Country Park | SP396520     | 1992 | JCB      | Calcareous sheep grazed turf |
| Stockton Cutting NR               | SP437651     | 1990 | MCB      |                              |

The Oldbury site, just to the east of Mancetter Quarry, is unusual as it is an area of rough grassland on acid soil in the north of the county and contains many 1,000's of plants. This site was first brought to our attention in 2011 by John Harris and specimens were eventually identified as *E. confusa*, after various mishaps, by Chris Metherell at a BSBI workshop session in September 2013. In 2015 a further collection was made from the northern end of the site and these were determined as *E. nemorosa*. It is not unusual for large colonies to contain more than one species and the hybrid between the two species is also likely to occur. While collecting fresh material JSW and MVW met an elderly man who had lived in a cottage that used to stand at the bottom of that very field when he was a child and he could remember the flowers being there 60 years ago. The first county record for the species was in 1978 when John Bowra discovered the Burton Dassett population, and that record was confirmed by P. Yeo.

***Euphrasia confusa* × *nemorosa***

Warwickshire Rare

**Hybrid Eyebright**

Native

Napton Quarry                      SP45436158      2015      JRR, VR

A group of about thirty plants was seen in limestone grassland of the quarry spoilheaps.

***Euphrasia confusa* × *micrantha***

Warwickshire Rare

**Hybrid Eyebright**

Native

Sutton Park                              SP0936996051      2015      MR, MS      west of the Longmoor stream

The Birmingham and Black Country Recording Group surveyed Longmoor on 25 August 2015, not knowing that Mike Smith and Martin Rand (the South Hampshire Vice-county Recorder) had already visited the site five days previously! They also sent specimens from the same colony to the BSBI referee Chris Metherell and this time they came back identified as the hybrid, rather than the main species, (see below). This is not unusual as hybrid swarms are fairly common with *Euphrasias*.

***Euphrasia micrantha***

ES: Endangered

Warwickshire Rare

**Slender Eyebright**

Native

Sutton Park                              SP09369605      2015      BBCRG

A small colony of about twenty plants was found on the edge of the heathland near the base-rich mire near Longmoor Pool, five days after the above find. It is one of Warwickshire's rarest plants, being the only recent record in the Midlands and like many of Sutton Park's specialities it is a species more likely to be encountered in the wetter north and west of the British Isles. Bagnall reported *E. nemorosa* from Sutton Park in 1866 and Harold Fowkes reported some plants as *E. nemorosa* from close to this site in 1995 (SP0995 & SP0996) which may have been this species. There is one further modern record of *E. micrantha* in Cadbury *et al.* (1971) from a calcareous canal bank near Olton (SP1392).

***Euphrasia nemorosa***

ES: Near Threatened

Warwickshire Scarce

**Common Eyebright**

Native

|                        |              |      |          |                      |
|------------------------|--------------|------|----------|----------------------|
| Haselor Lodge          | SP135566     | 1992 | JB       |                      |
| Snitterfield Bushes NR | SP19816013   | 2015 | JSW, MVW |                      |
| Cross Hands Quarry     | SP26822883   | 2010 | SJF      |                      |
| Oldbury, Hartshill     | SP31149530   | 2015 | JSW, MVW |                      |
| Harbury Spoilbank NR   | SP3853059894 | 2015 | JSW, MVW | Many 100's of plants |
| Bishops Hill NR        | SP393583     | 2015 | JSW, MVW |                      |
| Tasker's Meadow NR     | SP43936515   | 2015 | JSW, MVW |                      |

If you come across an Eyebright growing in limestone grassland in Warwickshire, it is most likely to be this species. The Snitterfield plants are on the part of the reserve south of the road. Two small patches can be seen next to the path from the car park and there is a larger area on the edge of the airfield as you exit the trees. There are about 150 plants in all. The Tasker's Meadow colony is more extensive and may well consist of thousands of plants. Although the habitat at Bishops Hill looked favourable for *Euphrasias*, the number of plants seen (about 20) was surprisingly low. Cadbury *et al.* (1971) reported *E. nemorosa* from 42 tetrads, but the species is declining due to habitat loss and poor grassland management.

**Below are some more post-1990 sites of *E. officinalis* agg. that still need to be investigated.**

|                               |            |      |     |
|-------------------------------|------------|------|-----|
| Railway Triangle, Water Orton | SP1591     | 1996 | CW  |
| Hay Wood                      | SP21047129 | 2017 | CN  |
| Wroxall                       | SP2272     | 1997 | HBA |
| Walton                        | SP2852     | 2003 | JWP |
| Ryton Pools                   | SP3672     | 1998 | HBA |
| Brandon Marsh                 | SP388758   | 2017 | JS  |
| Nettle Hill                   | SP418823   | 1998 | MJS |
| Southam Old Quarry            | SP4264     | 2017 | GC  |
| Stockton Locks                | SP4364     | 2017 | GC  |
| Off Stockton Road, Stockton   | SP42676477 | 2017 | GC  |



Some dried-up late specimens from Hay Wood were sent to Chris Metherell in September 2017 which Chris felt were probably *Euphrasia arctica*. Better material will be collected in 2018 so that a positive identification can be made. There is also a record of *E. officinalis agg.* from Sutton Park (SP0998) in Trueman *et al.* (2013) well away from the *E. micrantha* site. A specimen from Kineton (SP3449), mentioned in Cadbury *et al.* (1971) and provisionally thought to be *E. stricta* is unlikely to be that species as that taxon is now considered to be very rare. A further specimen from Harbury (SP3660) was thought to be close to *E. pseudokernerii*. Unfortunately neither of these two specimens can be located.

***Festuca altissima***

Warwickshire Rare

**Wood Fescue**

Native

Bentley Park Wood                      SP290958                      1990                      MJS

*Festuca altissima* is an uncommon upland species that is virtually absent from the Midlands, because of a lack of its preferred habitat of crevices and rocky slopes and ledges, overlooking streams in shaded woodland. Luckily there is just such a place in Bentley Park Wood, near Atherstone, from where it was described as growing abundantly with “about 30 big clumps”. Although it hasn’t been reported since 1990, it is in a very inaccessible area, and may well have survived.

***Festuca filiformis***

Warwickshire Rare

**Fine-leaved Sheep’s-fescue**

Native

|                                |            |      |                  |                              |
|--------------------------------|------------|------|------------------|------------------------------|
| Sutton Park                    | SP08949594 | 2005 | MP, JHA, EC, ITR | Woodland clearing            |
| Sutton Park                    | SP0896     | 2005 | MP, JHA, ITR     |                              |
| Sutton Park                    | SP0897     | 2005 | MP, JHA, ITR     | Heathland                    |
| Sutton Park, Streetly Gate     | SP08999837 | 2005 | MP, JHA, ITR     |                              |
| Sutton Park                    | SP09179563 | 2005 | MP, ITR          | Heathland                    |
| Sutton Park, Longmoor Valley   | SP09079663 | 2006 | MP, PR, ITR      | Stream margin, dry heathland |
| Sutton Park                    | SP09619708 | 2005 | EC, MP, JHA, ITR | Acidic grassland             |
| Sutton Park                    | SP09469831 | 2015 | BBCRG            | Little Bracebridge Pool      |
| Sutton Park                    | SP103956   | 2005 | MP, JHA, ITR     | Heathland                    |
| Sutton Park                    | SP10099679 | 2005 | EC, MP, JHA, ITR | Heathy grassland             |
| Sutton Park, near Blackroot    | SP1097     | 2015 | BBCRG            |                              |
| Sutton Park, Bracebridge area  | SP10429788 | 2005 | MP, ITR          |                              |
| Sutton Park                    | SP102987   | 2005 | MP, ITR          | Heathland                    |
| Sutton Park                    | SP11059587 | 2005 | MP, JHA, ITR     | Heathland, light woodland    |
| Sutton Park                    | SP11149614 | 2005 | MP, JHA, ITR     |                              |
| Sutton Park, near Hartsop Gate | SP11159709 | 2005 | MP               |                              |
| Bedworth, Old Coalfield        | SP364865   | 1999 | JS               |                              |
| Herald Way                     | SP381722   | 1996 | MJS              |                              |

This species is probably under-recorded outside Sutton Park because of confusion with the various subspecies of *F. ovina*. Trueman *et al.* (2013) report it from every tetrad there. In Cadbury *et al.* (1971), which lists six other sites in north-west Warwickshire, it is called *F. ovina* subsp. *tenuifolia*.

***Festuca ovina* subsp. *ophiolicola***

Warwickshire Rare

**Sheep’s-fescue subsp.**

Native

Midsummer Meadow SSSI                      SP239411                      1997                      JCB

This subspecies can be separated from the previous one and from subsp. *ovina* by its slightly larger lemmas and spikelets. It may be under-recorded because of the identification difficulties within this group and critical material should be collected and refereed. There is a doubtful 1905 record in the WBRC from an unknown author from Shipston-on-Stour (SP2540) that does not appear on any other database, nor is it mentioned in Cadbury *et al.* (1971).

***Festuca rubra* subsp. *commutata***

Warwickshire Rare

**Chewing’s Red Fescue**

Native

Olton Sports Centre                      SP133812                      1999                      JL, SW  
Wellesbourne                      SP272551                      1993                      JCB

The key in Stace (2010) mentions seven different subspecies of *F. rubra*. This one, which he considers to be under-recorded, can be separated from the rest, by its lack of rhizomes. The national distribution is scattered

with pockets of abundance in Yorkshire and near Liverpool which is probably due to recorder bias. Although it occurs as a native, it is also a common component of lawn grass seed mixtures and the two records above may have been from this source. There are a few records from the 1980's: Hampton-in-Arden, 1987 (SP207808), Snitterfield Park Lane, 1987 (SP2259) and Hagley Road Station, 1982 (SP0386). Cadbury *et al.* (1971) reports it from 20 tetrads.

### ***Filago vulgaris***

GBS: Near Threatened

ES: Near Threatened

### **Common Cudweed**

Native

|                                   |              |      |                        |                    |
|-----------------------------------|--------------|------|------------------------|--------------------|
| Peel Heights, Wilnecote           | SK226007     | 2008 | MAA                    |                    |
| Pennine Way, Stoneydelph          | SK239009     | 2009 | MAA                    |                    |
| Edgbaston Reservoir               | SP043867     | 2002 | Anon                   |                    |
| Salford Priors Gravel Pit         | SP076530     | 2013 | JJB, JRR, VR, JSW, MVW |                    |
| Tanworth                          | SP094728     | 1993 | MJS                    |                    |
| Sutton Park                       | SP1012796002 | 2011 | JH                     |                    |
| Bearley Railway Sidings           | SP170604     | 1996 | JL, MrsSW              |                    |
| Stratford Greenway                | SP1877953299 | 2011 | MD                     |                    |
| Bickenhill Plantation             | SP18928464   | 2012 | WFG                    |                    |
| Hanson's Quarry Middleton         | SP1952697814 | 2012 | WFG                    |                    |
| Coleshill Sludge Treatment Wks.   | SP195915     | 2011 | JJB                    |                    |
| Pendigo Lake, NEC                 | SP19448336   | 2013 | DAB                    |                    |
| Lea Marston Quarry                | SP2049393813 | 2012 | WFG                    |                    |
| Kingsbury Water Park              | SP210952     | 2011 | JSW, MVW               |                    |
| Shustoke Reservoir                | SP220915     | 2011 | JBA                    |                    |
| Meriden Sand & Gravel Quarry      | SP229813     | 2014 | WFG                    |                    |
| Grove Park                        | SP231653     | 2000 | BD                     |                    |
| Kingsbury Colliery                | SP237984     | 1990 | MAA, GAA               |                    |
| Daw Mill Sidings                  | SP252903     | 2013 | JSW, MVW               |                    |
| Baddesley Quarry                  | SP265985     | 2007 | MAA                    |                    |
| Baddesley Old Pit Site            | SP2879       | 2013 | BL, JSW, MVW           | Hundreds of plants |
| Burmington                        | SP269382     | 1996 | DO                     |                    |
| Allesley                          | SP2882       | 2003 | JWP                    |                    |
| Purley Quarry                     | SP3041296375 | 2012 | JH                     |                    |
| Hartshill Sidings                 | SP33719488   | 2012 | VC                     |                    |
| Hartshill                         | SP3393693569 | 2015 | JH                     |                    |
| Nuneaton, Stoney Road             | SP345926     | 2012 | VC                     |                    |
| Bubbenhall Quarry                 | SP3606871839 | 2009 | BL                     |                    |
| Siskin Rise, Coventry             | SP366753     | 2007 | JWP                    |                    |
| Paget's Lane, Bubbenhall          | SP368272246  | 2010 | IT, BL                 |                    |
| DM Kineton, Borrowpit Lake        | SP36955146   | 2012 | WFG                    |                    |
| Ryton Pools Country Park          | SP37367211   | 2012 | JSW, MVW               |                    |
| Claybrookes Marsh NR              | SP379770     | 2011 | JSW, MVW               |                    |
| Brandon Wood                      | SP386762     | 2012 | WFG                    |                    |
| Burton Dassett Hills Country Park | SP3951       | 2011 | Anon                   |                    |
| Bramcote                          | SP416876     | 1998 | MJS                    |                    |
| Blooms Garden Centre              | SP448720     | 2011 | BL                     |                    |
| Newbold-on-Avon                   | SP491762     | 2011 | DL                     |                    |

*F. vulgaris* cannot be considered rare in Warwickshire. It is included in this register because of its national status, which has declined steeply. It favours bare acid to neutral soil in quarries, mineral workings and gravel pits with sites concentrated along the Tame Valley and in the Brandon area, SE of Coventry. As an annual, populations fluctuate from year to year and in 2011, favourable weather led to a considerable population expansion and a large number of new sites were found, some containing thousands of plants. To put this in context, the plant was recorded from only seven sites in the survey for Cadbury *et al.* (1971). It is often seen with *F. minima* (Small Cudweed), *Ornithopus perpusillus* (Bird's-foot) and *Trifolium striatum* (Knotted Clover).

### ***Frankenia laevis***

GBS: Near Threatened

ES: Near Threatened

Warwickshire Rare

### **Sea-heath**

Native

|                            |              |      |         |  |
|----------------------------|--------------|------|---------|--|
| Marlcliff, Bidford-on-Avon | SP0991550738 | 2013 | JBA, SJ |  |
|----------------------------|--------------|------|---------|--|

This surprising find was first spotted by entomologist Robert Thoman when he was out looking for leaf-mines. He sent a photo of it to iSpot, then contacted us, and with John and Val Roberts we went to investigate. The plant was growing in six separate clumps along about twenty metres of kerbstone in front of a hedge. Material was taken and confirmed by Fred Rumsey and David Pearman. The local Alpine Flower Society group in Stratford-upon-Avon were contacted, but none of the members were cultivating this species in their gardens. As its name suggests, Sea-heath usually occurs in saltmarshes and dunes in England and Wales but it is

sometimes grown as an ornamental. No other inland salt-tolerant species such as *Puccinellia distans* (Reflexed Saltmarsh-grass) or *Plantago coronopus* (Buck's-horn Plantain) were seen with it.

***Fumaria capreolata***

Warwickshire Rare

**White Ramping-fumitory**

Native

|                         |          |      |    |
|-------------------------|----------|------|----|
| Warwick Castle Park     | SP287646 | 1998 | SW |
| Griff Hollows, Bedworth | SP362898 | 1996 | PN |

Nationally, it occurs mainly near the coast and is declining inland. The Warwick Castle plant was found growing on a grassy bank "near the new bridge to the island". The only other Warwickshire record was from Rugby in 1831 by W. Baxter. Both records are of subsp. *babingtonii*.

***Fumaria muralis* subsp. *boraei***

Warwickshire Scarce

**Common Ramping-fumitory**

Native

|                              |              |      |              |
|------------------------------|--------------|------|--------------|
| Winterbourne Botanic Gardens | SP052838     | 2016 | BBCRG, WFG   |
| Four Oaks                    | SP104994     | 2006 | JWP          |
| Hanson's Quarry, Middleton   | SP18769750   | 2012 | JSW, MVW     |
| Balsall Common               | SP2236979405 | 2010 | BL           |
| 46 Hill Top, Baddesley Ensor | SP269987     | 2013 | BL, JSW, MVW |
| Charles Street, Warwick      | SP294658     | 2011 | DE           |
| Coventry                     | SP3085778028 | 2010 | BL           |
| Baginton Allotments          | SP33777548   | 2009 | SJF          |
| Aldermoor Fields, Coventry   | SP35597710   | 1994 | GS, MJS      |
| Wood Farm, Bubbenhall        | SP3717371745 | 2010 | BL           |

Strangely this species seems to be on the increase as it was not recorded in the survey for Cadbury *et al.* (1971). Apart from the first county record in 1872, there is only one further record from Sherbourne (SP259622) in 1987. It has been reported from gardens, allotments and pavement cracks.

***Fumaria officinalis* subsp. *wirtgenii***

Warwickshire Rare

**Common Fumitory**

Archaeophyte

|                               |          |      |     |                      |
|-------------------------------|----------|------|-----|----------------------|
| Birmingham University Grounds | SP0493   | 2008 | SWH |                      |
| Withybrook                    | SP439844 | 1991 | MJS | Edge of arable field |

It is easy to overlook this subspecies of the Common Fumitory (*F. officinalis* subsp. *officinalis*) as it grows in similar habitats. It has fewer flowers per raceme and the sepals are smaller. There are two other 1980's records for this plant, in 1987 from Ufton (SP384624) and in 1989 from Stratford-upon-Avon (SP200539).

***Galeopsis angustifolia***

GBS: Critically Endangered ES: Critically Endangered Warwickshire Rare

**Red Hemp-nettle**

Archaeophyte

|                          |          |      |     |
|--------------------------|----------|------|-----|
| Ratley Quarry, Edge Hill | SP372471 | 1992 | ADU |
|--------------------------|----------|------|-----|

Agricultural intensification has been the main cause of this arable weed's rapid decline, and it may now be extinct in the county. There is a slight possibility that populations may still exist at Ratley and at Cross Hands Quarry where the plant was seen in 1986 (SP272292).

John and Val Roberts saw it regularly in the 1970's at Ufton Hill Farm (SP389616), before the farmer destroyed the site to make it into a private tip rather than an SSSI. There is a rather dubious, anonymous record from Oscott College on the WBRC database (SP095963, 1997) that is not found anywhere else. Cadbury *et al.* (1971) regards it as an "occasional" plant and reports it from 19 tetrads.

***Galeopsis speciosa***

GBS: Vulnerable ES: Vulnerable Warwickshire Rare

**Large-flowered Hemp-nettle**

Archaeophyte

|                              |              |      |         |            |
|------------------------------|--------------|------|---------|------------|
| Castle Bromwich Hall Gardens | SP1421689730 | 2013 | MS. DWA | One plant  |
| Maxstoke                     | SP223886     | 2004 | DP      | Two plants |

This has always been a rare plant in Warwickshire, occurring more frequently in Northern Britain. The Maxstoke plants appeared in an area of sown grassland. This may indicate that the plants were introduced in a seed-mix, or came from the original seed bank when it was disturbed. The single Castle Bromwich plant

was found as a weed in the border of the Upper Wilderness area and was left to set seed but it was not seen the following year. There are only six sites from the survey for Cadbury *et al.* (1971).

***Galium palustre* subsp. *elongatum***

**Greater Marsh-bedstraw**

Warwickshire Rare

Native

|                |          |      |         |               |
|----------------|----------|------|---------|---------------|
| Edgbaston Pool | SP0583   | 2007 | MP, JWP |               |
| Bushwood       | SP187691 | 1996 | JWP     | Canal towpath |

Most of the *G. palustre* records we receive are not identified to subspecies and this one has probably been seriously under-recorded. Bagnall (1891) reports it as rare and local from all over the county, but Cadbury *et al.* (1971) does not map the two subspecies separately. It is a more robust plant than subsp. *palustre*, with longer leaves and flowers up to 4.5 mm across. There is a free on-line key to the subspecies in Rich & Jermy (1998).

***Galium parisiense***

**Wall Bedstraw**

GBS: Vulnerable

ES: Vulnerable

Warwickshire Scarce

Native

|                              |            |      |     |                                |
|------------------------------|------------|------|-----|--------------------------------|
| M40 Warwick Services         | SP337580   | 2000 | PS  | Northbound side                |
| Rugby/Leamington railway     | SP353649   | 2012 | JJB |                                |
| DM Kineton, base of bund     | SP37135174 | 2012 | WFG | Dry grassland, one large patch |
| Offchurch/Hunningham railway | SP384666   | 2012 | JJB |                                |

At the start of the WFG meeting at DM Kineton, Brian Laney jokingly said that he would probably find the first county record for this plant on that day. He was wrong, because three hours later it was Jon Bowley who arrived with a small specimen of it from the east end of the bund overlooking Borrowpit Lake. Later, while checking his records, Brian found that the species had in fact been seen before at Warwick Services in 2000 but no record had been sent in to the WBRC at the time. It is found mainly in southern England on calcareous soil and prefers walls and bare soil where competition is low. Specimens from Kineton and Offchurch are now in the Warwick Herbarium.

***Galium* × *pomeranicum***

**Hybrid Bedstraw**

Warwickshire Rare

Native

|                   |          |      |           |
|-------------------|----------|------|-----------|
| Roundhill Coppice | SP143618 | 1996 | JL, MrsSW |
| Goldicote         | SP249505 | 1991 | AN        |

A vigorous hybrid between *G. album* (Hedge Bedstraw) and *G. verum* (Lady's Bedstraw), this plant has a scattered distribution across the British Isles. It has pale yellow flowers and is unlikely to be overlooked. Cadbury *et al.* (1971) reported it from Wilmcote in 1938, but it was not seen in their main survey.

***Gastridium ventricosum***

**Nit-grass**

(Warwickshire Rare)

Native in GB, probably a casual in Warwickshire

|                            |              |      |     |
|----------------------------|--------------|------|-----|
| Salford Priors Gravel Pits | SP0790252556 | 2013 | JJB |
|----------------------------|--------------|------|-----|

These plants were found growing on a raised bank of bare sandy soil beside a track. The site is an active quarry and habitats are often only temporary. It is difficult to tell whether the colony emerged from the disturbed seedbank or arrived as a casual. There was an earlier record from an arable field at a nearby site west of Alcester in 1957 (SP9554). Thirty or so plants were seen at Salford Priors in 2013 and further patches were seen in a different part of the site in 2014.

***Genista anglica***

**Petty Whin**

GBS: Near Threatened

ES: Vulnerable

Warwickshire Rare

Native

|            |          |      |      |
|------------|----------|------|------|
| Packington | SP221865 | 1994 | NRRR |
|------------|----------|------|------|

By 1990 there were only two plants of *G. anglica* left in the county and their site was threatened by the construction of the slip road to the M6 Toll Road. In an attempt to save them, they were transplanted in suitable habitat nearby where they did not thrive. Jon Bowley from the HBA visited the site a few years ago. It is now overgrown with bramble and there is no sign of the Petty Whin. The plants were last seen in 1994. The only other Warwickshire records are from the nineteenth century.

**Genista tinctoria**

ES: Vulnerable

Warwickshire Scarce

**Dyer's Greenweed**

Native

|                        |            |      |      |
|------------------------|------------|------|------|
| Owl Wood               | SP128653   | 2000 | LS   |
| May's Hill Farm Meadow | SP13826544 | 2010 | SJF  |
| Monkspath Meadow       | SP145764   | 1996 | BD   |
| Hardwick Farm          | SP166593   | 1996 | PJC  |
| Packington             | SP221865   | 1994 | NRRR |
| Peastocking Meadow     | SP263831   | 2013 | WNHS |
| Oxhouse Farm           | SP3050     | 1993 | SJF  |
| Mollington Hill        | SP328623   | 2008 | JJB  |

*G. tinctoria* is a small shrubby plant of grassland and scrub found mainly in the west of the county. The ploughing up and improvement of much of the county's ancient meadows is to blame for a substantial decline in the species from when Cadbury *et al.* (1971) reported it from 38 tetrads. There are 1980's records from Fossedene Manor in 1987 (SP295508), Coombe Farm, Alderminster in 1985 (SP236511) and Shirley Golf Course in 1980 (SP1476). There is also a 1968 record from Alvecote (SK255048).

**Gentianella amarella subsp. amarella**

ES: Near Threatened

Warwickshire Scarce

**Autumn Gentian**

Native

|                        |              |      |          |
|------------------------|--------------|------|----------|
| Grove Hill NR          | SP115549     | 2012 | JSW, MVW |
| Binton Verge           | SP1453       | 1992 | PJC      |
| Wilmcote               | SP15105937   | 2002 | SJF      |
| Bishops Bowl           | SP38305885   | 2002 | SJF      |
| Harbury Spolbank NR    | SP384598     | 2014 | JSW, MVW |
| Ufton Fields NR        | SP384617     | 1996 | BD       |
| Bishops Hill NR        | SP3910458238 | 2010 | BL       |
| Long Itchington Quarry | SP420635     | 2009 | JB       |
| Stockon Cutting NR     | SP440649     | 1996 | MCB      |
| Stockton Quarry        | SP4431364186 | 2010 | BL       |

This late flowering species is limited to the limestone grassland and quarries in the south of the county. It prefers an open, often disturbed habitat, but sites can easily be threatened by competition and the overgrowth of bramble (*R. fruticosus agg.*). There is a record from Wolford Wood (SP2333) in 1986 and another from near Goldicote (SP2250) during the 1980's. It was reported from 11 tetrads in Cadbury *et al.* (1971).

**Geum rivale**

Warwickshire Scarce

**Water Avens**

Native

|                              |            |      |     |                                 |
|------------------------------|------------|------|-----|---------------------------------|
| Birmingham Botanical Gardens | SP04778539 | 2007 | JWP | Along edge of path by duck pond |
| Clowes Wood NR               | SP100737   | 1996 | RH  |                                 |
| Grove Hill NR                | SP115549   | 2012 | WFG |                                 |
| Pype Hayes                   | SP1292     | 1996 |     |                                 |
| Coopers Wood                 | SP253979   | 1999 | AG  |                                 |
| Seeswood Pool                | SP329904   | 2004 | DC  |                                 |
| Chesterton Wood              | SP341573   | 2013 | JJB |                                 |
| Ufton Wood                   | SP3862     | 1996 | JT  |                                 |
| Brandon Wood                 | SP394768   | 1993 | MJS |                                 |
| Stretton                     | SP439812   | 1996 | MJS |                                 |

Some people will know this species as a garden plant with many horticultural varieties. There is also a native hybrid between *G. rivale* and *G. urbanum* (Wood Avens) called *G. x intermedium*, so care is needed to ensure you have the true native species. Its natural habitat is wet woodland and damp grassland, often beside streams. It has declined from the 24 tetrads given in Cadbury *et al.* (1971), and was not seen at Brandon Wood or Clowes Wood on recent WFG surveys.

**Glebionis segetum**

GBS: Vulnerable

ES: Vulnerable

**Corn Marigold**

Archaeophyte and casual

|                              |              |      |                         |
|------------------------------|--------------|------|-------------------------|
| Freasley Lane                | SK234005     | 1991 | MAA                     |
| The Centre of the Earth      | SP044881     | 1994 |                         |
| Salford Priors Gravel Pits   | SP0776252640 | 2013 | JSW, MVW, JJB, JRR, VR, |
| Birmingham and Fazeley Canal | SP09218985   | 2002 | TMO                     |
| Birmingham and Fazeley Canal | SP108900     | 2002 |                         |
| Job's Close                  | SP175766     | 2011 | JJB                     |

|                             |              |      |          |                                    |
|-----------------------------|--------------|------|----------|------------------------------------|
| Henwood                     | SP183795     | 1995 | BD       |                                    |
| Middleton Lakes RSPB        | SP194982     | 2009 | NW       |                                    |
| Coleshill                   | SP201895     | 1997 | DP       | 10,000 plus plants                 |
| Kingsbury Water Park        | SP209952     | 1997 | EH       |                                    |
| Balsall Common              | SP2218979703 | 2011 | JSW, MVW |                                    |
| Northbrook Farm, Fulbrook   | SP246615     | 1998 | PJC      | Two plants                         |
| Balsall Common              | SP252751     | 1995 | JT       |                                    |
| A3400, Little Wolford Heath | SP276343     | 1995 | PJM      |                                    |
| Abbey Fields Pool and Marsh | SP283722     | 2010 | SS       | Introduced with seed mix           |
| Oakley Wood                 | SP301599     | 1991 | HAR      | One plant                          |
| Combrook                    | SP315519     | 1993 | HAR      |                                    |
| Coventry                    | SP332784     | 1990 | MJS      | Three plants                       |
| Leam Valley NR              | SP338652     | 2010 | WNHS     |                                    |
| Baginton                    | SP338754     | 1991 | MJS      | Three or four plants               |
| Harbury                     | SP361594     | 1992 | HAR      | Four plants                        |
| River Sowe                  | SP365779     | 1992 | MJS      |                                    |
| Hockley House Farm          | SP403693     | 1996 | JWA      |                                    |
| Fenny Compton Wharf         | SP433533     | 1992 | HAR      | One plant                          |
| Thurlaston Grange Farm      | SP459709     | 1991 | JB       | Six plants                         |
| Rugby Bypass                | SP4662773577 | 2010 | BL       |                                    |
| Dunchurch                   | SP471714     | 2013 | JSW, MVW | 100s amongst poppies in wheatfield |
| Clifton                     | SP528760     | 1996 | PP       |                                    |

Corn Marigold (*Glebionis segetum*), was one of the species chosen for special attention by the BSBI Threatened Plants Project in 2009. Warwickshire did not get involved in this until 2011, so only a few sites were examined in 2013. Many records are of just a few plants that appear either as casuals or when the seed bank is disturbed. The wheat field near the Baptist Church in Dunchurch, however, can be a really splendid sight with hundreds of golden-headed plants scattered amongst the poppies. The 10,000 + plants by the River Cole in Coleshill were probably even more spectacular when David Porter saw them in 1997, but there was no sign of them in 2013. This species is often included in wildflower seed mix and some of these records may be from this source. Sites are scattered around the county with a concentration on the sandy soils between Coventry and Rugby. Formerly known as *Chrysanthemum segetum* in Falk (2009) and in Cadbury *et al.* (1971), where it was recorded from 62 tetrads.

### ***Gnaphalium luteoalbum***

### **Jersey Cudweed**

GBS: Critically Endangered (Warwickshire Rare) Native in GB, casual in Warwickshire

|                                 |          |      |              |                           |
|---------------------------------|----------|------|--------------|---------------------------|
| Birmingham Allotments           | SP115939 | 2007 | JWP, MP, ITR |                           |
| Queens Street, Leamington Spa   | SP323663 | 2016 | JRR, VR      | 30 plants amongst cobbles |
| Eastfield Road., Leamington Spa | SP324659 | 2006 | JWP          |                           |

This is one of Britain's rarest plants, native to the sand dunes of the Channel Islands. It also occurs inland as a rare casual and has a scattered distribution across the rest of the country. It is similar to the common *G. uliginosum* (Marsh Cudweed), but is more colourful with leafless clusters of yellow florets with red stigmas.

### ***Gnaphalium sylvaticum***

### **Heath Cudweed**

GBS: Endangered ES: Endangered Warwickshire Scarce Native

|                              |              |      |                   |           |
|------------------------------|--------------|------|-------------------|-----------|
| Castle Bromwich Hall Gardens | SP141897     | 1999 | JL, MrsSW         |           |
| Marsh Lane, Hampton-in-Arden | SP216807     | 2004 | JWP               |           |
| Meriden Sand & Gravel Quarry | SP2362881669 | 2014 | JSW, MVW, BL, RHA |           |
| Rawn Hill, Atherstone        | SP312967     | 2011 | JJB               |           |
| Brandon Wood                 | SP389766     | 1992 | MJS               | 12 plants |

In Warwickshire *G. sylvaticum* occurs along woodland rides and in heathland on acid soils. It is a common species in northern Scotland and in some of the heathlands of southern England, but is a scarce plant in the Midlands. As it is a short-lived perennial, populations vary from year to year. The visit to Meriden Quarry in 2014 was disappointing as about half of the site seen previously in 2011 had been destroyed. However, over 1,000 plants were seen growing amongst mossy grass on top of the bund that separates the quarry from the adjacent arable farmland from SP2362881669 to SP2363481599, making this one of the largest colonies in the country.

The Brandon Wood site, revisited in 2014, is now dense scrubby woodland and no plants were found. There is a 1986 record from a heathy area of Brandon Marsh that has since been quarried for gravel (SP386763, Jane Sells). Cadbury *et al.* (1971) reported it from 11 tetrads.

**Groenlandia densa**

GBS: Vulnerable ES: Vulnerable Warwickshire Rare

**Opposite-leaved Pondweed**

Native

River Leam, Birdingbury Viaduct SP431691 1997 MCB

Reported from canals, ponds and rivers, this perennial aquatic has a liking for clean, base-rich water. Its decline in the county has probably been caused by increased nitrogen levels and the drainage of farm ponds and other wetland habitats. It has an easterly distribution within the British Isles. The only site reported in Cadbury *et al.* (1971) was a pond at Brandon Wood Farm in 1965 (SP3976). The Warwickshire Wildlife Trust carried out a wetland survey in 1977 and found the plant in the canal arm at Marston Doles (SP45), the River Leam at Offchurch (SP358662) and the River Blythe at Temple Balsall (SP209764). Louise Sherwell, from the WBRC, went to search for the plant at Birdingbury in 2013 as part of the BSBI Threatened Plants Project, but was unable to find it.

**Helianthemum nummularium**

ES: Near Threatened Warwickshire Rare

**Common Rockrose**

Native

|                              |              |      |         |
|------------------------------|--------------|------|---------|
| Cross Hands Quarry           | SP27082906   | 2014 | WFG     |
| B4100 verge, Chesterton Hill | SP3343757456 | 2013 | JRR, VR |
| Upton House                  | SP369456     | 2016 | GH      |

This is another declining species down to just three sites from the 16 tetrads reported in Cadbury *et al.* (1971). Limited to the south of the county *H. nummularium* is now restricted to areas of calcareous grassland on roadside verges and in a lawn. The colony at Cross Hands Quarry, of just a few plants, can be found on a grassy bank, just to the east of the site. The Upton House plants are in a strip of lawn by a brick retaining wall, behind the house. There is a 1980's record from Aston Grove (SP139578) and another from near Cross Hands Quarry by Pam Copson in 1987 beside the A44, SE of Little Compton at SP268289 where the plant was seen along 50 metres of verge. Cadbury's records show three isolated "hotspots": one near Wilmcote, another in the far south near Wolford and a third in the east on the Oxfordshire border. These areas have not have been surveyed recently.

**Helleborus viridis**

Warwickshire Rare

**Green Hellebore**

Native

|               |              |      |     |                  |
|---------------|--------------|------|-----|------------------|
| Bannam's Wood | SP11486430   | 2015 | WFG | About 300 plants |
| May's Wood    | SP1411864489 | 2014 | WFG | About 40 plants  |

Warwickshire has lost seven sites for this handsome plant since the survey for Cadbury *et al.* (1971). It is found in deciduous woodland on limestone, but is not frequently grown in gardens and unlikely to occur as a casual. As an early flowerer it can be hidden under hedges and taller vegetation as the summer progresses. The May's Wood colony can be found growing in a dry linear depression in deep shade near the western edge of the wood. There is a healthy mixture of young and mature plants. The colony at Bannam's Wood has started to spread now that badly needed management work has opened up the woodland canopy. The wood is now part of the Heart of England Forest Project.

**HIERACIUM (HAWKWEEDS)**

*Hieracium* is a complex genus divided into many "microspecies" that are very difficult to identify. Much effort went into the recording of Warwickshire Hawkweeds during the 1950's and for Cadbury *et al.* (1971). The majority of plants were identified by C. E. A. Andrews with many of the specimens ending up in the sizeable collection at the Warwickshire Museum herbarium. This material is in need of urgent revision as many of the "good" species of the past have now become aggregates in the light of more recent taxonomic and genetic research. Little was done on the group until 2014 when the new book *Yorkshire Hawkweeds* (Jones, V (2014)) was published. In 2015 JSW and MVW put together a small reference collection of named specimens, thanks to the help of the expert David McCosh. They also started visiting past sites in order to familiarize themselves with some of the more common species in the county. Many of the following records have supporting specimens that have been determined by David McCosh.

The list below is of the native or possible native plants seen since 1990 in the county. Warwickshire's most abundant hawkweeds, *H. sabaudum* (Autumn Hawkweed) and *H. salticola* (Bluish-leaved Hawkweed) are missing from the list, as there are too many sites for them to be on the Rare Plant Register. *H. vagum* (Glabrous-leaved Hawkweed), which was reported from 21 tetrads in Cadbury *et al.* (1971), was last seen at Henley-in-Arden in 1986 (SP1466) and should still be in Warwickshire.

The only other hawkweeds seen in the county since 1990 are the two introduced species *H. argillaceum* (Southern Hawkweed), the most common, summer flowering “non-leafy” species and *H. scotostictum* (Dappled Hawkweed) a garden ornamental that is often grown for its attractive blotched leaves. There is still plenty of work to be done on this group.

***Hieracium prominentidens***

**Large-toothed Hawkweed**

GBS: Vulnerable (Warwickshire Rare)

Native in GB, probably a casual in Warwickshire

|                             |            |      |          |                     |
|-----------------------------|------------|------|----------|---------------------|
| Pooley Fields Country Park  | SK258034   | 2015 | JSW, MVW | Near the canal      |
| Coleshill Industrial Estate | SP19919038 | 2015 | JSW, MVW | Waste grassland     |
| Butlers Wood, Maxstoke      | SP25378790 | 2015 | JSW, MVW | About twenty plants |

The colonies at Pooley and Maxstoke were both growing on sunny south-facing banks on acid soil. This species is only considered to be a true native in woods and coastal grassland, but as there are currently only 34 records for it in the whole of the British Isles, it is included here. The Pooley Fields record is the first record for the county with just a few plants in amongst a colony of *H. salticola*.

***Hieracium umbellatum***

**Umbellate Hawkweed**

Warwickshire Rare

Native

|         |          |      |         |  |
|---------|----------|------|---------|--|
| Barston | SP219779 | 1996 | JRR, VR |  |
|---------|----------|------|---------|--|

When this site was revisited in September 2015, the bank where it had been seen previously had been mowed and there was no sign of the plant. A true native, it was reported from 7 tetrads in Cadbury *et al.* (1971). There is a specimen from Cross Hands Quarry in the Warwick Museum herbarium from 1980 (SP2729).

***Hieracium triviale***

**Common Hawkweed**

Warwickshire Rare

Native

|          |            |      |          |                            |
|----------|------------|------|----------|----------------------------|
| Washford | SP075654   | 2006 | AWR, WAT |                            |
| Whitnash | SP33926180 | 2017 | JRR, VR  | abundant on railway bridge |

This species was previously known as *H. vulgatum*. The Washford record is of f. *triviale* and the record from Whitnash is of f. *subfasciculare* which has a rosette of dentate basal leaves. The survey for Cadbury *et al.* (1971) found it in only five tetrads.

***Hippocrepis comosa***

**Horseshoe Vetch**

Warwickshire Rare

Native

|                   |          |      |     |  |
|-------------------|----------|------|-----|--|
| Oversley Green    | SP094568 | 1999 | PBA |  |
| Grey Goose Quarry | SP266287 | 1994 | MJS |  |

This is an elegant perennial that favours species-rich, dry, calcareous grassland and is limited to two places in the south of the county. It was known from just three sites in Cadbury *et al.* (1971).

***Hottonia palustris***

**Water-violet**

ES: Vulnerable (Warwickshire Rare)

Native

|                      |          |      |     |               |
|----------------------|----------|------|-----|---------------|
| Middleton Lakes RSPB | SP201989 | 2010 | MAA | Fisher's Mill |
| Kingsbury Water Park | SP208970 | 1991 | WCC |               |
| Dosthill Clay Pits   | SP217991 | 2010 | MAA |               |

The recent history of this plant is a complex one. Water-violet was first discovered growing in a ditch near Fisher's Mill Bridge, Middleton Lakes, by Edwin Hopkins in 1989 and a few plants were taken to Kingsbury Water Park to start a new colony. These only survived for a few years. Meanwhile, local naturalist John Bates had also been cultivating wild material from Fisher's Mill in his Coleshill garden pond. When the wild plants eventually died out at Fisher's Mill in about 2008, his plants were used to try and restart the colony there, but they failed to grow. The Dosthill record was also a reintroduction from John Bates' pond. There are two other records from the 1830's from the north of the county.



***Hyoscyamus niger***

GBS: Vulnerable ES: Vulnerable Warwickshire Scarce

**Henbane**  
Archaeophyte

|                                 |          |      |                   |                |
|---------------------------------|----------|------|-------------------|----------------|
| Salford Priors Gravel Pits      | SP075528 | 2013 | JSW, MVW, JRR, VR | One plant only |
| Milcote, River Avon-River Stour | SP183533 | 1992 | JRR, VR           |                |
| Ladywalk Nature Reserve         | SP204929 | 1998 | BM                |                |
| Ettington Park                  | SP253474 | 1997 | HAR               |                |
| Charlecote Park                 | SP254564 | 2003 | BL                |                |
| Walton                          | SP288532 | 2003 | PJC               |                |
| Avon Dasset                     | SP4150   | 1990 | MJL               |                |
| Wolvey Abbey                    | SP437897 | 1997 | MJS               |                |

This poisonous biennial plant has been recorded from a mixture of disturbed habitats, including a river bank, a garden, a quarry, a farmyard and even a dunghill. There are five records from the 1980's from Billesley Church (SP148568), Wilmcote (SP156573), Solihull (SP178795), Hatton Rock (SP25) and Stoneythorpe (SP400619) and Cadbury *et al.* (1971) recorded it from 8 tetrads.

***Hypericum elodes***

GBS: Near Threatened Warwickshire Rare

**Marsh St. John's-wort**  
Native

|                 |          |      |     |
|-----------------|----------|------|-----|
| Baginton Castle | SP340747 | 1992 | VCC |
|-----------------|----------|------|-----|

This record was hidden in a filing cabinet at the Warwickshire Biological Records Centre until 2015 when an English Nature report about an area of marshland next to the River Sowe caught the attention of Agni- Louiza Arampoglou. Although there was no supporting specimen, the species is fairly distinctive and easy to identify. Cadbury *et al.* (1971) reported it from Coleshill Pool and Bickenhill Plantation, but it has not been seen there since.

***Hypochaeris glabra***

GBS: Vulnerable ES: Vulnerable Warwickshire Rare

**Smooth Cat's-ear**  
Native

|                     |          |      |    |
|---------------------|----------|------|----|
| The Decoy, Alvecote | SK243057 | 1998 | KH |
|---------------------|----------|------|----|

The only other Warwickshire records are by John Ray in 1670 from Middleton and William Withering from Washwood Heath in 1796.

***Hypopitys monotropa***

GBS: Endangered ES: Endangered Warwickshire Rare

**Yellow Bird's-nest**  
Native

|                         |            |      |         |                          |
|-------------------------|------------|------|---------|--------------------------|
| Ladywalk Nature Reserve | SP213919   | 2001 | JRR     | No subsp. given          |
| Ufton Fields NR         | SP38306156 | 2007 | JRR, VR | subsp. <i>hypophegea</i> |

There are specimens from both sites in the Warwick Herbarium. The Ladywalk plants were found for the first time in 2000 in young birch woodland that was colonizing a gravel pit filled with Pulverised Fuel Ash from the nearby power station. It did not survive very long; leaching from the PFA may have made the habitat unsuitable for its survival. The Ufton Fields plants fared better. First seen in 1986 growing inside a small conifer plantation, they even survived the Wildlife Trust laying a path through the middle of the colony! Both sites continue to be monitored in case the plants should reappear. There is a 1983 record of subsp. *hypopitys* from Wilmcote Rough (SP154575). The 1972 record from Moreton Morrell (SP304557) and James Bagnall's record from Compton Verney in 1848 are both given without subspecies.

***Jasione montana***

ES: Vulnerable Warwickshire Rare

**Sheep's-bit**  
Native

|                      |          |      |     |
|----------------------|----------|------|-----|
| Middleton Lakes RSPB | SP196989 | 1996 | MJS |
|----------------------|----------|------|-----|

*J. montana* was first seen near Middleton by MJS in 1989 at SP191989, next to the main road, and in 1996 he saw it again closer to the canal. A reintroduction from nursery-bought plants was carried out in 2008 by MAA at a site about 10 metres inside the Staffordshire border, where the species had been seen many years previously, but they did not survive. It was not recorded in the Cadbury *et al.* (1971) survey but there are a few nineteenth century records including one from Sutton Park and another from Middleton Heath.

***Juncus compressus***  
GBS: Near Threatened

ES: Vulnerable

Warwickshire Scarce

**Round-fruited Rush**  
Native

|                           |          |      |                   |
|---------------------------|----------|------|-------------------|
| Arrow                     | SP077569 | 2017 | RTO               |
| Walton                    | SP2852   | 2003 | JWP               |
| DM Kineton                | SP348489 | 1990 | JAH               |
| Radway                    | SP368477 | 2013 | JJB               |
| South of Burton Dasset    | SP3850   | 1997 | HBA               |
| Southam Holt salt spring  | SP446605 | 1997 | JCB               |
| Draycote Fish Ponds       | SP447698 | 2017 | JSW, MVW, JRR, VR |
| Hayway Cottage, Broadwell | SP459663 | 2008 | SS                |
| Pailton                   | SP474824 | 1997 | MJS               |

This species was on the BSBI's Threatened Plant Project list, so many sites have been surveyed recently. The Broadwell site has been destroyed and at Pailton, a series of fishponds have been created where the plants used to grow. A survey of Southam Holt in 2011 was also unsuccessful.

When the Flora Group visited DM Kineton in 2011, the location of the original grid reference was found to be on top of a concrete bunker! Joe Hardman's 1990 figures had probably been taken from a 1:50,000 OS map, which at that time just showed a blank space with the ominous label "Danger Area". Nowadays with Google Earth and 1:25,000 maps with details of all of the site buildings, this kind of understandable inaccuracy should not occur. All ponds and wet areas nearby were searched but the plant was not refound. It is absent from the north and west of the county but was reported from 14 tetrads in Cadbury *et al.* (1971).

***Juncus squarrosus***

Warwickshire Scarce

**Heath Rush**

Native

|                              |            |      |                   |
|------------------------------|------------|------|-------------------|
| Sutton Park                  | SP0895     | 2005 | EC, MP, JHA, ITR  |
| Sutton Park                  | SP0896     | 2005 | MP, JHA, ITR      |
| Sutton Park                  | SP0897     | 2005 | MP, JHA, ITR      |
| Sutton Park                  | SP0898     | 2015 | BBCRG             |
| Sutton Park                  | SP092892   | 2015 | BBCRG             |
| Sutton Park                  | SP0995     | 2005 | MP, ITR           |
| Sutton Park, Longmoor Valley | SP0996     | 2015 | BBCRG             |
| Sutton Park                  | SP0997     | 2005 | EC, JHAW, MP, ITR |
| Priory Fields NR             | SP101791   | 2013 | JSW, MVW, JRR, VR |
| Sutton Park                  | SP1095     | 2005 | MP, JHA, ITR      |
| Sutton Park                  | SP1096     | 2005 | EC, MP, JHA, ITR  |
| Sutton Park                  | SP1097     | 2015 | BBCRG             |
| Sutton Park                  | SP1098     | 2005 | MP, ITR           |
| Sutton Park, Hartop Gate     | SP11159709 | 2005 | MP, ITR           |
| Riverside Drive, Solihull    | SP116790   | 2000 | JW                |
| Sutton Park                  | SP1195     | 2005 | MP, JHA, ITR      |
| Sutton Park                  | SP1196     | 2005 | EC, MP, JHA, ITR  |
| Sutton Park                  | SP1197     | 2015 | BBCRG             |
| Pype Hayes                   | SP1292     | 1996 | SPG               |
| Riverside Meadows            | SP142631   | 1994 | EN                |
| Bickenhill Plantation        | SP18868467 | 2012 | WFG               |
| Purley Golf Course           | SP305943   | 1997 | IT                |
| Stonebridge Meadow NR        | SP346756   | 1995 | SSC               |

This is a species of wet acidic grassland and heathland that is limited by habitat to the north west of the county. It is abundant at Sutton Park in grazed and trampled situations (Trueman *et al.*, 2013). It has not been seen at Baddesley Common since the nineteenth century, nor was it found in the recent survey at Coleshill Pool. Cadbury *et al.* (1971) recorded it from 14 tetrads.

***Juncus subnodulosus***

Warwickshire Scarce

**Blunt-flowered Rush**

Native

|                           |          |      |     |            |
|---------------------------|----------|------|-----|------------|
| Chadwick Manor, Knowle    | SP2074   | 1998 | HBA |            |
| Lighthorne Quarry         | SP346563 | 2011 | JJB |            |
| Bascote, canal            | SP390641 | 1999 | MJS |            |
| North of Napton reservoir | SP4464   | 1992 | PJC | Canal side |
| Tomlow, Grand Union Canal | SP456642 | 1992 | JCB |            |

With a preference for wet calcareous soils, it is not surprising that all recent records for this plant are from the central and southern areas of the county. It was seen at six sites in the 1980's, including Clowes Wood NR (SP102739) and Ufton Fields NR (SP384615) and reported from eight tetrads in Cadbury *et al.* (1971). A WFG survey of Napton reservoir did not refind it. It is an easy species to overlook and may well be under-recorded.

***Koeleria macrantha***

Warwickshire Scarce

**Crested Hair-grass**

Native

|                                   |          |      |     |
|-----------------------------------|----------|------|-----|
| Round Hill                        | SP143618 | 1996 | JWP |
| Wilmcote Horsepasture             | SP164584 | 2012 | JJB |
| Great Wolford                     | SP23     | 1996 | AN  |
| Midsummer Meadow                  | SP240412 | 1997 | HAR |
| Burton Dassett Hills Country Park | SP397520 | 2015 | WFG |
| Burton Dassett Hills Country Park | SP398519 | 2015 | WFG |

Recorded from 36 tetrads in the survey for Cadbury *et al.* (1971), including an area north of Shipston-on-Stour where it was noted from nearly every tetrad, this species appears to have declined drastically to the handful of sites above. There is a healthy and widespread population at Burton Dassett Country Park and the new grazing regime should help to encourage it to spread. It is a perennial of dry, limestone grassland and all records are confined to the south of the county. Part of the decline may be attributed to recent uneven surveying and an unwillingness of some otherwise good botanists to tackle grasses. In Cadbury *et al.* (1971) as *K. cristata*.

***Lathraea squamaria***

Warwickshire Scarce

**Toothwort**

Native

|                             |              |      |           |                |
|-----------------------------|--------------|------|-----------|----------------|
| Wilnecote Conservation Park | SK237005     | 2002 | MAA       |                |
| Coton Lakes                 | SP2132694521 | 2015 | JSW, MVW  |                |
| Atherstone-on-Stour         | SP214515     | 2004 | JL, MrsSW |                |
| Brook End Farm, Hurley      | SP249949     | 2011 | JBA       |                |
| Dafferns Wood               | SP28938965   | 2017 | LD        |                |
| Oakley Wood                 | SP306595     | 2013 | LSH, RK   | 30 to 40 heads |
| Galley Common               | SP320925     | 1996 | BP        |                |
| Whittleford Park            | SP338921     | 2013 | JBA       | 108 heads      |
| Chesterton Wood             | SP344576     | 1991 | BD        |                |

John Bates is Warwickshire's Toothwort monitor. He has been keeping an eye on the Hurley plants since they were first found by local botanist Dorothy Yardley in 1994 and used to check the Nuneaton sites regularly. The Galley Common plants have been trampled by children using a nearby tree as a swing and have not been seen recently. It is an easy plant to overlook as it often grows at the base of hedges and is very difficult to spot once the surrounding vegetation has emerged. The large Coton colony, which would have been passed daily by birdwatchers walking to a hide, may well have been there a while before Ron Thomas and Keith Warmington noticed it in 2011. The Whittleford Park and Coton plants were found growing under *Corylus avellana* (Hazel). The expected decline due to Dutch Elm Disease put forward in Partridge (1995) does not seem to have happened, and it may even be increasing, as it was reported from only five tetrads in Cadbury *et al.* (1971).

***Legousia hybrida***

Warwickshire Rare

**Venus's-looking-glass**

Archaeophyte

|                       |          |      |     |
|-----------------------|----------|------|-----|
| Gravel Pit Plantation | SP224815 | 1992 | MJS |
|-----------------------|----------|------|-----|

Like all of Warwickshire's other arable weeds, this one has declined severely during the last forty years or so. Of the 18 tetrads in Cadbury *et al.* (1971), all from the limestone in the south of the county, it managed to hold on at five sites until the 1980's. One of these, near Home Farm, north of Walton Hall (SP288537) has been monitored regularly by John and Val Roberts without success.

***Lepidium heterophyllum***

Warwickshire Scarce

**Smith's Pepperwort**

Native

|                      |              |      |          |              |
|----------------------|--------------|------|----------|--------------|
| Stratford-upon-Avon  | SP193540     | 1996 | PJC      |              |
| Middleton Lakes RSPB | SP2040698387 | 2011 | MVW, JSW | On riverbank |
| Whitacre Heath NR    | SP209931     | 2011 | JBA, SJ  |              |

|                            |          |      |     |                                 |
|----------------------------|----------|------|-----|---------------------------------|
| White Hall Farm, Hartshill | SP319949 | 2016 | JH  | Twenty plants near gorse bushes |
| Wappenbury Wood NR         | SP376710 | 2011 | WFG | Hedgerow, one plant             |
| Brandon Wood               | SP387765 | 2012 | WFG | Beside path in open woods       |

This plant occurs in a mixture of secondary habitats and has a preference for acid, sandy soils. The Whitacre record is of two plants on the disturbed soil at the edge of the car park. It can be separated from other *Lepidium* species by the shape of the fruits. It was only recorded from two tetrads in Cadbury *et al.* (1971).

***Lepidium latifolium***  
(Warwickshire Scarce)

**Dittander**  
Native in GB, casual in Warwickshire

|                          |              |      |          |                           |
|--------------------------|--------------|------|----------|---------------------------|
| Kettlebrook              | SK216032     | 1992 | GAA, MAA |                           |
| Glascote                 | SK228033     | 1995 | MAA      |                           |
| Park Hall Nature Reserve | SP15629090   | 2013 | DAB      |                           |
| Water Orton Sidings      | SP1992       | 1992 | HHF      |                           |
| Lea Marston Quarry       | SP2048393879 | 2012 | MVW, JSW |                           |
| Dosthill Lake            | SP2094698929 | 2013 | JH       |                           |
| Tamworth East            | SK213045     | 2007 | RDM      |                           |
| Coton                    | SP214944     | 1995 | MAA      |                           |
| Radnor Drive, Nuneaton   | SP343908     | 2005 | BP       | Demolished petrol station |
| Bramcote South           | SP417877     | 2017 | JSW, MVW | Abundant on bank          |

Primarily a salt-tolerant coastal plant in Great Britain, it has successfully colonized the floodplain of the River Tame in Warwickshire, where it can be found in marshes and wet meadowland, often accompanied by *Thalictrum flavum* (Common Meadow-rue). It is sometimes grown as an ornamental and this may explain the origin of the Nuneaton record. The first county record was not until 1978 when an unnamed botanist reported it from Water Orton (SP1791). James Partridge also found it at Birmingham's "Inland Port" near Duddleston (SP090874) in 1989.

***Leymus arenarius***  
(Warwickshire Rare)

**Lyme-grass**  
Native, introduced in Warwickshire

|                    |          |      |     |              |
|--------------------|----------|------|-----|--------------|
| Winson Green       | SP043882 | 1990 | CP  | Canal bank   |
| New Street Station | SP081870 | 1998 | GCS | Railway bank |

These two records from the part of VC38 in inner city Birmingham were reported in Trueman *et al.* (2013) without any comments on their origin. The plant's native habitat is coastal sand dunes, so it may either have been imported with building materials, like *Elytrigia juncea* (Sand Couch) in Warwick during the 1970's, or arrived as a garden throwout. Not recorded in Cadbury *et al.* (1971).

***Limosella aquatica***  
Warwickshire Scarce

**Mudwort**  
Native

|                              |              |      |         |  |
|------------------------------|--------------|------|---------|--|
| Earlwood Lakes               | SP114739     | 2011 | JRR, VR |  |
| Middleton Lakes RSPB         | SP202991     | 2011 | WFG     |  |
| Marsh Lane, Hampton-in-Arden | SP216808     | 2004 | JWP     |  |
| Draycote Water               | SP4744470747 | 2010 | BL      |  |

An annual water plant dependant on the amount of summer rainfall, it can be found growing on the drawdown zones of reservoirs and the muddy edges of ponds. In 2012 the water levels at Middleton Lakes were too high for it to grow and in 2013 restrictions caused by major landscape work made access impossible. Predator proof fencing has recently hindered surveying. It occurred in "enormous quantities" at Earlwood Lakes in 2011 but has not been reported since then. In Cadbury *et al.* (1971) it was only known from five sites, It is probably overlooked in the county, as Gent *et al.* (2012) have found it to be quite common in neighbouring Northamptonshire.

***Lithospermum arvense***  
GBS: Endangered

ES: Endangered  
Warwickshire Scarce  
**Corn Gromwell**  
Archaeophyte

|                           |          |      |     |                         |
|---------------------------|----------|------|-----|-------------------------|
| Ettington                 | SP269486 | 1997 | PML |                         |
| Hell Hole, Compton Verney | SP306530 | 2012 | JJB |                         |
| Knightcote                | SP375552 | 1990 | HAR | Gateway to arable field |
| Southam bypass            | SP425626 | 2005 | MJS | Top of grassy bank      |
| Stockton                  | SP439646 | 1998 | JCB |                         |

This arable weed was a widespread plant on the calcareous soils of the county sixty years ago when Cadbury *et al.* (1971) reported it from 35 tetrads. Since then, modern agricultural practices have hastened its decline to just nine sites in the 1980's and to just the single Hell Hole site by 2012. It is unlikely to be seen again as a true arable weed but may appear as a casual of disturbed ground.

***Littorella uniflora***  
Warwickshire Rare

**Shoreweed**  
Native

|                  |          |      |     |                      |
|------------------|----------|------|-----|----------------------|
| Earlswood Lakes  | SP113740 | 1998 | SC  | Occasional           |
| Brandon Marsh NR | SP389753 | 1995 | MJS | Edge of Swallow Pool |

This perennial aquatic can be found growing on the edges of acid pools and only flowers when mud and gravel is exposed in dry summers. Nationally it is a plant of the uplands of the north and west. In 1983 it was seen abundantly along the gravel foreshore of Olton Reservoir (SP113740) and there are older records from Sutton Park, Rotten Park Reservoir and Coleshill Pool. It is possibly under-recorded as it is easy to miss when submerged.

***Luzula multiflora* subsp. *congesta***  
Warwickshire Scarce

**Heath Wood-rush**  
Native

|                             |              |      |                      |                        |
|-----------------------------|--------------|------|----------------------|------------------------|
| Sutton Park                 | SP08639772   | 2005 | MP, ITR, JHA         | Heathland, golf course |
| Sutton Park                 | SP09179563   | 2005 | MP, ITR              | Heathland              |
| Sutton Park, N. of Longmoor | SP093964     | 2011 | ITR, PCo             |                        |
| Sutton Park                 | SP092982     | 2015 | BBCRG                |                        |
| Clowes Wood NR              | SP10107375   | 2010 | JSW, MVW             |                        |
| Sutton Park                 | SP10349670   | 2005 | MP, JHA, ITR, EC     | Heathland              |
| Sutton Park                 | SP1097       | 2007 | ITR, PR, MP, DA, JAN |                        |
| Sutton Park                 | SP11099589   | 2005 | MP, JHA, LB, SCA     |                        |
| Sutton Park                 | SP11189658   | 2005 | EC, MP, JHA, ITR     |                        |
| Sutton Park                 | SP1197       | 2015 | BBCRG                |                        |
| May's Wood                  | SP14376456   | 2009 | SJF                  |                        |
| Bickenhill Plantation       | SP190843     | 2012 | WFG                  |                        |
| Corley Moor                 | SP280853     | 1995 | DP                   |                        |
| Monks Park Wood             | SP2954996001 | 2011 | JH                   |                        |
| Ryton Butterfly Reserve     | SP38057275   | 2009 | SJF                  |                        |
| Wappenbury Wood NR          | SP376710     | 2012 | WFG                  |                        |
| Old Nun Wood NR             | SP381707     | 2012 | WFG                  |                        |
| Brandon Wood                | SP388766     | 2012 | WFG                  |                        |

We have many records of *L. multiflora* which are not identified to subspecies level, so it is probably under-recorded in the county. It is common in Sutton Park in wet heathland and fairly frequent in wet marshy areas in acid woodland. The keys in Stace (2010) and Rich and Jermy (1998) both emphasize seed characteristics for identification rather than just relying on the shape of the inflorescence. Cadbury *et al.* (1971) has var. *congesta* from just 5 tetrads.

***Lythrum portula***  
Warwickshire Scarce

**Water-purslane**  
Native

|                           |              |      |                   |                      |
|---------------------------|--------------|------|-------------------|----------------------|
| New Park Wood, Middleton  | SP159981     | 2014 | JSW, MVW          | Wet edge of footpath |
| Hay Wood                  | SP214712     | 2009 | JJB               |                      |
| Castle Fields, Kenilworth | SP278724     | 2008 | SP                |                      |
| Weston & Waverley Woods   | SP35437041   | 2012 | WFG               |                      |
| Ryton Wood NR             | SP3792472522 | 2011 | BL                |                      |
| Brandon Wood              | SP388764     | 2014 | JSW, MVW, JRR, VR |                      |
| Brandon Marsh NR          | SP389751     | 2003 | JS                |                      |
| Newnham Paddock           | SP481844     | 1995 | MJS               |                      |

This is a rather inconspicuous plant that can be found growing in marshland and at the edges of ponds and reservoirs. It has also been recorded from path edges and in puddles made by vehicle tracks and is limited to acid soils. It is reported from 15 tetrads in Cadbury *et al.* (1971) under the old name of *Peplis portula*.

**Melampyrum pratense**

ES: Near Threatened

Warwickshire Scarce

**Common Cow-wheat**

Native

|                     |              |      |          |
|---------------------|--------------|------|----------|
| Forshaw Heath       | SP085732     | 2001 | DC, LSL  |
| Clowes Wood NR      | SP1008274117 | 2013 | JSW, MVW |
| Little Dickens Wood | SP108760     | 2000 | JW       |
| Palmer's Rough      | SP122800     | 2011 | GAF      |
| Brown's Coppice     | SP131802     | 2000 | JW       |
| Priests Park Wood   | SP210732     | 2001 | JW       |
| Hay Wood            | SP208706     | 1995 | JRR, VR  |
| Tile Hill Wood      | SP277791     | 2000 | KC, PB   |
| Brandon Wood        | SP394768     | 1994 | MJS      |

This plant is now only encountered in ancient woodland on the west side of the county. In the past it was recorded from four tetrads in Sutton Park (Trueman *et al.*, 2013). In 1979 it was reported from Arley Wood (SP2891), but has not been seen there since the conifers were planted. It may still be present at Kingsbury Wood (1983, SP2397), which has not been fully surveyed for a while.

There is a 1974 record from Edgehill (SP3747) that may be subsp. *commutatum*. This subspecies with wider leaves prefers to grow on limestone and chalk and has been seen nearby in Oxfordshire. Any plant found growing in the south of the county should be examined carefully. The usual form in Warwickshire is subsp. *pratense*. It was seen in 22 tetrads in the survey for Cadbury *et al.* (1971).

**Mentha pulegium**

GBS: Endangered

ES: Critically Endangered

(Warwickshire Scarce)

**Pennyroyal**

Native in GB, casual in Warwickshire

|                              |              |      |          |
|------------------------------|--------------|------|----------|
| Pooley Fields Country Park   | SK258034     | 2012 | JSW, MVW |
| Meriden Sand & Gravel Quarry | SP2284982239 | 2011 | BL       |
| Leek Wootton                 | SP289690     | 1991 | MJS      |
| Binley Road, Coventry        | SP356788     | 1991 | MJS      |
| Ryton                        | SP379728     | 2012 | MS       |

All of our modern records are likely to be garden escapes or from seed mixes. The Pooley Fields plants were probably brought in with sand and hardcore used to construct a wheelchair friendly path to the summit of the spoilheap. There are 18<sup>th</sup> and 19<sup>th</sup> century records of the plant as a native, from wet heathy areas in Erdington, Corley Moor and Allesley. It was not recorded in the survey for Cadbury *et al.* (1971).

**Minuartia hybrida**

GBS: Endangered

ES: Endangered

Warwickshire Rare

**Fine-leaved Sandwort**

Native

|                    |              |      |     |
|--------------------|--------------|------|-----|
| Oversley Wood      | SP103563     | 1994 | RJ  |
| Cross Hands Quarry | SP27082906   | 2014 | WFG |
| Quarry near Ratley | SP3701746894 | 2014 | BL  |
| Quarry near Ratley | SP3708447016 | 2014 | BL  |
| Quarry near Ratley | SP3711546828 | 2014 | BL  |

About 50 plants on limestone spoil  
Seen on the quarry floor, in disturbed areas near machinery and vehicles

*Minuartia hybrida* is an easily overlooked plant of disturbed ground, walls and trackways favouring calcareous soils. There are also two 1970's records from the strongly acidic sites of Bickenhill Plantation and Coleshill that may be misidentifications. The nine tetrads on the map in Cadbury *et al.* (1971) seem to be scattered about the county with no obvious pattern. In 1988 a few plants were seen growing on the rifle butts at Wedgnock Range, Warwick (SP274676). Nationally this plant is usually found in the south-east of the country, and is now virtually extinct as an arable weed. It is however, starting to turn up more frequently in suitable habitat along railway lines.

**Misopates orontium**

GBS: Vulnerable

ES: Vulnerable

Warwickshire Rare

**Weasel's-snout**

Archaeophyte

|                               |              |      |     |
|-------------------------------|--------------|------|-----|
| Shottery, Stratford-upon-Avon | SP1888054763 | 2010 | SJF |
| Binley Woods                  | SP397772     | 2012 | JS  |

Both records are from cultivated ground, the Shottery plants from an allotment and the Binley Woods plants from a garden. This annual is declining rapidly as an arable weed due to agricultural improvement and the autumn sowing of crops. There is a 1981 record from Binton (SP388774) and it was reported from three sites in Cadbury *et al.* (1971).

***Myosotis secunda***

Warwickshire Rare

**Creeping Forget-me-not**

Native

|                      |            |      |       |                         |
|----------------------|------------|------|-------|-------------------------|
| Sutton Park          | SP09469827 | 2015 | BBCRG | Little Bracebridge Pool |
| Brook Meadow NR      | SP181742   | 1994 | JCB   |                         |
| Lighthorne Hill Pool | SP344567   | 1997 | MJS   |                         |

Nationally this plant is common on moorland flushes and acid peaty pools in the west and north of the country. It could be confused with *M. laxa* and *M. scorpioides* and may be overlooked. The Sutton Park colony is small and vulnerable. The Lighthorne record and another one from 1986 from Barton Hill (SP265315), were both growing on limestone, and may have been misidentifications. The shape of the calyx teeth and the length of the fruit-stalks will confirm identification. It is found in seven tetrads in the survey for Cadbury *et al.* (1971), all on the west side of the county.

***Myosurus minimus***

GBS: Vulnerable

ES: Vulnerable

Warwickshire Scarce

**Mousetail**

Native

|                 |          |      |           |                                   |
|-----------------|----------|------|-----------|-----------------------------------|
| Whitehouse Farm | SP147605 | 1996 | JL, MrsSW |                                   |
| Copdock Hill    | SP255591 | 1991 | MJS       |                                   |
| Hampton Magna   | SP2665   | 1992 | GTO       | Found in garden                   |
| Wellebourne     | SP286563 | 1992 | HAR       |                                   |
| Barford         | SP292599 | 2001 | BL        | Footpath to Plestowes, 300 plants |

This annual plant can be found in nutrient enriched sites that are seasonally flooded. It has a fondness for vehicle tracks and gateways where the soil has been disturbed. There are two 1980's records from Bishops Tachbrook (SP299618) in 1987 and Morton Morrell (SP309549) in 1989, but neither colony was refound when surveyed again in 1992. The nineteen records reported in Cadbury *et al.* (1971) are mainly along the Avon Valley. It is absent from the north of the county.

In April 2016 Brian Laney led a "Mousetail Hunt" to six of the above sites without success. The Bishop Tachbrook site had been altered substantially by the building of the M40, the Morton Morrell site was now a meadow, not an arable field, and the arable at Copdock Hill looked quite good, but like Whitehouse Farm, wheat was being grown and had been sprayed with weedkiller. The Barford and Wellebourne sites looked the most promising and would be worth a further visit, but the farmer had added hard-core to the gate entrances making it less likely that the plant will return.

***Neottia nidus-avis***

GBS: Near Threatened

ES: Vulnerable

Warwickshire Scarce

**Bird's-nest Orchid**

Native

|                          |              |      |          |              |
|--------------------------|--------------|------|----------|--------------|
| Abbey Morton Road Verges | SP055543     | 2009 | JJB      |              |
| Bannams Wood             | SP114642     | 1995 | HD       |              |
| Snitterfield Bushes NR   | SP19936029   | 2017 | JSW, MVW |              |
| Ufton Wood               | SP3872862715 | 2010 | BL       | Ash woodland |
| All Oaks Wood            | SP450786     | 1996 | SSC      |              |
| Far Popehill Spinney     | SP453713     | 2009 | SS       |              |

Birds-nest Orchid is a saprophytic plant of deep woodland shade and is easy to overlook. Surviving without chlorophyll and relying on nutrients supplied by a fungus, the shrivelled spikes of this plant may be seen for up to a couple years after flowering. It grows in a wide range of woodland types and is not limited to a particular host species. The Snitterfield Bushes colony, found under a mixture of ash and hazel, has been monitored for many years by John and Val Roberts. It produces around ten flowering spikes each year. There is a record from damp woodland, north of the pool at Farnborough in 1982 (SP427496). It was reported from 11 tetrads in the south of the county in Cadbury *et al.* (1971) and may be declining.

***Nepeta cataria***

GBS: Vulnerable

ES: Vulnerable

Warwickshire Rare

**Cat-mint**

Archaeophyte

|         |          |      |     |                          |
|---------|----------|------|-----|--------------------------|
| Shilton | SP407845 | 1998 | MJS | Two plants in a hedgerow |
|---------|----------|------|-----|--------------------------|

The Shilton site was monitored for the next few years after its discovery, but the plant was not seen again. The number of 19<sup>th</sup> century records of Cat-mint clearly show that it used to be a fairly common hedgerow plant in the south of the county. Cadbury *et al.* (1971) reports it from Burton Dassett Hills (SP4052), Halford (SP2744) and from three tetrads near Newbold-on-Stour (SP2245, SP2345 and SP2446). This steep decline has been caused by the removal of hedgerows, scrub encroachment and the general tidying up of hedge

banks and field edges. It is odd that it has not been seen on any of the Wildlife Trust limestone grassland reserves.

***Oenanthe aquatica***

**Fine-leaved Water-dropwort**

Warwickshire Rare

Native

Feldon Forest Farm, Frankton SP420692 1995 RMS

This species is surprisingly rare in Warwickshire. An annual or biennial, it favours still and slow-moving water and can tolerate pools that dry out in the summer. Bagnall reported it from Chesterton Mill Pool in 1877 and it was still there in 1956 as reported in Cadbury *et al.* (1971), but it was not refound when searched for in 1984.

***Oenanthe fistulosa***

**Tubular Water-dropwort**

ES: Vulnerable

Warwickshire Scarce

Native

|                               |          |      |           |                            |
|-------------------------------|----------|------|-----------|----------------------------|
| Alvecote, Railway Pit         | SK244044 | 2012 | JRR, VR   |                            |
| Alvecote                      | SK257043 | 1995 | MAA       |                            |
| Clowes Wood NR                | SP100738 | 1994 | SA        |                            |
| Henwood                       | SP183793 | 2001 | JW        | Marshy corner of cornfield |
| Hampton-in-Arden (Marsh Lane) | SP2080   | 2003 | JWP       |                            |
| Coleshill                     | SP215862 | 2001 | DP        | Ditchside, ten plants      |
| Hatton Locks                  | SP245667 | 2012 | JJB       |                            |
| Hampton Wood NR               | SP255598 | 2004 | JWP       |                            |
| Hill Wootton                  | SP300680 | 1996 | JL, MrsSW | Swamp edge, three plants   |
| Tocil Wood                    | SP304757 | 2009 | JJB       |                            |
| Seeswood Pool                 | SP329904 | 2004 | DC        |                            |
| Wyken Pool NR                 | SP367835 | 1998 | JS        |                            |
| Napton Canal Arm              | SP464592 | 1997 | MA        |                            |
| Willoughby                    | SP521693 | 1994 | JWP       | Canal arm, one plant       |

Although this species was selected by the BSBI for the Threatened Plants Project in 2009, it wasn't until 2013 that some of the above sites were revisited. Hampton Wood and the Coleshill site were both re-surveyed but sadly no plants were discovered. Jane Sells also led a trip back to Wyken. The small, round, open pond where the plant had been growing abundantly in 1998, was difficult to see as it was surrounded by tall willows and impenetrable bramble, and although still wet, was completely shaded. There was no sign of the *Oenanthe* but viable seed may still be there. The colony at Alvecote Railway Pit is also seriously threatened as only one plant was found there in 2012. The nearby pond is in need of management and the whole area is scrubbing over and drying out. There are additional records from Whitacre Heath in 1987 (SP2192), Langley Pool in 1982 (SP152968) and from three different stretches of the River Leam in 1981 (SP390693, SP430690 and SP468685). Cadbury *et al.* (1971) reported it from 31 tetrads, most of these to the north of Warwick.

***Oenanthe fluviatilis***

**River Water-dropwort**

Warwickshire Rare

Native

|                |            |      |                   |             |
|----------------|------------|------|-------------------|-------------|
| Eathorpe NR    | SP38936890 | 2014 | JSW, MVW, JRR, VR | By the weir |
| North Eathorpe | SP395699   | 1992 | JCB               |             |

*O. fluviatilis* has an easterly national distribution and favors calcareous streams and rivers that are not nutrient enriched. It only rarely flowers and usually propagates itself by fragmentation. Plants found in the Wildlife Trust reserve in 2014 only had submerged leaves. It is easy to overlook it in this form and many books do not show the shape of the aquatic leaves, so identification can be a bit of a problem. It was also searched for but not seen, by the bridge over the river in the middle of the village. The River Leam is the county stronghold for this plant and James Bagnall found it at Marton in 1891. It was still growing there in 1988 (SP407691), at Hunningham in 1986 (SP373683) and in a small pond next to the river at Birdingbury Viaduct in 1988 (SP430690). There is another record from Rugby Mill, on the River Avon in Rugby in 1984 (SP505768). Surprisingly it was not recorded in the survey for Cadbury *et al.* (1971), but was more widespread throughout the county at the end of the 19<sup>th</sup> century with records from Tamworth, Coventry, Leamington Spa and Warwick.

***Oenanthe lachenalii***

**Parsley Water-dropwort**

ES: Near Threatened

Warwickshire Rare

Native

|                       |            |      |          |                    |
|-----------------------|------------|------|----------|--------------------|
| Alvecote, Railway Pit | SK24450445 | 2011 | JSW, MVW |                    |
| Alvecote              | SK255045   | 1992 | MAA      | Edge of Flash Pool |
| Wilmcote Rough        | SP158571   | 1997 | MB       |                    |



Nationally this is a widespread coastal species of saltmarshes and rough grassland that can also occur less commonly inland in marshes and fen. Growing with *O. fistulosa* at the Alvecote Railway Pit site, it too is under threat from encroaching scrub and a drying out of the habitat. It was not refound in 2012.

The grid reference for the Wilmcote Rough record may be inaccurate as it appears to be centred on a farmyard. There is, however, another 1987 record also labelled Wilmcote Rough at SP152576 where ten plants were seen beside a damp lane. This appears to be a far more likely site for the plant. Another ten plants were spotted at the edge of the lagoon of the swan reserve in the middle of Stratford-upon-Avon in 1987. The species was found in six different tetrads in the survey for Cadbury *et al.* (1971).

***Oenanthe silaifolia***

**Narrow-leaved Water-dropwort**

GBS: Near Threatened      Warwickshire Rare

Native

Southam Meadow South      SP417609      2003      LSL

One of the rarer British species, this record was discovered while searching through old paper survey forms at the HBA in Warwick. It was not included in Falk (2009). Unfortunately the wet meadow where the plant was found has been built on. The only other records for the county are from Bidford-on-Avon, Small Heath and Stratford-upon-Avon from the beginning of the 19<sup>th</sup> century.

***Ophrys insectifera***

**Fly Orchid**

GBS: Vulnerable      Warwickshire Rare

Native

Snitterfield Bushes NR      SP201607      1993      JRR, VR

Warwickshire's only Fly Orchid plant was first seen by J. Matthews and S. J. Matthews in 1998 in a small fenced enclosure near the main path of the reserve. It persisted for five years. John and Val Roberts continued to visit the site for many years afterwards to look for it, but it did not reappear.

***Orchis anthropophora***

**Man Orchid**

GBS: Endangered      ES: Endangered      Warwickshire Rare

Native

Ufton Fields NR      SP3840261684      2015      BL      Eighteen rosettes

The Man Orchids at Ufton Fields are probably Warwickshire's most photographed flowers. There is however, some concern over their status. Duncan Jeffray, who first found the orchid growing at Ufton in a newly quarried area in 1968, considered the plant either a deliberate introduction, or an accidental one, as there was evidence of soil and spoil dumping from similar quarries in Northamptonshire where the orchid is more commonly found. However, it is possible that it may have arrived naturally by wind-blown seed. The orchids were described as neophytes in Falk (2009) and Partridge (1995) where they can be found under their previous name of *Aceras anthropophora*. Rob Bateman has offered to DNA test the flowers of the Warwickshire plants, and although this may show which other population they are most closely related to, it will not answer the question as to how they got there in the first place. Perhaps we will never know. John and Val Roberts carefully monitored the site between 1975 and 1987, with the largest number of flowering spikes being 130 in 1976, but numbers varied greatly from year to year. Brian Laney now monitors the orchids and manages the site making an early spring count of leaf rosettes before the rabbits start munching.

***Oreopteris limbosperma***

**Lemon-scented Fern**

Warwickshire Rare

Native

|                |              |      |     |
|----------------|--------------|------|-----|
| Clowes Wood NR | SP1014573996 | 2011 | WFG |
| Hay Wood       | SP2083371133 | 2013 | WFG |
| Hay Wood       | SP2083671108 | 2013 | WFG |
| Hay Wood       | SP2136471201 | 2013 | WFG |

Lemon-scented Fern is a common species in the western and northern parts of the British Isles, but is a scarce plant in the Midlands. The Clowes Wood colony is limited to a very small, acidic wet meadow in the centre of the wood that is also home to rarities such as *Viola palustris* and *Cirsium dissectum*. Only a few plants were seen on the 2011 WFG field meeting. When visited in 2013, the Hay Wood colony was found to be more widespread than previously thought. This survey was carried out in early May when the glistening glands and scales on the emerging leaves were easy to spot.

There is a record from Baxterley Park (SP275974) from 1960 and another from Edgbaston Pool in 1953 (SP0583). Cadbury *et al.* (1971) contributes additional records from Coleshill Pool (SP1986), Sutton Park

(SP0998) and Frankton Wood (SP4171). There are many undated 19<sup>th</sup> century records. Bagnall reported it as “formerly abundant beside many of the streams” in Sutton Park and it was also noted from Marston Green and Middleton Heath amongst other places. It appears in Cadbury *et al.* (1971) under the old name of *Thelypteris limbosperma* (Mountain Fern).

***Orobanche hederæ***  
(Warwickshire Rare)

**Ivy Broomrape**  
Native in GB, but casual in Warwickshire

Winterbourne Botanic Gardens      SP05188390      2016      MP

Reported in June by Mike Poulton, it was growing at the base of a large ivy-covered oak tree on the north side of the drive to the gardens. Some fresh flowers were collected by John and Monika Walton a few weeks later and photos of these were sent to the national referee Dr. Fred Rumsey who confirmed the identification. About forty stems were seen in various stages of development simultaneously, a characteristic of this species that uses Ivy (*Hedera helix*) as a host. The stigmas were purplish-brown, which is rather atypical, and this led initially to some confusion over the plant’s identity.

***Osmunda regalis***  
(Warwickshire Rare)

**Royal Fern**  
Extinct as a native in Warwickshire, now only seen as a casual

Edgbaston Pool                      SP0583                      2005      AJL  
Lark Stoke                              SP280781                      2015      JJB  
Nuneaton Town Centre              SP363913                      2013      JSW, MVW

Unfortunately there are no longer any native Royal Ferns left in Warwickshire. The Birmingham and Black Country Flora (Trueman *et al.*, 2013) quotes James Bagnall’s statement that the last native Royal Fern seen at Sutton Park was destroyed in 1868. It also mentions a 1987 site in Harbourne (SP037854), just inside the boundary of Vice-county 38. The National Trust reported it as an introduction at Upton House Lake in 1985 (SP371461). Cadbury *et al.* (1971) adds an extra record from Leek Wootton Court (SP2868) and mentions earlier records from Coleshill Heath, Marston Green and from near Rugby without giving dates, status or authors. The Nuneaton plant is a garden throwout which has found a home beside the River Anker. It can be seen on the north side of the footbridge that crosses the river from the east side of the bus station.

***Papaver argemone***  
GBS: Vulnerable

ES: Endangered

Warwickshire Scarce

**Prickly Poppy**  
Archaeophyte

|                                |              |      |          |                                     |
|--------------------------------|--------------|------|----------|-------------------------------------|
| Atherstone-on-Stour            | SP2050       | 2003 | JWP      |                                     |
| Stratford                      | SP20855375   | 2012 | NA       | Four plants on recently turned soil |
| Wellesbourne HRI               | SP260569     | 2007 | JWP      |                                     |
| Hampton Lucy                   | SP2640057903 | 2016 | BL       |                                     |
| Purlieu Lane, Kenilworth       | SP27527244   | 2012 | JSW, MVW |                                     |
| Wellebourne                    | SP275548     | 1992 | HAR      | Three large plants                  |
| Walton                         | SP2852       | 2003 | JWP      |                                     |
| Wellesbourne                   | SP281550     | 1996 | LCD      | Ten plants                          |
| Walton Hall Drive              | SP286544     | 1992 | HAR      | Edge of cornfield, several plants   |
| Idlicote South                 | SP28904362   | 2017 | JRR, VR  |                                     |
| Holbrooks, Somerfield Car Park | SP333832     | 2006 | MJS      | Four plants                         |
| Gaydon                         | SP365543     | 2004 | BL       | Roadworks, two plants               |
| Bubbenhall Mitigation Site     | SP3709371758 | 2006 | BL       |                                     |
| Long Itchington                | SP405649     | 1991 | JCB      | One plant only                      |

This species, found on dry banks, waste ground and disturbed sites, is declining both nationally and within the county. In the 1980’s there were many more records. Michael Senior monitored a colony at Piles Coppice, near Coventry from 1973 to 1983 (SP285771) and it was also seen nearby at Brandon Wood (SP385763). In the south, there were records from Offchurch (SP354658), Fulbrook (SP258599), Bishops Itchington (SP409551), Edgehill Quarry (SP437300) and Snitterfield (SP235594). There was another record by Maurice Arnold from Piccadilly (SP235594) in the north of the county. Cadbury *et al.* (1971) reports it from 48 tetrads with two rather surprising “hotspots” in the Tame Valley and near Atherstone. There are only a few 19<sup>th</sup> century records of this species.

***Papaver hybridum***

Warwickshire Rare

**Rough Poppy**

Archaeophyte

|              |          |      |     |
|--------------|----------|------|-----|
| Wellesbourne | SP283549 | 1990 | PJC |
|--------------|----------|------|-----|

Pam Copson discovered just one plant in an unsprayed, organic wheatfield. There are no other historical records of this species in the county. Nationally it favours arable and disturbed sites and is most commonly found on chalk and limestone in the south and east.

***Parentucellia viscosa***

(Warwickshire Scarce)

**Yellow Bartsia**

Native in GB, casual in Warwickshire

|                    |          |      |    |
|--------------------|----------|------|----|
| Packington Tip     | SP203866 | 1996 | AG |
| Foleshill Gasworks | SP343834 | 1999 | JS |

As a native, this species is found in dune slacks and damp grassland mainly in the west of the country. Recently it has been occurring more often as a casual on amenity grassland. The Foleshill Gasworks plants were first seen by Steven Falk and later, in 1996, by the HBA and Roger Maskew. Although a large part of the old Gasworks site was destroyed by the construction of the Ricoh Arena, these sightings were by the new A444 link road, a fair distance away to the north of the building, but they are unlikely to have survived. There are no other Warwickshire records.

***Paris quadrifolia***

Warwickshire Scarce

**Herb-Paris**

Native

|                                |              |      |           |                            |
|--------------------------------|--------------|------|-----------|----------------------------|
| New Coppice, Redditch          | SP043640     | 2000 | AT        | A two metre patch          |
| Oversley Wood                  | SP1025056355 | 2011 | BL        |                            |
| Redhill Wood                   | SP1353156135 | 2011 | BL        |                            |
| Snitterfield Bushes NR         | SP19946025   | 2013 | BSBI      | Airfield side              |
| Snitterfield Bushes NR         | SP20026035   | 2013 | BSBI      |                            |
| Bowshot Wood                   | SP3053       | 1997 | HAR       | One plant                  |
| Cottage Farm                   | SP3088       | 1993 | BP        | Forty to forty-five plants |
| Lighthorne Rough               | SP320546     | 2015 | JJB       |                            |
| DM Kinton, Graveground Coppice | SP353491     | 1995 | MGW       | Frequent                   |
| Ufton Wood                     | SP392627     | 1996 | JL, MrsSW |                            |
| All Oaks Wood                  | SP448786     | 1994 | MJS       | Two plants                 |

Herb Paris, an ancient woodland indicator species of calcareous soils, is easy to overlook as it often grows in deep shade. It is sufficiently widespread nationally to be labelled of Least Concern in Stroh *et al.* (2014) but many populations are small and isolated and need to be protected. Ten plants were seen at Hastings Frizhill Wood, near Wellesbourne in 1987 (SP295537). There are also records from Windmill Hill Plantation in 1982 (SP2041) and from Weethley Wood in 1979 (SP047563). Cadbury *et al.* (1971) reports it from 22 tetrads all south of Coventry. An up to date view of the plant's status and much more can be found on Alex Lockton's Species Account: *Paris quadrifolia*, which is available free on the BSBI website.

***Parnassia palustris***

ES: Vulnerable

Warwickshire Rare

**Grass-of-Parnassus**

Native

|             |              |      |       |
|-------------|--------------|------|-------|
| Sutton Park | SP0936096076 | 2015 | BBCRG |
| Sutton Park | SP09399597   | 2015 | BBCRG |

Warwickshire's only current site is a base-enriched flush near Longmoor Pool. There is also a 19<sup>th</sup> century record from SP0997. Cadbury *et al.* (1971) has it from SP0998 and there are three other 19<sup>th</sup> century records from near Kenilworth that are supported by specimens in the Warwick herbarium.

***Pedicularis palustris***

ES: Vulnerable

Warwickshire Rare

**Marsh Lousewort**

Native

|                       |              |      |       |                         |
|-----------------------|--------------|------|-------|-------------------------|
| Sutton Park           | SP0947398320 | 2015 | BBCRG | Little Bracebridge Pool |
| Sutton Park, Longmoor | SP0935796144 | 2010 | JH    |                         |

This is yet another widespread, western upland species that in Warwickshire can only be found in the flushes of Sutton Park. The survey for Cadbury *et al.* (1971) also found it in SP0995 and SP1097 and Bagnall is

reported to have seen it in SP0997 in 1867 (Trueman *et al.*, 2013). There are 19<sup>th</sup> century records from Coleshill Pool, Packington, Lawsonford, Alveston and Balsall Common.

***Pedicularis sylvatica***

**Lousewort**

ES: Vulnerable Warwickshire Rare

Native

|                       |            |      |             |                         |
|-----------------------|------------|------|-------------|-------------------------|
| Sutton Park           | SP0998     | 2015 | BBCRG       | Little Bracebridge Pool |
| Sutton Park, Longmoor | SP093958   | 2005 | ITR, MP     |                         |
| Sutton Park, Longmoor | SP0996     | 1997 | SB          |                         |
| Packwood Hay Meadow   | SP175723   | 2016 | JJB, CN, AE |                         |
| Great Wolford         | SP24303323 | 1997 | PJM         |                         |
| Brandon Wood          | SP393766   | 1994 | CC          |                         |

In the past, this species was much more common than *P. palustris*, with Cadbury *et al.* (1971) reporting it from 18 different tetrads, including four in Sutton Park and from near Clowes Wood. Unfortunately, a sharp decline caused by drainage and nutrient enrichment has led to its virtual extinction in the rest of Warwickshire, until a few plants were discovered at Packwood in 2016. Visits were made to both Brandon Wood and Great Wolford in 2014 but no plants were found. The Brandon Wood site is in rather dense, wet woodland that looks to be a very suitable habitat. The eight figure grid reference for the Great Wolford site gives a location in wet, ferny woodland, alongside a stream below a high hedge bank. The original description given when the record was sent in to the WBRC was of "rough, boggy grazing" which suggests a mistake with the grid reference. There is an area of sedge marsh nearby, but this is not suitable for grazing either. Both sites may well repay further investigation. Warwickshire material is all subsp. *sylvatica*.

***Persicaria minor***

**Small Water-pepper**

GBS: Vulnerable Warwickshire Rare

Native

|                            |            |      |       |                        |
|----------------------------|------------|------|-------|------------------------|
| Sutton Park                | SP08859642 | 2015 | BBCRG | North of Longmoor Pool |
| Sutton Park, Longmoor Pool | SP09309565 | 1995 | HHF   |                        |

Martin Rand, the South Hampshire Vice-county Recorder, visited Sutton Park in August 2015 and reported thirty or so plants growing on the scrape. This newly created shallow pool was dug following a sewage incident, and the plant had not been seen in the area before. A few weeks later Ian Trueman and the BBCRG visited the site, where it was quickly discovered growing with *P. maculosa* and *P. hydropiper*.

In 1995 Harold Fowkes found it growing in a shallow ditch beside the road at Banner's Gate. The ditch has since become overgrown and the colony has been lost. Bagnall reported it from Bracebridge Pool (SP0998) in 1880 and it was still there in 1959 when it was seen by M. C. Clark. It is in Cadbury *et al.* (1971) as *Polygonum minus*.

***Petroselinum segetum***

**Corn Parsley**

Warwickshire Rare

Native

|            |              |      |     |                                       |
|------------|--------------|------|-----|---------------------------------------|
| DM Kineton | SP3663051526 | 2011 | WFG | On top of bund                        |
| DM Kineton | SP37045178   | 2012 | WFG | 20+ plants in wheat field behind bund |

Declared extinct in Falk (2009), it was refound by Brian Laney in 2011, after a gap of 61 years, on top of the bund, north of Borrowpit Lake in DM Kineton. A 2012 visit by WFG found it to be more widespread in the field just to the north of the bund. It was recorded from five tetrads in the survey for Cadbury *et al.* (1971), Tattle Bank (SP1863), Stratford-upon-Avon (SP1953), Newbold-on-Stour (SP2345), Hampton Lucy (SP2557) and near Lighthorne (SP3357). It was widespread in the 19<sup>th</sup> century.

***Pinguicula vulgaris***

**Common Butterwort**

ES: Vulnerable Warwickshire Rare

Native

|                       |              |      |      |                         |
|-----------------------|--------------|------|------|-------------------------|
| Sutton Park, Longmoor | SP0935496149 | 2011 | JH   |                         |
| Sutton Park           | SP09469827   | 2014 | BSBI | Little Bracebridge Pool |

This distinctive insectivorous plant is limited to the base-rich flushes of Sutton Park. The survey for Cadbury *et al.* (1971) adds nearby SP0995 and there is a record for SP0997 from C. R. Jordan in Trueman *et al.* (2013). There are 19<sup>th</sup> century records from Bannerley Pool (SP18) and Stivichall (SP37).

***Plantago major* subsp. *intermedia***

**Greater Plantain**

Warwickshire Scarce

Native

|                        |          |      |     |                        |
|------------------------|----------|------|-----|------------------------|
| Snitterfield Bushes NR | SP198601 | 1996 | JWP | Rough grass and debris |
|------------------------|----------|------|-----|------------------------|

|                       |              |      |     |   |
|-----------------------|--------------|------|-----|---|
| Leam Valley NR        | SP3450564986 | 2008 | JWP | Beach of pool, occasional               |
| Wyken Slough NR       | SP366832     | 2008 | JWP |   |
| River Sowe, Walsgrave | SP383803     | 2008 | MJS | Three plants, edge of ride, above ditch |

This is a smaller version of the common subsp. *major*, with a shorter flowering spike, with only 3 -5 veins in the leaves and favouring damper sites. It was not recorded separately in Cadbury *et al.* (1971). There is an additional record from S. Apton from the verge of Shadowbrook Lane, Hampton-in-Arden in 1989 (SP198813).

***Platanthera bifolia*** **Lesser Butterfly-orchid**  
 GBS: Vulnerable ES: Endangered Warwickshire Rare Native

|            |          |      |     |                |
|------------|----------|------|-----|----------------|
| Ufton Wood | SP387627 | 1995 | MJS | One plant only |
|------------|----------|------|-----|----------------|

In the 1980's Ufton Wood regularly attracted important botanists to see its impressive orchid flora and Lousley pronounced the Ufton Wood population of *P. bifolia* to be the "woodland form" of the species. John and Val Roberts used to regularly check on this plant. The wood nowadays is overgrown and in dire need of management. In 2013 access was refused for survey work. Cadbury *et al.* (1971) gives the first county record from near Stratford-upon-Avon in 1857 and there is an unconfirmed record in Falk (2009) from Moreton Morrell in 2002.

***Platanthera chlorantha*** **Greater Butterfly-orchid**  
 GBS: Near Threatened Native

|                             |            |      |          |                                |
|-----------------------------|------------|------|----------|--------------------------------|
| Bannams Wood                | SP114642   | 1995 | HD       |                                |
| Binton road verge           | SP143532   | 1996 | PJC      |                                |
| Luddington, disused railway | SP15845288 | 2009 | SJF      |                                |
| Snitterfield Bushes NR      | SP201607   | 2014 | JRR, VR  | Five spikes                    |
| Loxley                      | SP259532   | 1996 | MJS      |                                |
| Moreton Hall Meadows        | SP30325556 | 2011 | JJB      |                                |
| Chesterton Wood             | SP341572   | 2013 | JJB      |                                |
| Itchington Holt             | SP372563   | 1990 | JWP      | One plant                      |
| Ufton Fields NR             | SP38406167 | 2010 | SJF      |                                |
| Print Wood                  | SP385649   | 2009 | JJB      |                                |
| Ufton Wood                  | SP3862     | 1996 | TM       |                                |
| Bishop's Hill               | SP39255831 | 2002 | SJF      |                                |
| Southam Bypass              | SP419626   | 2012 | JRR, VR  | Small blue reintroduction site |
| Long Itchington Quarry      | SP420635   | 2009 | JJB      |                                |
| Stockton Cutting NR         | SP437651   | 2013 | JSW, MVW |                                |
| Tasker's Meadow NR          | SP439651   | 2014 | CS       | 75 spikes                      |
| All Oaks Wood               | SP451787   | 1996 | DL       |                                |

Although the above list is lengthy, many of the sites have just a few plants and these colonies could quickly disappear by becoming overgrown or damaged. There are another nine sites from the 1980's, the most interesting being the one site in the north of the county, Kingsbury Wood (SP235977) where a few orchids were seen in 1989. A visit was made in early September 2014 with Maurice Arnold who remembered the exact location, but no plants were seen.

A recent surprise was the discovery of a new colony in deep woodland at Snitterfield Bushes by Paul Hodges in 2013. This Wildlife Trust reserve has been thoroughly surveyed many times before. It just shows how easy it is to overlook plants especially if they do not flower every year. Cadbury *et al.* (1971) reports it from 35 tetrads, but only on the limestone in the south and east of the county.

***Poa infirma*** **Early Meadow-grass**  
 (Warwickshire Rare) Native in GB, casual in Warwickshire

|                       |              |      |          |
|-----------------------|--------------|------|----------|
| Kingsbury Water Park  | SP20279720   | 2015 | JSW, MVW |
| Warwick Services, M40 | SP34025799   | 2017 | GC       |
| Warwick Services, M40 | SP3408557947 | 2011 | BL       |

This early flowering annual grass used to be confined to the south coast but has been spreading north and is now quite common in London on amenity grassland. Brian Laney found the first Warwickshire plants on the 27<sup>th</sup> March 2011 on the southbound M40 services growing just inside the concrete kerbs of the flower borders. It was still there in 2017. The Kingsbury site is beside a shaded path between Broomey Croft Pool and Canal Pool. In the early spring of 2017 a large quantity of chipped bark was dumped on top of it and we will have to wait until the spring of 2018 to see if any plants have survived.

***Polygala serpyllifolia***

ES: Near Threatened

Warwickshire Scarce

**Heath Milkwort**

Native

|                      |            |      |          |  |
|----------------------|------------|------|----------|--|
| Earlswood            | SP104740   | 1996 | DT       |  |
| Oversley Wood        | SP1056     | 1991 | RJ       |  |
| Mockley Wood, Knowle | SP122685   | 1996 | JWP      |  |
| Riverside Meadows    | SP142531   |      | EN       |  |
| Hay Wood             | SP21047129 | 2017 | CN       |  |
| Packington Park      | SP225846   | 1998 | DP       |  |
| Baddesley Colliery   | SP279974   | 2001 | BM       |  |
| Hartshill            | SP315940   | 1996 | BP       |  |
| Brandon Wood         | SP388768   | 2016 | JSW, MVW |  |

This species can sometimes be difficult to separate from *P. vulgaris* (Common Milkwort), and some of the above records may be of that species. There are only two current colonies. One, consisting of about fifteen plants, is in an area of sandy grassland to the west of Brandon Wood, the other at Hay Wood is in acid grassland beside the main ride. Camille Newton's record updates a sighting by John and Val Roberts from 1997. A useful table of characteristics for both species can be found in Rich & Jermy (1988), free to download online. There is a further record from Coombe Abbey Park (SP390790) in 1982. Cadbury *et al.* (1971) records it from 15 tetrads all on the more acidic soils in the west of the county. Please do not use this as an identification guide as both *P. serpyllifolia* and *P. vulgaris* have been seen in Sutton Park in the past.

***Polygonum rurivagum***

Warwickshire Scarce

**Cornfield Knotgrass**

Archaeophyte

|                      |              |      |     |                  |
|----------------------|--------------|------|-----|------------------|
| Hampton-in-Arden     | SP200820     | 1990 | SA  | Old Station Road |
| Whitacre Heath NR    | SP208931     | 1994 | CJK |                  |
| M40/A46 Junction     | SP2597762252 | 2010 | BL  |                  |
| Lighthorne           | SP326563     | 1992 | JB  |                  |
| Squire Bridge, Ansty | SP402835     | 1992 | MB  |                  |

Cornfield Knotgrass has narrower leaves that are more acute than Common Knotgrass (*P. aviculare*), and it is very easy to overlook. Nationally, it is an arable weed of cereal crops on chalk or other light soils in the south of England. There is a 1989 record from Bascote (SP398641). The first county record, given in Cadbury *et al.* (1971), is from Martin's Farm, Rugby in 1950. Since then an earlier record from 1890 found at Whitnash (SP36) by H. Bromwich has come to light, supported by a specimen in the herbarium at the World Museum, Liverpool.

***Polypogon monspeliensis***

(Warwickshire Scarce)

**Annual Beard-grass**

Native in GB, casual in Warwickshire

|                             |              |      |   |                    |
|-----------------------------|--------------|------|---|--------------------|
| Handsworth                  | SP045890     | 2005 | MP  |                    |
| Salford Priors Gravel Pits  | SP075528     | 2013 | JSW, MVW, JRR, VR, JJB                      |                    |
| Alcester-Broom Railway Line | SP086540     | 2009 | JJB   |                    |
| Hatton Locks                | SP245667     | 2009 | JJB   |                    |
| Warwick                     | SP249660     | 1992 | JWP   |                    |
| Charlecote                  | SP265565     | 1992 | JMP   |                    |
| University of Warwick       | SP296757     | 2012 | MJS   |                    |
| Coventry, Paradise Street   | SP3394078454 | 2014 | KDS   | In pavement cracks |
| Ryton-on-Dunsmore           | SP3934074687 | 2017 | IT  |                    |
| Newton                      | SP53147986   | 2015 | WFG and BSBI Vice County 55 Recording Group |                    |

As a native, *P. monspeliensis* is found along the coasts of southern and eastern England, but it also occurs inland as a casual. It was first seen at the Warwick site by John Bowra in 1981, and James Partridge reported it still present in 1992. The grass is quite widespread in damp patches at Salford Priors and seems to cope well with the disturbance at this active quarry. There is a 1929 record from Weston Park (SP24). Cadbury *et al.* (1971) reports it from a coal-tip in Bedworth (SP3585) and mentions that the first county record specimen collected by Dr. G.A.O. St. Brody from The Tannery in Kenilworth in 1875 was in Bagnall's herbarium.

***Potamogeton berchtoldii***

Warwickshire Scarce

**Small Pondweed**

Native

|                            |          |      |                        |  |
|----------------------------|----------|------|------------------------|--|
| Edgbaston Pool             | SP0584   | 2007 | JWP, MP,               |  |
| Salford Priors Gravel Pits | SP075528 | 2013 | JJB, JRR, VR, JSW, MVW |  |
| Sutton Park, Longmoor Pool | SP095958 | 2008 | JWP                    |  |

|                            |            |      |                        |
|----------------------------|------------|------|------------------------|
| Park Hall, Castle Bromwich | SP148905   | 2006 | ITR, MP, JWP           |
| Langley & Lindridge Pools  | SP154968   | 2006 | MP, ITR, JWP, JHA, MSC |
| Park Hall, Castle Bromwich | SP158908   | 2006 | ITR, MP, JWP           |
| Hampton-in-Arden           | SP2080     | 2003 | JWP                    |
| Whitacre Heath NR          | SP208924   | 1999 | JL, MrsSW              |
| Kingsbury Rifle Range      | SP22579593 | 2016 | JSW, MVW               |
| Penmire Lake, Dordon       | SP258996   | 2012 | JJB                    |
| Sandpits Lane Meadow       | SP316829   | 2011 | JJB                    |

*P. berchtoldii* and *P. pusillus* (Lesser Pondweed) can only reliably be separated by microscopic dissection of the stipules. This has led to both species being under-recorded with many botanists choosing to ignore them. It also makes it difficult to assess population trends both locally and nationally. There are records from the 1980's from Berkswell in 1985 (SP228795), Heathcote in 1987 (SP300632), Ryton-on-Dunsmore in 1985 (SP375728), near Wormleighton Reservoir in 1980 (SP446516), Stockton in 1984 (SP433648) and Alvecote Pools in 1985 (SK253041). Cadbury *et al.* (1971) reports it from 9 tetrads, all in the northern half of the county.

***Potamogeton friesii*** **Flat-stalked Pondweed**  
 GBS: Near Threatened ES: Vulnerable Warwickshire Rare Native

|                        |          |      |     |                            |
|------------------------|----------|------|-----|----------------------------|
| Sowe Common            | SP323832 | 1992 | DP  | Only one plant             |
| Wormleighton Reservoir | SP448517 | 1998 | MJS | South end of the reservoir |

There were many more records of this species from the 1950's and 1960's when it was frequent in canals. This decline has mainly been due to the increase in boat traffic and there are now few stretches of canal left in the county that support any kind of aquatic community. It was not seen at Wormleighton Reservoir in 2014. Cadbury *et al.* (1971) reported it from 12 tetrads.

***Potamogeton lucens*** **Shining Pondweed**  
 Warwickshire Scarce Native

|                        |          |      |           |          |
|------------------------|----------|------|-----------|----------|
| Alderminster           | SP233483 | 1994 | JMC, CDP  | Frequent |
| Coventry Canal         | SP335803 | 1997 | JS        |          |
| Bascote                | SP404640 | 1997 | AN        |          |
| Frankton Ponds         | SP416706 | 1998 | JL, MrsSW |          |
| Wormleighton Reservoir | SP447518 | 2014 | WFG       |          |

This large leaved species favours calcareous sites. Be aware that it can hybridise and hybrids have been seen in the county. *P. lucens* was seen at six separate sites on the Coventry Canal near Hawkesbury Junction in 1985 (SP38), in the River Leam in 1981 (SP468685) and from Stockton in 1983 (SP439649). It was difficult to assess the health of the population at Wormleighton Reservoir when the WFG visited it in September 2014. The water levels had been drawn down a few weeks earlier, and the group were faced with a large area of mud with only a few recognizable dying leaves left. It was found in 16 tetrads during the survey for Cadbury *et al.* (1971).

***Potamogeton obtusifolius*** **Blunt-leaved Pondweed**  
 Warwickshire Rare Native

|               |          |      |     |
|---------------|----------|------|-----|
| Edbaston Pool | SP0583   | 2005 | AJL |
| Coleshill     | SP201895 | 1997 | DP  |

This is another declining species. There are six records from the 1980's. The most interesting is from Wormleighton Reservoir in 1984 (SP448517). Nationally this species has a fondness for acid water bodies which makes John Bowra's question mark on the comment ("on lias?") attached to the record from Wormleighton Reservoir, understandable. His record is a good one though, as the specimen was confirmed by N. T. H. Holmes. Readett (1971) reports it from SP0997 and SP0998 at Sutton Park. Cadbury *et al.* (1971) has it from two other sites, Wyndley Pool, Sutton Park (SP1195) and Packington Park (SP2284). Again there are plenty of earlier records.

***Potamogeton polygonifolius*** **Bog Pondweed**  
 Warwickshire Scarce Native

|                       |            |      |          |                         |
|-----------------------|------------|------|----------|-------------------------|
| Sutton Park, Longmoor | SP093964   | 2011 | WFG      |                         |
| Sutton Park           | SP095982   | 2011 | ITR, JOB | Little Bracebridge Pool |
| Bickenhill Plantation | SP19028430 | 2012 | WFG      |                         |
| Little Packington     | SP203844   | 1998 | DP       |                         |

|                           |              |      |                             |
|---------------------------|--------------|------|-----------------------------|
| Coleshill Pool            | SP203864     | 2010 | ALA, LS, HW, SAB            |
| Exhall Fish Pool          | SP331859     | 1997 | JS                          |
| Brandon Wood Jubilee Pool | SP3921876688 | 2014 | JSW, MVW, JRR, VR, Abundant |

Nationally, Bog Pondweed is encountered in the moorland and bogs of western and northern Britain so Warwickshire is on the edge of its natural range. It has never been common in the county, and has always been limited to strictly acidic sites. Cadbury *et al.* (1971) reports it from nine tetrads and Readett (1971) also has it from SP1096 in Sutton Park. There are many 19<sup>th</sup> century records.

### **Potamogeton pusillus**

### **Lesser Pondweed**

Warwickshire Scarce

Native

|                                 |            |      |           |
|---------------------------------|------------|------|-----------|
| Kettlebrook Park                | SK233016   | 1999 | MJS       |
| Edgbaston Pool                  | SP0583     | 2005 | AJL       |
| Warren Chase Water              | SP166569   | 1998 | PJC       |
| Hanson's Quarry, Middleton      | SP19367897 | 2014 | JSW, MVW, |
| Middleton Lakes RSPB            | SP202991   | 2011 | WFG       |
| Kingsbury Water Park            | SP205958   | 1990 | JL, MrsSW |
| Kingsbury Water Park            | SP210957   | 2016 | JSW, MVW  |
| Birch Coppice Industrial Estate | SP258996   | 2014 | JSW, MVW  |
| Purley Chase Lane Pond          | SP299949   | 2014 | JSW, MVW  |
| Sowe Common                     | SP370834   | 1992 | DP        |
| Cropston Magna                  | SP4459     | 2016 | JSW, MVW  |

Difficulties with identification have led to this species being under-recorded and a few of the above records may refer to *P. berchtoldii*. It is fairly tolerant of eutrophication, is not fussy about habitat and appears to be increasing nationally. It was found at Warwick in 1987 (SP219561), in the River Leam at Emscote in 1985 (SP299654) and in Jephson Gardens (SP324657). In the south there are records from Lighthorne in 1983 (SP344567) and Napton Reservoir in 1987 (SP467632). It was not refound when the WFG visited Napton in 2014. It was seen in 15 tetrads during the survey for Cadbury *et al.* (1971) all in the north of the county.

### **Potamogeton trichoides**

### **Hairlike Pondweed**

Warwickshire Rare

Native

|                    |          |      |     |
|--------------------|----------|------|-----|
| Kilsby Lane Meadow | SP538724 | 2011 | JJB |
|--------------------|----------|------|-----|

This is a rare species in the county even though it can tolerate eutrophic water and can occur as a pioneer in newly cleaned out drainage ditches. There is a 1989 record from Bascote Reservoir (SP395641). There are three other modern records reported in Cadbury *et al.* (1971), from Turner's Pool, Glascote (SK2102), Lighthorne (SP3356) and Brownsover Wharf on the Oxford Canal (SP5076).

### **Potentilla argentea**

### **Hoary Cinquefoil**

GBS: Near Threatened ES: Near Threatened Warwickshire Rare

Native

|                         |              |      |     |
|-------------------------|--------------|------|-----|
| Primrose Hill, Woodloes | SP2798866547 | 2009 | MJS |
|-------------------------|--------------|------|-----|

Warwickshire's only remaining colony is limited to two plants growing on a sandstone outcrop in the middle of a modern housing estate in Warwick. A specimen from this site, collected in 1810 by W.G. Perry, is in the Warwick herbarium. It was also found at Water Orton Sidings (SP1791) until 1985, but that site has since been built on. Cadbury *et al.* (1971) reported it from east of Brandon (SP4176) and Salford Priors (SP0750). There are three other 19<sup>th</sup> century records.

### **Primula elatior**

### **Oxlip**

GBS: Near Threatened (Warwickshire Rare)

Native in GB, casual in Warwickshire

|                 |          |              |                              |
|-----------------|----------|--------------|------------------------------|
| Moor Hall Drive | SP125982 | MP, JWP, JHA | Seedlings from garden origin |
|-----------------|----------|--------------|------------------------------|

This is a species of East Anglian woodland and is unlikely to occur as a native in Warwickshire.

### **Prunus cerasus**

### **Dwarf Cherry**

ES: Near Threatened Warwickshire Scarce

Archaeophyte

|                            |          |      |     |
|----------------------------|----------|------|-----|
| Cuttle Pool NR             | SP202754 | 2009 | JJB |
| Weddington Railway Cutting | SP365935 | 2011 | JJB |
| CAD Kineton                | SP366505 | 1990 | JAH |



|  |          |      |     |
|--|----------|------|-----|
| Rugby - Leamington Disused<br>Railway Line | SP435694 | 2011 | JJB |
| Withybrook Spinney                         | SP460861 | 1997 | MJS |

This species, one of the parents of the cultivated "Morello" cherry, always remains a shrub or small tree. It can easily be overlooked, or confused with *P. avium* (Wild Cherry) and is sometimes planted. It was seen east of Snitterfield in 1988 (SP2258), Clifford Chambers in 1982 (SP1852) and Redditch in 1987 (SP06), and was reported from sixteen tetrads in Cadbury *et al.* (1971).

### ***Ranunculus arvensis***

GBS: Critically Endangered ES: Endangered

### **Corn Buttercup** Archaeophyte

|                               |          |      |     |                                      |
|-------------------------------|----------|------|-----|--------------------------------------|
| Packwood, beside canal        | SP193727 | 1994 | NMW |                                      |
| Darlingscott                  | SP225414 | 1995 | MJS | One plant, embankment edge           |
| Ilmington                     | SP232436 | 2005 | MJS | Field margin, near farmyard entrance |
| Lower Wolford                 | SP267341 | 1991 | PJM |                                      |
| Weston Mill Farm, Cherrington | SP281363 | 1992 | PJM | Fallow field                         |
| Wellesbourne                  | SP283549 | 1990 | PJC | Wheat field                          |
| Moreton Morrell               | SP310549 | 1992 | JB  | Wheat field                          |
| Stoke Green Park              | SP353787 | 1999 | MJS | Casual, probably from seeding        |
| Townsend Farm, Radway         | SP378492 | 1990 | PJC | Organic wheat crop                   |
| Ufton Fields NR               | SP383615 | 1994 | CJK |                                      |
| Nettle Hill                   | SP420822 | 1996 | MJS | Waste ground by M6/canal crossing    |
| Southam By-pass               | SP421627 | 1997 | MJS | Top of embankment                    |
| Napton                        | SP448612 | 1991 | BD  | Edge of cornfield                    |
| Napton                        | SP452625 | 1991 | BD  | Edge of cornfield                    |

The best way to see the severity of decline in this species is by comparing the following figures. There are 320 different records on the BSBI database since the first county record in 1812. The survey for Cadbury *et al.* (1971) managed to find it in 152 tetrads. There were only 13 records in the 1990's and only one since. In 2012 this species was selected for the BSBI Threatened Plants Project to quantify the decline and some of the above sites were chosen and revisited. At Weston Mill Farm, Lower Wolford, Ilmington and Nettle Hill, even after careful searching, no plants were seen. It may reappear in the south of the county as it is able to survive for many years in the seed bank. Intensive agriculture and better seed cleaning are the main reasons for the loss of this arable weed.

### ***Ranunculus circinatus***

Warwickshire Scarce

### **Fan-leaved Water-crowfoot** Native

|                            |            |      |          |
|----------------------------|------------|------|----------|
| Pooley Fields Country Park | SK253051   | 2014 | JSW, MVW |
| Shuttington                | SK254048   | 1995 | MAA      |
| Bull's Lane Pool           | SP15369470 | 2004 | MP       |
| Kingsbury Water Park       | SP214954   | 2008 | JWP      |
| Ryton Pool Country Park    | SP375729   | 1990 | MB       |
| Brandon Marsh              | SP388755   | 2011 | JRU      |

Although most modern records are from the north of the county, historically it appears not to have been very fussy about soil type or eutrophic water. The first two records above are from adjacent pools (the Country Park hadn't opened in 1995, hence the two location names). It was first seen in 1995 growing in the main pool closer to the canal. This pool is now overgrown with *Typha* and willows and by 2014 the plant had moved to the open water of the *Utricularia* pool, next to the Miner's Path, where it was abundant. In 1985 it was frequent in the River Leam near Offchurch Bury (SP347656). It was reported from 15 tetrads in Cadbury *et al.* (1971).

### ***Ranunculus hederaceus***

Warwickshire Scarce

### **Ivy-leaved Crowfoot** Native

|                              |            |      |               |                           |
|------------------------------|------------|------|---------------|---------------------------|
| Sutton Park                  | SP08639767 | 2005 | MP, ITR, JHA, | Mud of dried up stream    |
| Sutton Park, Longmoor Pool   | SP09389595 | 2005 | MP, ITR,      | Wet mud, shallows of pool |
| Truemans Heath               | SP092770   | 1990 | JD            |                           |
| Sutton Park, Longmoor Valley | SP09229645 | 2005 | MP, ITR, PR   | Muddy margin of stream    |
| Majors Green Pastures        | SP093779   | 1999 | JD            |                           |
| Sutton Park                  | SP09499824 | 2015 | BBCRG         | Little Bracebridge Pool   |
| Sutton Park, Blackroot Pool  | SP108971   | 1998 | SPG           |                           |
| Hockley Heath                | SP117763   | 1997 | DT            | Square Acre Farm          |
| Sidenhill Spinney            | SP417764   | 1994 | JB            | East Marsh                |

This mud-dwelling species has declined sharply since the Cadbury survey, but its Warwickshire distribution indicates that it favours the more acidic soils of the north and west of the county. There is a record from a boggy meadow in Balsall Street, Solihull from 1989 (SP223763) and another from near Gravel Pit Plantation in 1987 (SP2281). Cadbury *et al.* (1971) reported it from 31 tetrads.

***Ranunculus omiophyllus***

**Round-leaved Crowfoot**

Warwickshire Scarce

Native

|                            |            |      |                   |                         |
|----------------------------|------------|------|-------------------|-------------------------|
| Dosthill Park              | SK211006   | 1998 | RA                |                         |
| The Decoy                  | SK243057   | 1998 | KH                |                         |
| Sutton Park                | SP08569630 | 2015 | BBCRG             |                         |
| Sutton Park, Longmoor      | SP093956   | 2011 | ITR, PCo          | In ditch beside road    |
| Sutton Park                | SP09499824 | 2014 | BSBI              | Little Bracebridge Pool |
| Armscote House, Armscote   | SP246445   | 2004 | IT                |                         |
| Lighthorne, Darkland Copse | SP326558   | 2012 | JSW, MVW, JRR, VR |                         |

A species of wet, acidic habitats in western Britain, the Warwickshire records are right on the eastern edge of this plant's range. The 2015 Sutton Park colony was growing in a muddy pool that had been created after remedial groundwork following a pollution incident. The two records from the south of the county are particularly unusual and may repay further investigation. In Cadbury *et al.* (1971) it was only reported from Sutton Park, where it was found in three extra monads (SP1095, SP1096 and SP1097).

***Ranunculus parviflorus***

**Small-flowered Buttercup**

Warwickshire Scarce

Native

|                   |              |      |     |                                 |
|-------------------|--------------|------|-----|---------------------------------|
| Pendigo Lake, NEC | SP19448336   | 2013 | DAB | Short turf by Crown Plaza Hotel |
| Hatton Rock       | SP2257       | 1997 | AN  |                                 |
| Copdock Hill      | SP2551059115 | 2016 | BL  | Hundreds of plants in arable    |
| Hampton Lucy      | SP2555158678 | 2016 | BL  |                                 |
| Copdock Hill      | SP2559459013 | 2016 | BL  |                                 |
| Moreton Morrell   | SP311549     | 1992 | JB  | One plant only                  |

This is an easily overlooked southern species that occurs on dry banks, disturbed ground and as a weed in gardens. There are two 1980's records, from near Hampton Lucy in 1983 (SP255591) where the plant was refound in 2016, and from Bishops Tachbrook in 1988 (SP300619). It was only reported from the Hatton Rock site in Cadbury *et al.* (1971). The plants at Copdock Hill (SP2551059115) were in a wheat field and had recently been sprayed with herbicide.

***Ranunculus penicillatus* subsp. *pseudofluitans***

**Stream Water-crowfoot**

Warwickshire Scarce

Native

|                      |            |      |     |  |
|----------------------|------------|------|-----|--|
| Warwickshire Moor    | SK2104     | 2016 | WFG |  |
| River Arrow          | SP058673   | 2004 | JD  |  |
| River Arrow          | SP059667   | 2004 | JD  |  |
| River Arrow          | SP060666   | 2004 | JD  |  |
| River Arrow          | SP068650   | 2004 | JD  |  |
| River Arrow          | SP070650   | 2004 | JD  |  |
| River Arrow, Studley | SP08066366 | 2016 | WFG |  |
| River Cole           | SP101779   | 1995 | CW  |  |
| River Cole           | SP101781   | 1995 | WAT |  |
| Low Brook            | SP170863   | 1999 | DP  |  |
| Hampton-in-Arden     | SP2080     | 2003 | JWP |  |
| Barston              | SP202777   | 1994 | MJS |  |
| River Blythe         | SP201803   | 1998 | DP  |  |
| Hampton Wood NR      | SP258601   | 2002 | CI  |  |
| River Itchen         | SP396675   | 1992 | JCB |  |

This species has been woefully under-recorded during the last ten years and some up-to-date survey work is urgently needed. The taxonomy and identification of Water-crowfoots can be a challenge. Earlier records of *R. penicillatus* without a subsp. reference, are likely to be this species as *R. penicillatus* subsp. *penicillatus* is more western, occurring in west Wales and Ireland. During the 1980's there were six records from the River Blythe and two more from the River Leam. It was reported from Tanners Green (SP0874), near Wootton Wawen (SP1664), near Dosthill (SP2099) and Alvecote Pools (SK2404) in Cadbury *et al.* (1971) with no subsp. given. A similar species, *R. fluitans*, which has too many modern records to be included in this register,

also occurs in rivers to the west of the county. It is very variable with many different forms. Some records of *R. fluitans* may be of *R. penicillatus*.

***Ranunculus sardous***

**Hairy Buttercup**

Warwickshire Rare

Native

|                         |              |      |     |   |
|-------------------------|--------------|------|-----|---|
| South of Wasperton      | SP2652058240 | 2016 | BL  | One rosette W of footpath in tractor rut    |
| South of Wasperton      | SP2653568213 | 2016 | BL  | Three rosettes W of footpath in tractor rut |
| South of Wasperton      | SP2658958231 | 2016 | BL  | One rosette E of footpath in tractor rut    |
| South of Wasperton      | SP2659558239 | 2016 | BL  | One rosette in tractor rut next to footpath |
| Wellesbourne Water Mill | SP286542     | 1992 | MJS |   |

This is a southern species with a scattered distribution in England. Seeds from Brian Laney's collection were identified by Rodney Burton at the BSBI Exhibition Meeting in November 2016.

***Rhinanthus minor* subsp. *stenophyllus***

**Yellow-rattle subsp.**

(Warwickshire Rare)

Native in GB, casual in Warwickshire

|                |          |      |           |
|----------------|----------|------|-----------|
| Deans Green NR | SP130685 | 1996 | JL, MrsSW |
| Frankton       | SP416706 | 1998 | JL, MrsSW |

In Warwickshire the common form of Yellow Rattle is *R. minor* subsp. *minor*, but most records are submitted without a subspecies. Of the six British subspecies, this one is more branched and flowers later than subsp. *minor* and is more frequent in Scotland and Northern England. It would be worth checking plants in the future as seed mixes use plants which may have been collected from distant populations. The Dean's Green record was considered to be an introduction by John Bowra but the Frankton plant's status was given as uncertain.

***Ribes alpinum***

**Mountain Currant**

(Warwickshire Rare)

Native in GB, casual in Warwickshire

|               |          |      |     |
|---------------|----------|------|-----|
| Fenny Compton | SP420536 | 1991 | MJS |
|---------------|----------|------|-----|

A tiny plant was seen growing in a cleft between the stream and the railway bridge. It is likely to have been a garden escape.

***Rorippa islandica***

**Northern Yellow-cress**

Warwickshire Rare

Native

|           |              |      |    |
|-----------|--------------|------|----|
| Earlswood | SP1131974363 | 2010 | BL |
|-----------|--------------|------|----|

Brian Laney found five plants growing on the jutting-out section of the concrete edge of the reservoir. He recognized it at once by its drooping fruits, as he had seen it before in Scotland. A specimen was sent to Tim Rich for confirmation. It is the only modern record in the Midlands.

It wasn't until 1968 that the taxonomy of *R. islandica* and *R. palustris* (Marsh Yellow-cress) was sorted out. Older records of "*R. islandica*" could, in theory, refer to either species, but in Warwickshire, it would usually mean *R. palustris*, which is a fairly common plant of wet places throughout the county.

**ROSA**

In preparation for the 2000 Atlas (Preston, Pearman and Dines, 2002) Pam Copson conducted a methodical campaign to collect *Rosa* specimens. All specimens, apart from *R. canina* and *R. arvensis*, were then confirmed by A. L. Primavesi, G. G. Graham or Roger Maskew and many found their way into various herbaria. Some *Rosa* hybrids are more common than the species reported here. There is plenty of opportunity for somebody to update the Warwickshire distribution maps as no serious *Rosa* recording has taken place recently.

***Rosa caesia* subsp. *vosagiaca***

**Glaucous Dog-rose**

Warwickshire Scarce

Native

|                              |          |      |        |
|------------------------------|----------|------|--------|
| Copmill Hill SSSI            | SP158578 | 1996 | RevALP |
| Moorwood cutting, Hartshill  | SP3139   | 1997 | PJC    |
| Wyken Slough NR              | SP366834 | 1998 | JS     |
| Bishop's Itchington Quarries | SP383584 | 1997 | PJC    |
| Coombe Fields                | SP409807 | 1998 | MJS    |
| Southam Cement Works         | SP426635 | 1997 | LGT    |

There is a record from 1963 by M.C. Clark from Cranhill (SP 1253). Cadbury *et al.* (1971) reported it from thirty tetrads mainly in the south-west of the county as *R. dumalis*.

***Rosa micrantha***  
Warwickshire Rare

**Small-flowered Sweet-briar**  
Native

|                   |          |      |     |
|-------------------|----------|------|-----|
| Hockley Heath     | SP139733 | 2000 | DT  |
| Copmill Hill SSSI | SP158578 | 1997 | RM  |
| Alveston          | SP2356   | 1997 | PJC |

There are records from Aston Grove (SP1457) and Sperrall Park (SP1063) in Cadbury *et al.* (1971) and many 19<sup>th</sup> century records too. It used to be fairly common on in the calcareous soils in the south of the county.

***Rosa sherardii***  
Warwickshire Scarce

**Sherard's Downy-rose**  
Native

|                          |            |      |           |                               |
|--------------------------|------------|------|-----------|-------------------------------|
| Portway, bank of A435    | SP083720   | 2001 | RM        |                               |
| Illshaw Heath            | SP137748   | 1997 | BD        |                               |
| Snitterfield Bushes NR   | SP200604   | 1997 | PJC       |                               |
| Wolford Wood             | SP2333     | 1996 | AN        |                               |
| Hareway Lane, Barford    | SP296604   | 1997 | PJC       |                               |
| Robinson's End, Nuneaton | SP31199130 | 2013 | JSW, MVW, | Two large bushes in hedgerow. |
| Astley Hall Farm         | SP327868   | 2005 | JWP       |                               |
| Walsgrave                | SP380804   | 1994 | MJS       |                               |

This is a north and western species, common in Scotland and Wales that is on the eastern limit of its range here. There are records in Cadbury *et al.* (1971) from Earlswood (SP1273), Wolford Wood (SP2333) and from near Coventry (SP3683). There are some additional records from various botanists during the 1960's, including some by Dorothy Cadbury, that were not included in the Computer Mapped Flora. They are from Hockley Heath (SP1572), Aston Grove (SP1457), Hatton Rock (SP2357), Astley Court (SP3086), Wilmcote (SP1658) and Earlswood Station (SP0974).

***Rosa spinosissima***  
(Warwickshire Scarce)

**Burnet Rose**  
Native in GB, probably casual in Warwickshire

|                             |            |      |             |       |
|-----------------------------|------------|------|-------------|-------|
| Nine Days Lane              | SP057648   | 2001 | JD          |       |
| Arrow Valley Park           | SP057675   | 2005 | AWR, JHAR   |       |
| Crossgate Road              | SP060656   | 2000 | JD          |       |
| Arrow Valley Park           | SP060675   | 1999 | JD          |       |
| The Rookery                 | SP062665   | 1999 | JD          |       |
| Far Moor Lane               | SP082679   | 2000 | JD          |       |
| Radleys Walk, Marston Green | SP15908597 | 2007 | JWP         |       |
| Water Orton                 | SP164909   | 2006 | JWP, RevALP |       |
| Holbrooks, Coventry         | SP349839   | 1998 | MJS         | Canal |
| Tunnel Bank, Fenny Compton  | SP436525   | 2010 | JJB         |       |

As its Latin name suggests, this very prickly rose with blackish fruits is unlikely to be overlooked. Its natural habitat is the coastal areas of Britain but it can occur inland on chalk and limestone. It is also grown as an ornamental in gardens and amenity planting schemes and easily roots from discarded material. The record from Water Orton was the only one of the above to be reported as "native". It is known by the earlier name of *R. pimpinellifolia* in Cadbury *et al.* (1971) which only reported it from Aston Grove (SP1457), however it was widespread as a native in the 19<sup>th</sup> century in the south-east of the county.

***Rosa stylosa***  
Warwickshire Rare

**Short-styled Field-rose**  
Native

|                 |          |      |              |
|-----------------|----------|------|--------------|
| Stockton Quarry | SP440648 | 2006 | JWP, Rev ALP |
|-----------------|----------|------|--------------|

This is a common species in southern England but Warwickshire is on the northern edge of its range. It can be recognized by the characteristic sharp delta-shaped prickles. There are other recent records from Offchurch Manor Farm (SP363666) in 1981 and Shadowbrook Meadows NR (SP187815) in 1989. It was reported from four tetrads in Cadbury *et al.* (1971).

**Rosa tomentosa**  
Warwickshire Scarce

**Harsh Downy-rose**  
Native

|                          |          |      |     |
|--------------------------|----------|------|-----|
| Alcock's Arbour, Haselor | SP115566 | 1996 | PJC |
| Loxley Reservoir         | SP259525 | 2009 | JJB |
| Chesterton Wood          | SP3456   | 1996 | AN  |
| Snowford Bridge          | SP393663 | 1998 | JT  |
| Stockton Reservoir       | SP425645 | 2009 | JJB |

This is a climbing species with a southern distribution that avoids more acidic soils. It is difficult to separate from *R. x scabriuscula* (its hybrid with *R. canina*) which is also widespread. There is a 1989 record from Berkswell (SP2479) and it was recorded from eleven tetrads in Cadbury *et al.* (1971). It was far more frequent in the 19<sup>th</sup> century and there are many early herbarium specimens.

**Rumex acetosella subsp. pyrenaicus**  
Warwickshire Rare

**Sheep's Sorrel subsp.**  
Native

|                    |          |      |     |                                   |
|--------------------|----------|------|-----|-----------------------------------|
| Mere Green         | SP112994 | 2006 | JWP | an abandoned garden, a few plants |
| Foleshill Gasworks | SP346834 | 1998 | SPC |                                   |

This subspecies can only be separated from the common form of Sheep's Sorrel by seed characteristics. It was also seen east of Snitterfield in 1988 (SP2258).

**Rumex acetosella subsp. tenuifolius**  
Warwickshire Rare

**Sheep's Sorrel subsp.**  
Native

|                   |          |      |     |
|-------------------|----------|------|-----|
| Kenilworth Common | SP297730 | 2010 | JJB |
|-------------------|----------|------|-----|

This subspecies branches from the base and has narrow linear leaves. It likes to grow on stony dry places. Cadbury *et al.* (1971) reports it from five tetrads with the name *R. tenuifolius*. Stace (2010) demotes it to a mere variety (*var. tenuifolius*), but the new edition of the BSBI Docks and Knotweeds Handbook (Akeroyd, 2014) accepts it as a subspecies. There is a 1973 record from Bannerley Pool.

**Rumex palustris**  
Warwickshire Rare

**Marsh Dock**  
Native

|                |              |      |    |
|----------------|--------------|------|----|
| Draycote Water | SP4515968993 | 2010 | BL |
| Draycote Water | SP4523670224 | 2010 | BL |
| Draycote Water | SP4545568967 | 2010 | BL |
| Draycote Water | SP4552068974 | 2010 | BL |
| Draycote Water | SP4580270492 | 2010 | BL |
| Draycote Water | SP4586069056 | 2010 | BL |
| Draycote Water | SP4698270682 | 2010 | BL |

This species was first seen by Brian Laney in 2000. The 2010 grid references are from the north shore, the northwest corner by the valve tower and Hensborough Bank. Brian visited the site in late September, and paid attention to the mud exposed by the falling water levels during the dry summer. It has been searched for more recently and not seen, but suitable habitat does not occur every year. This is the only site in the county for the species.

**Rumex pulcher**  
Warwickshire Scarce

**Fiddle Dock**  
Native

|                            |              |      |     |
|----------------------------|--------------|------|-----|
| Salford Priors             | SP076510     | 1992 | JRR |
| Middleton Lakes RSPB       | SP202991     | 2008 | LBA |
| Halford Hill Farm          | SP2650844397 | 2010 | PC  |
| Wellesbourne               | SP2772455182 | 2010 | BL  |
| Brookhampton Farm, Kineton | SP319506     | 1990 | JWP |

Warwickshire is just on the edge of the northern most range of this southern species which is widespread on dry calcareous grassland. It is a distinctive plant with spreading branches and violin-shaped leaves and should not be overlooked. Cadbury *et al.* (1971) reported it from Salford Priors (SP0750, probably the same place as the site above) and Newbold-on-Stour (SP2446). There are a few earlier records.

***Sagina nodosa***

ES: Vulnerable

Warwickshire Rare

**Knotted Pearlwort**

Native

|                    |              |      |       |
|--------------------|--------------|------|-------|
| Sutton Park        | SP0995       | 2015 | BBCRG |
| Sutton Park        | SP0934196184 | 2011 | JH    |
| Sutton Park        | SP1095       | 1998 | SB    |
| Baddesley Colliery | SP2897       | 2012 | VC    |

A widespread species of wet flushes and heathland throughout the British Isles, it is limited in Warwickshire by the availability of suitable habitat. There is a 1973 record from Water Orton Sidings (SP172914) and Cadbury *et al.* (1971) reported it from three tetrads in Sutton Park including SP0998 where it has not been seen since. There are earlier records from Bannerley Pool, Coleshill and Warwickshire Moor.

***Salix cinerea* subsp. *cinerea***

Warwickshire Scarce

**Grey Willow**

Native

|                               |          |      |            |
|-------------------------------|----------|------|------------|
| Studley Common Nature Reserve | SP065639 | 2008 | CN, SP, SM |
| The Moat House                | SP089740 | 2006 | DC         |
| Clowes Wood NR                | SP100738 | 1994 | SA         |
| Oversley Wood                 | SP104562 | 2009 | JJB        |
| Hunt's Green, Middleton       | SP1896   | 1998 | AG         |
| Hampton-in-Arden              | SP213803 | 1993 | SA         |
| Bedworth Coalpit              | SP364858 | 1998 | JS         |
| Willey Lane                   | SP475861 | 1998 | MJS        |

This subspecies of Grey Willow is much rarer than the more commonly encountered subsp. *oleifolia*. Careful examination of the leaves is needed for identification and many hybrids also occur in the county. There is a 1987 record from Newbold-on-Stour and another from Oxhouse Farm in 1977 (SP302509). Cadbury *et al.* (1971) reports it from the canal near Lawsonford (SP230454).

There is a key to all of the Warwickshire willows and their hybrids by willow expert R. D. Meikle in Cadbury *et al.* (1971), which although being over 40 years old, is still useful.

***Salix repens***

ES: Near Threatened

(Warwickshire Rare)

**Creeping Willow**

Native in GB, casual in Warwickshire

|                 |        |      |     |
|-----------------|--------|------|-----|
| Emscote Sidings | SP2965 | 1995 | JWP |
|-----------------|--------|------|-----|

A considerable amount of South Wales sea sand was brought to Emscote Sidings in the early 1950's to extinguish a coal dump fire, and with it came *S. repens* and a few other seaside plants. John Bowra wrote an article entitled "Warwick by the Sea" about the site in the 1978 Report of the Warwick Natural History Society. This was also the place where he did his experimental work on Evening Primrose (*Oenothera*) hybrids. The *S. repens* survived there for forty years as reported in Partridge (1995), but soon afterwards a supermarket was built on the site. It was last seen as a native in the 1960's from Forshaw Heath (SP0873) and Sutton Park (SP0998) in the survey for Cadbury *et al.* (1971).

***Salix triandra***

Warwickshire Scarce

**Almond Willow**

Archaeophyte

|   |          |      |                   |
|---|----------|------|-------------------|
| River Arrow                             | SP0566   | 1998 | JD                |
| River Avon                              | SP198536 | 1995 | JMP               |
| River Wood                              | SP330658 | 2005 | JST               |
| Newbold Comyn Country Park              | SP337654 | 2014 | JRR, VR, JSW, MVW |
| Kineton                                 | SP338509 | 1995 | JCB               |
| Chesterton Wood                         | SP341578 | 2013 | JJB               |
| Gaydon Coppice                          | SP357556 | 2011 | JJB               |
| Rugby – Leamington Disused Railway Line | SP435694 | 2011 | JJB               |
| Napton Canal                            | SP4559   | 1999 | MA                |

Almond Willow used to be an important plant in the basket-making industry and many cultivars were developed for planting. Some of the above records may be of either planted trees or their descendants. There are 1980's records, all from John Bowra, from near Stratford-upon-Avon (SP199538) in 1987, near Wootton Wawen (SP161639) in 1983 and from Manor Farm, Offchurch (SP3566) in 1981. The survey for Cadbury *et al.* (1971) found it in 23 tetrads.

***Salvia pratensis***

GBS: Near Threatened

ES: Near Threatened

**Meadow Clary**

(Warwickshire Rare)

Native in GB, casual in Warwickshire

|                  |              |      |    |                            |
|------------------|--------------|------|----|----------------------------|
| Pillerton Priors | SP2897547588 | 2015 | PC | Twenty-two rosettes        |
| Ashorne          | SP3042857722 | 2013 | BL | On verge in front of house |

The two Warwickshire records are of deliberate introductions or garden escapes. There are no records of wild plants in the county as even the few 19<sup>th</sup> century records were considered to be casuals or introductions.

***Salvia verbenaca***

ES: Near Threatened

Warwickshire Scarce

**Wild Clary**

Native and casual

|                         |              |      |         |                                    |
|-------------------------|--------------|------|---------|------------------------------------|
| Moor Street, Birmingham | SP074870     | 2011 | DH      | Several plants, 100's of seedlings |
| Bidford-on-Avon         | SP103518     | 1993 | JCB     | Three plants, near garden          |
| Welford-on-Avon church  | SP146524     | 1990 | JRR     |                                    |
| Alderminster            | SP234482     | 1995 | HAR     | Twenty plants on bank by road      |
| Gaydon Coppice          | SP357556     | 2011 | JJB     |                                    |
| Ufton                   | SP3762       | 2017 | JRR, VR |                                    |
| North Warwick           | SP2643963104 | 2010 | BL      |                                    |
| Heathcote Lane          | SP2927764163 | 2006 | DLW     |                                    |
| Rugby Western Bypass    | SP47107425   | 2013 | JRR, VR |                                    |
| Ruigby Cement           | SP4875       | 2017 | JRR, VR |                                    |
| Millenium Green, Rugby  | SP51257569   | 2017 | BL, SWR | Probably from seed mix             |

Many of the above are introductions, either as self-sown casuals or from seed mixes. The Alderminster record is the only one considered "native" by the finder. The North Warwick and Rugby Bypass plants may also be true natives as they could have come from a long buried seed bank that was disturbed by the recent roadworks. It was called *S. horminoides* in Cadbury *et al.* (1971) and reported from Bidford-on-Avon (SP1051). The First County Record was from Tamworth Castle Hill.

***Sambucus ebulus***

Warwickshire Rare

**Dwarf Elder**

Archaeophyte

|                             |              |      |            |  |
|-----------------------------|--------------|------|------------|--|
| Temple Grafton              | SP122548     | 1990 | JL, Mrs SW | Thirty plants, in flower bed on verge        |
| Knowle                      | SP178757     | 1995 | JL, Mrs SW | One plant, in hedgerow at roadside           |
| Welcombe Hills Country Park | SP2100856922 | 2010 | SJF        | Huge patch on landslip, south of the obelisk |

Nationally this herbaceous species has a widespread distribution, but is never very common anywhere. It is easy to overlook, probably under-recorded in Warwickshire and may be misidentified as an umbellifer by the unwary. The Temple Grafton colony was first reported in 1854 and the Knowle plants in 1830. Cadbury *et al.* (1971) reports it from High Cross (SP4788). The First County Record was from Tamworth Castle Hill.

***Samolus valerandi***

Warwickshire Rare

**Brookweed**

Native

|                                  |          |      |     |          |
|----------------------------------|----------|------|-----|----------|
| Bordon Hill Nurseries, Stratford | SP178537 | 2017 | WFG | Abundant |
| Walton Ford                      | SP287537 | 1995 | HAR |          |

This mainly coastal, short-lived perennial can be found in permanently wet habitats such as puddles and the edge of lakes and ditches. It prefers both calcareous and saline soils. When the Warwickshire Flora Group visited Bordon Hill Nurseries in 2017, they found it to be abundant, covering thirty yards of a damp lawn in front of the offices. Walton Ford has been searched recently, but the plant was not seen. There are 1980's records from Charlecote Park in 1987 (SP263563) and from the north bank of the River Leam at Birdingbury in 1984 (SP424691). The survey for Cadbury *et al.* (1971) found it in four tetrads.

***Scabiosa columbaria***

Warwickshire Scarce

**Small Scabious**

Native

|                    |            |      |          |                 |
|--------------------|------------|------|----------|-----------------|
| Stoneydelph        | SK239099   | 2010 | MAA      |                 |
| Rough Hill Pasture | SP05686405 | 1997 | HBA      |                 |
| Copmill SSSI       | SP152576   | 1996 | PJC      |                 |
| Fossedene Manor    | SP295508   | 2016 | WFG      | Two plants only |
| Long Itchington    | SP410645   | 2016 | JSW, MVW |                 |

The colony at Long Itchington can be seen growing on the trackbed of the old disused railway bridge that crosses the canal. The Stoneydelph record is likely to have been an introduction as this is a native of calcareous grassland. There are 1980's records from a quarry at Little Compton in 1980 (SP2629), Ettington Park in 1986 (SP2547) and Wilmcote Rough in 1986 (SP153573). It was reported from 10 tetrads in Cadbury *et al.* (1971).

***Scandix pecten-veneris***

**Shepherd's-needle**

GBS: Critically Endangered ES: Endangered Warwickshire Scarce

Archaeophyte

|                      |          |      |         |                             |
|----------------------|----------|------|---------|-----------------------------|
| Burton Green         | SP272764 | 2001 | MJS, GS |                             |
| Fulready             | SP277466 | 1992 | HAR     |                             |
| Marton, River Itchen | SP405691 | 1991 | JCB     |                             |
| Napton               | SP452607 | 1991 | JCB     | Twelve plants, fallow field |

This plant has declined dramatically from the 61 tetrads reported in Cadbury *et al.* (1971). As an arable weed it has suffered from the increased use of herbicides and more efficient seed cleaning, and may well now be extinct in the county. There is a 1986 record of a couple of plants growing in a wheatfield at Cloudesley Farm, near Monks Kirby (SP462859). The last county record at Burton Green in 2001 was of just one plant growing in a "wheat field in vehicle tracks, 50 yards into the field from the footpath".

***Schoenoplectus tabernaemontani***

**Grey Club-rush**

Warwickshire Scarce

Native and casual

|                           |            |      |            |  |
|---------------------------|------------|------|------------|--|
| Ipsley Alders             | SP077676   | 2012 | JD         |  |
| Wootton Pool              | SP156637   | 1996 | JL, Mrs SW |  |
| Hardwick Farm, Pathlow    | SP166597   | 1996 | PJC        |  |
| Snitterfield              | SP2258     | 2003 | JWP        |  |
| Salt Spring, Southam Holt | SP44626052 | 2011 | JSW, MVW   |  |
| Gimswood, Grandborough    | SP47656649 | 2012 | JSW, MVW   |  |

This species is much rarer than the Common Bulrush (*S. lacustris*). It is more glaucous and has red-dotted glumes and could easily be mistaken for that species. It is available from aquatic nurseries as an architectural marginal and it is possible that it may have been introduced at some of the above sites. The salt spring at Southam Holt, where it was first seen in 1873, is in danger of becoming overgrown and drying up. It was reported in the survey for Cadbury *et al.* (1971) under the name of *Scirpus tabernaemontani*, and from two other brackish sites, Itchington Holt (SP3755) and near Flecknoe (SP5064) where it was first seen in 1874.

***Scleranthus annuus***

**Annual Knawel**

GBS: Endangered ES: Endangered Warwickshire Scarce

Native

|                              |              |      |     |                               |
|------------------------------|--------------|------|-----|-------------------------------|
| Bickenhill                   | SP186827     | 1997 | MJS |                               |
| Berkswell, west of           | SP23157925   | 2005 | MJS | Oat field corner, large patch |
| Meriden Sand & Gravel Quarry | SP2329481774 | 2011 | BL  |                               |
| Kineton Rd, Wellesbourne     | SP284547     | 1992 | HAR | Fifteen plants, roadside      |
| Warwick Hospital Car Park B  | SP289658     | 1992 | JWP | Ten plants, waste ground      |
| Baginton                     | SP34727316   | 2009 | SJF |                               |
| Piles Coppice                | SP387771     | 1992 | MJS |                               |
| Wolvey                       | SP437882     | 1997 | MJS |                               |

*Scleranthus annuus* is a small plant that prefers dry, sandy habitats such as heathland, waste ground and arable field edges. There are 1980's records from Brandon Marsh (SP3875), near Oaks Farm, Kenilworth (SP2670), Hampton-in-Arden (SP186799) and Piles Coppice (SP384773). It has declined sharply since the survey for Cadbury *et al.* (1971) when it was seen in 60 tetrads. It has not been reported from the calcareous clays in the far south of the county.

***Scrophularia umbrosa***

**Green Figwort**

Warwickshire Rare

Native

|                 |            |      |                   |  |
|-----------------|------------|------|-------------------|--|
| Moreton Morrell | SP32205636 | 2012 | JSW, MVW, JRR, VR |  |
|-----------------|------------|------|-------------------|--|

Also known as Water Betony, it has a strange patchy national distribution and although considered a native, was only seen for the first time in the country in 1840. In 2012, two plants with nine flowering spikes were



seen. The plants are on the far side of the ditch when walking the bridleway from the Fosse Way to Little Morrell.

**Scutellaria minor**  
Warwickshire Rare

**Lesser Skullcap**  
Native

|              |              |      |       |
|--------------|--------------|------|-------|
| Sutton Park  | SP0917498383 | 2015 | BBCRG |
| Sutton Park  | SP0918398400 | 2011 | JH    |
| Brandon Wood | SP394766     | 1994 | NMW   |

A plant of wet heathland, bogs and fens, it has a national range that covers both the south and west of the British Isles. It has always been rare in Warwickshire because of the lack of suitable habitat. Cadbury *et al* (1971) reported it from Sutton Park at SP0996, from Coleshill Bog (SP2086) and Ryton Wood (SP3872).

**Silene noctiflora**

GBS: Vulnerable Warwickshire Scarce

**Night-flowering Catchfly**  
Archaeophyte and casual

|                             |              |      |     |                           |
|-----------------------------|--------------|------|-----|---------------------------|
| A452 Balsall Common         | SP22387936   | 2010 | SJF | First seen by Brian Laney |
| Walton Hall Drive           | SP289541     | 1996 | PJC | East of drive, frequent   |
| Combrook                    | SP30615115   | 2010 | MJS |                           |
| Beechwood Gardens, Coventry | SP3109677946 | 2013 | IT  |                           |

The Coventry record was from a front garden, but was not sown by the owner. It was likely to have come from a neighbouring garden. The Balsall Common plants were from a buried seedbank that was disturbed by the construction of a new roundabout. There is a 1987 record of seven plants from Uplands Farm, Edgehill (SP373461) and in 1986 more plants were seen in a pea crop at Lark Stoke (SP185426). It was recorded from 14 tetrads in the survey for Cadbury *et al.* (1971) mainly in the far south of the county.

**Silene uniflora**

(Warwickshire Rare)

**Sea Campion**  
Native in GB, casual in Warwickshire

|          |          |      |         |
|----------|----------|------|---------|
| Edbaston | SP044846 | 2006 | MP      |
| Sheldon  | SP152839 | 2007 | MP, ITR |

This coastal plant is often grown as an ornamental in gardens. Some escaped seedlings were reported in Trueman *et al.* (2013).

**Sinapis alba**

Warwickshire Scarce

**White Mustard**  
Archaeophyte

|                                    |            |      |            |
|------------------------------------|------------|------|------------|
| Rough Hill Lane                    | SP049648   | 1997 | JD         |
| Snitterfield Bushes NR             | SP196604   | 1995 | JL, Mrs SW |
| Atherstone-on-Stour                | SP2050     | 2003 | JWP        |
| Hampton-in-Arden                   | SP2080     | 2003 | JWP        |
| Warwick                            | SP290658   | 1999 | WB         |
| Smorrall Lane Allotments, Bedworth | SP33508658 | 2017 | WFG        |
| Newdigate Colliery, Bedworth       | SP341871   | 2011 | JJB        |
| Hollis Road, Stoke, Coventry       | SP365785   | 2012 | MJS        |
| Coombe                             | SP400806   | 1998 | SSC        |
| Ash Pole Spinney                   | SP425648   | 1992 | JCB        |

This is a casual weed of waste ground, quarries and urban roadsides with a preference for calcareous soils. It has declined sharply since the plant was seen in 35 tetrads during the survey for Cadbury *et al.* (1971). There are six records from the 1980's, from Wyken (SP374789), Walton (SP2852), Whitnash Allotments (SP323635), Maxstoke Golf Course (SP2088), Dorsington (SP121497) and Ettington (SP268506). It may be overlooked or purposely ignored by some, as just "another awkward yellow crucifer".

**Solidago virgaurea**

ES: Near Threatened Warwickshire Rare

**Goldenrod**  
Native

|                         |              |      |          |
|-------------------------|--------------|------|----------|
| Windmill Naps           | SP095727     | 1994 | MJS      |
| Clowes Wood NR          | SP1013173868 | 2013 | JSW, MVW |
| Bridgetown              | SP213535     | 2002 | LSL      |
| Weston & Waverley Woods | SP355708     | 2009 | JJB      |

The Bridgetown record is a surprise as this plant usually chooses to grow on acidic soils. Nationally it is common in most of the country except the more intensively farmed and drier areas of the Midlands and the east of England. There is a 1985 record from a hedgerow just south of Windmill Naps (SP094714), a 1986 record of 5 plants on a heathy bank at "The Firs" Dorridge (SP163758) and a record from Cornets End in 1987 (SP2280). In Cadbury *et al.* (1971) it was recorded in 17 tetrads in the Earlswood – Solihull – Wroxall area.

### ***Spergula arvensis***

GBS: Vulnerable

ES: Vulnerable

### **Corn Spurrey**

Archaeophyte

|                                |              |      |                    |                                   |
|--------------------------------|--------------|------|--------------------|-----------------------------------|
| Springfield                    | SK13310040   | 2007 | MP, PR, JHA, SCO   | Fallow field                      |
| Arrow Valley Park              | SP0567       | 1998 | JD                 |                                   |
| The Vale, Edgbaston            | SP0584       | 2016 | MP, MVW            |                                   |
| Arrow Valley Park              | SP0667       | 1998 | JD                 |                                   |
| Harbourne Lane Allotments      | SP04018312   | 2008 | PST                |                                   |
| Salford Priors                 | SP072513     | 2006 | JWP                | A hundred plus plants             |
| Coughton Court                 | SP07696044   | 2005 | RA                 |                                   |
| Jennens Rd/Lawley Middleway    | SP083875     | 2007 | MP                 | Brownfield site                   |
| Four Oaks Common               | SP10559947   | 2006 | JWP, MP, ITR       | Allotment plot                    |
| Bordesley Green Allotments     | SP10938698   | 2008 | ITR                |                                   |
| Tyburn Road                    | SP11279023   | 2007 | JWP, MP, LB,       | subsp. <i>sativa</i>              |
| Pype Hayes                     | SP130920     | 2002 | EC, AF, JTE, ITR   |                                   |
| Temple Grafton                 | SP135547     | 1997 | PJC                |                                   |
| Ashfurlong Hall                | SP135983     | 1998 | SBO                | In barley field                   |
| Buckland End                   | SP142891     | 2007 | JWP                | On soil tip, subsp. <i>sativa</i> |
| Fox Covert                     | SP15259441   | 1990 | JJB                |                                   |
| Henwood                        | SP183795     | 1995 | BD                 |                                   |
| Coleshill Heath                | SP189861     | 1999 | JL, Mrs SW         |                                   |
| Holywell Meadow                | SP1947266783 | 2010 | BL                 |                                   |
| Hoggrill's End, Shustoke       | SP220917     | 2011 | JSW, MVW           |                                   |
| Hoggrill's End, Shustoke       | SP221921     | 2013 | JSW, MVW           |                                   |
| Harwood House, Little Shrewley | SP221680     | 2011 | BL                 |                                   |
| A 452, Balsall Common          | SP22383935   | 2010 | SJF                |                                   |
| Berkswell                      | SP224796     | 2011 | JSW, MVW, MAA, MJS |                                   |
| Snitterfield                   | SP2258       | 2003 | JWP                |                                   |
| Packington                     | SP225845     | 1998 | SSC                |                                   |
| Meriden Tarmac Quarry          | SP236819     | 2014 | JSW, MVW, BL, RHA  |                                   |
| Meriden Tarmac Quarry          | SP233821     | 2014 | JSW, MVW, BL, RHA  |                                   |
| Lower House Farm               | SP24229940   | 2010 | JSW, MVW           |                                   |
| Fern Hill Farm                 | SP258713     | 1997 | JRR, VR            |                                   |
| Wasperton                      | SP2658       | 2017 | JRR, VR            |                                   |
| Little Wolford                 | SP267345     | 1994 | PJM                |                                   |
| Beausale East                  | SP27K        | 2016 | DC                 |                                   |
| Little Wolford                 | SP270346     | 1993 | PJM                | Newly seeded grass ley            |
| Wasperton                      | SP27055853   | 2009 | ALA                | Three plants                      |
| Wellesbourne HRI               | SP270564     | 2007 | JWP                |                                   |
| Burton Green                   | SP275760     | 2005 | MJS                | Very common, arable edge          |
| Howetts Green, Canley          | SP284774     | 2014 | DEC                |                                   |
| Allesley                       | SP2882       | 2003 | JWP                |                                   |
| Grendon                        | SP2899       | 2017 | JSW, MVW           |                                   |
| Guy's Cliffe                   | SP29416686   | 2010 | SJF                |                                   |
| Kenilworth Road, Coventry      | SP303744     | 2013 | GD                 |                                   |
| Purley Park Quarry             | SP308959     | 1997 | JS                 |                                   |
| N. Leamington School           | SP3186667745 | 2010 | BL                 |                                   |
| Cherry Tree Farm, Hartshill    | SP32659520   | 2007 | JSW, MVW           |                                   |
| Houldsworth Tip                | SP330839     | 1996 | JS                 |                                   |
| South Cubbington Wood          | SP349685     | 2014 | JRR, VR            |                                   |
| Gaydon                         | SP365543     | 2004 | BL                 | Roadworks near roundabout         |
| Rock Spinney                   | SP365773     | 1992 | MJS                |                                   |
| Bubbenhall Quarry              | SP3680972209 | 2009 | BL                 |                                   |
| Siddenhill Spinney             | SP416765     | 1995 | JB                 |                                   |
| Bourton-on-Dunsmore            | SP43147056   | 2009 | LS                 | Small patch, east side of field   |
| Wolvey                         | SP440899     | 1997 | SSC                |                                   |
| Draycote                       | SP44807129   | 2016 | DL                 |                                   |
| Coventry Road, Dunchurch       | SP471714     | 2011 | BL                 |                                   |

This species was considered abundant in Cadbury *et al.* (1971) and recorded from an impressive 328 tetrads. Its national status is the reason for its inclusion in the Warwickshire Rare Plant Register. It is an annual and

can be more frequent in some years than others. It is mainly recorded from arable fields but has recently appeared a few times as an urban weed in cemeteries and gardens. It is more common in the north of the county. There are seven 1980's records.

***Spirodela polyrhiza***  
Warwickshire Scarce

**Greater Duckweed**  
Native

|                        |            |      |             |                 |
|------------------------|------------|------|-------------|-----------------|
| Perry Crofts, Tamworth | SK215043   | 2004 | CNS, MS, CH |                 |
| Alvecote Wood          | SK25060366 | 2014 | JSW, MVW    |                 |
| Old Milverton          | SP296674   | 1994 | JCB         |                 |
| Coventry Canal         | SP356845   | 1997 | JS          |                 |
| Nuneaton Canal         | SP3691     | 2006 | JWP         |                 |
| Brandon Wood           | SP388768   | 2013 | JS          | One small patch |

This species was first seen at Alvecote Wood by Maurice Arnold in 2009, growing in a shaded woodland pool that still had a small area of open water. It was searched for without success at Brandon Wood in 2014. It is easily overlooked and under-recorded. It was reported from 6 tetrads in Cadbury *et al.* (1971).

***Stachys arvensis***

**Field Woundwort**

GBS: Near Threatened      ES: Near Threatened      Warwickshire Scarce      Archaeophyte

|                                |              |      |              |                              |
|--------------------------------|--------------|------|--------------|------------------------------|
| Stoneydelph                    | SK233013     | 1995 | MAA          |                              |
| Marsh Hill Allotments          | SP09019185   | 2006 | EC, JHA, ITR |                              |
| Court Lane Allotments          | SP10599279   | 2008 | ITR          |                              |
| Northleigh Road Allotments     | SP11408904   | 2008 | ITR          | On several plots on one area |
| Wyndley Leisure Centre         | SP114962     | 1998 | SPG          |                              |
| Langley Brook                  | SP162971     | 1999 | DOT          |                              |
| Baddesley Clinton, canal       | SP194727     | 1994 | NMW          |                              |
| Balsall Common                 | SP2226579395 | 2010 | BL           |                              |
| Wellesbourne                   | SP270571     | 1990 | WB           |                              |
| Hell Hole                      | SP297543     | 1994 | NMW, AG      |                              |
| Stoneleigh Quarry Fm Mancetter | SP318957     | 1994 | JB           |                              |
| Brandon Marsh                  | SP385755     | 1992 | NMW          |                              |
| Stretton under Fosse           | SP46258060   | 1994 | NMW          |                              |

This is another plant of arable field edges, allotments and gardens that is declining sharply in the county. Although there are 14 sites for it since 1990, there are no post 2010 records and none of the above sites are on nature reserves. There are records from the 1980's from Slingsgate Coppice, Alderminster (SP236504), Kineton (SP397478), Kingsbury Wood (SP235978) and Dordon (SP275006). Cadbury *et al.* (1971) recorded it from 26 tetrads.

***Stellaria pallida***

**Lesser Chickweed**

Warwickshire Scarce      Native

|                              |            |      |                   |                        |
|------------------------------|------------|------|-------------------|------------------------|
| The Holloway, Redditch       | SP04866736 | 2008 | JD                |                        |
| Grenville Street, Birmingham | SP062863   | 2011 | ITR               |                        |
| Sutton Park                  | SP10779734 | 2015 | ITR               | Steep bank under pines |
| Grove Hill NR                | SP116550   | 1991 | NMW               |                        |
| Ailstone Farm                | SP21855105 | 2008 | CK, MARK          |                        |
| Charles Street, Warwick      | SP294656   | 2014 | JRR, VR           |                        |
| Burton Dassett Country Park  | SP397521   | 2014 | JSW, MVW, JRR, VR |                        |
| Priors Hardwick              | SP471562   | 2015 | PSTR              |                        |

In a report on Burton Dassett Country Park in 1978, this plant was described as "occasional" (Bowra, 1979) and it was still there 36 years later when a visit was made in early May 2014. It was widespread in the short turf above the limestone outcrops in the north side of the park. The plants in Charles Street were originally found by Ted Pratt and Dorothy Evans. The Priors Hardwick colony was seen in amenity grassland near the Butchers Arms pub. This is an early flowering species and many of the above records are from the beginning of April. It can easily be mistaken for *S. media* (Common Chickweed) which is sometimes small and can have tiny or no petals. The two species need to be separated by the seed characteristics and it is probably under-recorded in urban habitats. There is a 1989 record of six plants growing on ballast beside the railway at Fenny Compton (SP424533), and it was reported from Aston Grove (SP1457), Broom Court (SP0852) and near Walton Hall (SP2852) in Cadbury *et al.* (1971).

***Stellaria palustris***

GBS: Vulnerable

ES: Vulnerable

Warwickshire Rare

**Marsh Stitchwort**

Native

Middleton Lakes RSPB

SP194984

2009

LBA

Lesley Barton-Allen was an experienced professional botanist who was employed to do a full habitat survey of Middleton Lakes when it was first acquired by the RSPB. Unfortunately some of her records were lost when her contract ended and the only grid reference we have is the general one used by the RSPB for the whole site. Mary Arnold, who was with Lesley when the plant was seen, remembered it being found behind the farm buildings near the settling pool at SP196983. Since then the area has been searched many times but the plant has not been refound. It is surprising that Lesley did not inform anybody at the Biological Records Centre about such a rare plant, one that had not been seen in the county for more than 125 years. Apart from a few 19<sup>th</sup> century sites there is a record from close to the Worcestershire border which has only recently come to light, dated 1966 from Ipsley Alders (SP0767) by F. Fincher.

***Stratiotes aloides***

GBS: Near Threatened

**Water-soldier**

Native in GB, casual in Warwickshire

|                             |            |      |         |
|-----------------------------|------------|------|---------|
| Oakenshaw Wood              | SP042654   | 1998 | WW      |
| Martineau Gardens           | SP060843   | 1999 | BPE     |
| Blythe Valley Business Park | SP14017562 | 2013 | DAB     |
| Hardwick Farm Pond          | SP166594   | 1997 | AN      |
| Marston Green Park          | SP175857   | 2009 | JJB     |
| Knowle Locks                | SP189763   | 2006 | JRR, VR |
| Shustoke                    | SP231902   | 1998 | AG      |
| Idlicote Village Pond       | SP284443   | 1999 | PJC     |
| Morton Morrell              | SP310558   | 1992 | JB      |
| Lighthorne Quarry           | SP346563   | 2011 | JJB     |
| Southam Industrial Estate   | SP41006086 | 2013 | DL      |

All of the above records are all likely to be introductions, as this commonly grown ornamental aquatic is now only found as a native in the fens of East Anglia. Unlike other introduced water plants it doesn't seem to have become invasive. The first county record was not until 1977.

***Suaeda vera***

(Warwickshire Rare)

**Shrubby Sea-blite**

Native in GB, casual in Warwickshire

M6 eastbound, Rugby

SP3982

2014

JMA

The first we knew of this seaside plant came from the publication of an article in *BSBI News* in January 2014 with the intriguing title "Would anybody believe us if we said we had seen *Suaeda vera* (Shrubby Sea-blite) on the M6 in Warwickshire?" John Martin and Simon Leach told how on various occasions they had slowed down to check this plant growing on the north side of the crash barrier of the eastbound carriageway about 0.7 miles east of the Rugby junction. Although this unusual record, with no supporting specimen for obvious reasons, at first gave us some worries about authentication, after some thought, it has been added to the county list. It is an easily recognizable species and unlikely to have been incorrectly identified by the two experienced botanists who spotted it. Brian Laney has also seen the plant and it was seen again later in 2014 by John Martin.

***Thymus pulegioides***

Warwickshire Scarce

**Large Thyme**

Native

|                            |          |      |              |
|----------------------------|----------|------|--------------|
| Bannam's Wood              | SP112640 | 1998 | JL, MrsSW    |
| Ettington                  | SP264492 | 2012 | WFG          |
| Wellesbourne Road. Barford | SP268605 | 2012 | KL, KK, JWAR |
| Pailton Pastures           | SP499825 | 1995 | MJS          |

The record from cleared scrub on calcareous soil at Bannam's Wood was originally on some databases incorrectly at SP163640. The Pailton plant was recorded from a concrete wall. Cadbury *et al.* (1971) reported it from Morton Bagot (SP1164). It was much more widespread in the 19<sup>th</sup> century.

***Torilis arvensis***

GBS: Endangered ES: Endangered Warwickshire Scarce

**Spreading Hedge-parsley**

Archaeophyte

|                                 |              |      |                   |
|---------------------------------|--------------|------|-------------------|
| Atherstone-on-Stour             | SP2050       | 2003 | JWP               |
| Snitterfield, Ingon Grange Farm | SP215589     | 1992 | JWP               |
| Walton                          | SP2884952117 | 2013 | JRR, VR, JSW, MVW |
| Woozeley Bridge                 | SP296580     | 1992 | HAR               |
| Bascote                         | SP398641     | 1997 | AN                |

As one of Britain's most rapidly declining species, *T. arvensis* was chosen for the BSBI Threatened Plants Project in 2011. The site at Walton was visited that year and the species was thriving. In 2013 a later visit was made in September to monitor the site. Although the field had long been ploughed, there were some shrivelled plants lying beside the fence and the fruits had to be examined to confirm their identity. The Bascote site was also visited in 2011 but no plants were seen. John and Val Roberts went to Ingon Grange Farm in 2013 but did not find any plants there either. It was recorded from 11 tetrads in Cadbury *et al.* (1971) all of which are in the south of the county.

***Trichophorum germanicum***

Warwickshire Rare

**Deergrass**

Native

|             |        |      |     |
|-------------|--------|------|-----|
| Sutton Park | SP0997 | 1990 | PJC |
|-------------|--------|------|-----|

A common species of wet places in the west and north of the country, it is limited to Sutton Park in Warwickshire and is right on the edge of its range. It was not seen in the recent survey for Trueman *et al.* (2013). There is a 1980 record from James Partridge on the BSBI database from SP0995. In Cadbury *et al.* (1971), where it is called *Scirpus caespitosus* subsp. *germanicus*, it is reported from SP0996 and SP0998. It is a small plant that could easily be overlooked or confused with small species of *Eleocharis*. The first county record was made by John Ray in 1670 of "*Juncus parvus montanus cum parvi capitulis luteis*" which he found "Circa Middleton & alibi in agro Warwicensi". There are 19<sup>th</sup> century records from Coleshill Pool and Coleshill Bog.

***Trifolium fragiferum***

ES: Vulnerable

Warwickshire Scarce

**Strawberry Clover**

Native

|                           |              |      |          |  |
|---------------------------|--------------|------|----------|--|
| A441, Redditch            | SP049648     | 1997 | JD       |  |
| Goodrest Farm, Kenilworth | SP279721     | 1998 | WNHS     |  |
| Walton Hall               | SP29145220   | 2011 | JSW, MVW |  |
| Pillerton Hersey          | SP296488     | 2017 | JRR, VR  |  |
| Butlers Marston           | SP3194550065 | 1990 | JWP      | One clump.                                   |
| Whitnash                  | SP3362       | 2017 | JRR, VR  |  |
| Chapel Ascote             | SP403562     | 1994 | VCC      | River Itchen Meadows                         |
| Withybrook                | SP441841     | 1999 | MJS      |  |
| Napton, Grand Union Canal | SP463623     | 1995 | JCB      |  |
| Napton, Grand Union Canal | SP4681862789 | 2014 | WFG      | Many plants scattered along footpath for 20m |

In England this is a mainly southern plant of limestone soils and coastal districts. It can easily be confused with *T. repens* (White Clover) until the inflated strawberry-like swollen calices appear in the late summer. The Walton Hall plants were not seen in 2013. It was reported from Oxhouse Farm (SP206508) in 1983 and Newbold (SP232454) in 1986. The 1984 record from Hartshill, near the Golf Course (SP305945) is not perhaps as surprising as it seems, as the local geology is complex and there are patches of other lime-loving plants in the area. Cadbury *et al.* (1971) reports it from 35 tetrads, all in the south of the county.

***Trifolium scabrum***

Warwickshire Rare

**Rough Clover**

Native

|                                   |            |      |     |                      |
|-----------------------------------|------------|------|-----|----------------------|
| Burton Dassett Hills Country Park | SP39725201 | 2015 | WFG | A few plants, quarry |
| Burton Dassett Hills Country Park | SP39844519 | 2015 | WFG |                      |

Cadbury *et al.* (1971) reported this plant from three different 1 km squares (SP3951, SP3952 and SP4051) at Burton Dassett, but by the time of John Bowra's survey of the site (Bowra (1979)) it was only found on Magpie Hill. In 2009 Steven Falk saw it in the depression opposite the path to the toilet block growing on a bare exposed rock face in the limestone grassland.

The 2015 visit by the WFG found Steve's site plus a second one a hundred metres or so away where it had successfully survived the trampling of visitors. Both sites probably contain less than 20 plants, but they are very small and could be missed elsewhere. Nationally it is a mainly coastal species and is rare inland.

***Trifolium striatum***

**Knotted Clover**

Warwickshire Scarce

Native

|                                   |              |      |                         |                           |
|-----------------------------------|--------------|------|-------------------------|---------------------------|
| Salford Priors Gravel Pits        | SP075528     | 2014 | JSW, MVW, JRR, VR, JJB, |                           |
| Shottery, Stratford-upon-Avon     | SP186548     | 1999 | JMP                     |                           |
| Hanson's Quarry, Middleton        | SP1957597785 | 2012 | WFG                     | A few plants on bare soil |
| Hatton Rock                       | SP236576     | 1992 | HAR                     |                           |
| Meriden sand & gravel quarry      | SP236817     | 1998 | DP                      |                           |
| Hell Hole                         | SP306539     | 2012 | JJB                     |                           |
| Heathcote, Leamington Spa         | SP308639     | 1991 | JCB                     |                           |
| Brandon Wood                      | SP3840776412 | 2012 | WFG                     |                           |
| Brandon Marsh NR                  | SP385757     | 1993 | NMW                     |                           |
| Burton Dassett Hills Country Park | SP39675199   | 2015 | WFG                     |                           |
| Burton Dassett Hills Country Park | SP39725201   | 2015 | WFG                     |                           |

Less fussy about soil type than the previous species, it frequently colonises newly disturbed ground in sand and gravel quarries where it can sometimes form large mats, often with *Filago vulgaris* (Common cudweed) and *F. minima* (Small cudweed). There is a 1985 record from near Sherbourne (SP253625). Cadbury *et al.* (1971) reports it from 16 different tetrads. At Burton Dassett, the WFG 2015 visit found that it was more widespread than originally thought, not just limited to rocky outcrops, but also in amongst the limestone grassland.

***Trifolium subterraneum***

**Subterranean Clover**

Warwickshire Rare

Native

|            |          |      |    |  |
|------------|----------|------|----|--|
| Sherbourne | SP266625 | 2011 | RL |  |
|------------|----------|------|----|--|

This southern coastal plant has been known from Sherbourne since 1866. It was also found at Salford Priors (SP0750) during the the survey for Cadbury *et al.* (1971). There is one other 19<sup>th</sup> century record.

***Triglochin palustris***

**Marsh Arrowgrass**

ES: Near Threatened

Warwickshire Scarce

Native

|                               |            |      |             |                         |
|-------------------------------|------------|------|-------------|-------------------------|
| Berry Mound                   | SP092775   | 1992 | WWTMS       |                         |
| Peterbrook Road, Majors Green | SP099776   | 2004 | JD          |                         |
| Sutton Park, Longmoor Valley  | SP09289638 | 2006 | MP, ITR, PR | Bog and fen vegetation  |
| Sutton Park, Longmoor Pool    | SP09389595 | 2005 | MP, ITR     | Bog, marsh              |
| Sutton Park                   | SP09469827 | 2015 | BBCRG       | Little Bracebridge Pool |
| Earlswood                     | SP103735   | 1996 | DT          |                         |
| Colehill Hall Farm            | SP192888   | 2008 | JJB, SP     |                         |
| Manor Farm, Withybrook        | SP428842   | 1996 | MJS         |                         |

This is another common western and northern species that struggles to find suitable habitat in our county. It is very easy to overlook and may well be under-recorded in wet meadows. There are 1980's records from near Alveston (SP219564), Deppers Bridge (SP397590), Temple Balsall (SP201755) and from near Brookhouse Farm, by the River Cole (SP099776). It has declined substantially since it was reported from 43 tetrads in Cadbury *et al.* (1971), mainly from the north and central areas of the county.

***Ulmus minor***

**Small-leaved Elm**

Warwickshire Scarce

Native

|                |          |      |           |  |
|----------------|----------|------|-----------|--|
| Blackfirs Lane | SP195851 | 1999 | JL, MrsSW |  |
| Loxley Meadow  | SP259532 | 1992 | JAH, VCC  |  |
| Coventry       | SP3283   | 1996 | JR        |  |
| Bedworth       | SP3384   | 1993 | JR        |  |
| BAD Kineton    | SP352492 | 1990 | JAH       |  |

The survey for Cadbury *et al.* (1971) that took place just before the main infestation of Dutch Elm Disease during the 1970's, managed to record 20 different species, hybrids and forms of *Ulmus*. Since then there have been very few records with most elms now only existing as suckers, and as Stace (2010) remarks, these are

virtually unidentifiable. *Ulmus* is a complex genus and many changes have been made to the taxonomy. I have not included any historical records as the trees are unlikely to have survived. Their decline can be put into perspective by the 97 records of *U. minor agg.* on the BSBI database for the years 1900 - 1950.

***Umbilicus rupestris***  
Warwickshire Rare

**Navelwort**  
Native

|                 |              |      |          |
|-----------------|--------------|------|----------|
| Babbs Mill      | SP1623387899 | 2014 | JSW, MVW |
| Maxstoke Priory | SP23458689   | 2015 | JSW, MVW |

This is another western species whose British distribution just reaches into Warwickshire. The Solihull plants, first found by Gary Farmer, were colonizing a virtually inaccessible, man-made drainage channel made of concrete faced with acid stone, and were unlikely to have been planted. James Partridge, in Partridge (1995), thought that the Maxstoke plants were not native and may be the survivors of plants originally grown by the monks for medicinal purposes. When Maxstoke Priory was revisited in spring 2015, twenty-five years after James Partridge's original record, the colony had spread on to the east end of the Priory. There were also many young plants on the wall and some of the larger memorials of the nearby churchyard (SP23578689). This was rather fortunate as a further visit in August 2015 found that the roof of the gatehouse had been re-pointed and re-tiled and the original plants had all been removed. There is one 19<sup>th</sup> century record from Guy's Cliffe, Warwick.

***Utricularia australis***  
Warwickshire Rare

**Bladderwort**  
Native

|                     |            |      |          |
|---------------------|------------|------|----------|
| Pooley Country Park | SK25420406 | 2016 | JSW, MVW |
|---------------------|------------|------|----------|

Some flowering material from Pooley was sent to Dr. P. Taylor in 1969 when it was confirmed as *U. australis*. Another substantial colony of an *Utricularia* species was seen in three newly created pools at Alvecote Wood (SK25250363) by JSW and MVW in September 2014. This colony is very close to the Pooley site and the ducks that regularly visit the Alvecote Wood pools may well have transported it on their feet. It has not been seen in flower yet so has not been confirmed to species.

There is possibly another colony at Little Bracebridge Pool in Sutton Park (SP098979, MP, ITR, JHA, EC). Although vegetative material has been examined, which has bladders with hairs that identify the plant as either *U. australis* or *U. vulgaris* flowering material has not yet been collected to enable accurate identification. Bagnall reported *U. minor* from this pool in 1875 but it may have been a misidentification, and this species is now thought to be extinct in the county. Cadbury *et al.* (1971) reported it from Tile Hill Wood in Coventry (SP2779).

***Vaccinium oxycoccos***  
Warwickshire Rare

**Cranberry**  
Native

|             |            |      |         |                  |
|-------------|------------|------|---------|------------------|
| Sutton Park | SP0928982  | 2015 | BBCRG   |                  |
| Sutton Park | SP092964   | 2006 | ITR, PR |                  |
| Sutton Park | SP093957   | 2005 | ITR, MP |                  |
| Sutton Park | SP10209775 | 2015 | BBCRG   | Locally abundant |

This is a westerly species limited to the bogs and flushes of Sutton Park. Cadbury *et al.* (1971) reported it from SP0898, SP0997 and SP1096. It was collected from Coleshill Bog in the 19<sup>th</sup> century.

***Vaccinium vitis-idaea***  
Warwickshire Rare

**Cowberry**  
Native

|                               |              |      |          |
|-------------------------------|--------------|------|----------|
| Sutton Park, near Gun Targets | SP088966     | 2009 | WBC      |
| Sutton Park, Streetley Clumps | SP089984     | 2009 | BL       |
| Sutton Park                   | SP0920195804 | 2010 | JH       |
| Sutton Park, N. of Longmoor   | SP093964     | 2011 | ITR, PCo |
| Sutton Park                   | SP10209775   | 2015 | BBCRG    |

This is a Sutton Park speciality. Cadbury *et al.* (1971) only reported it from four 1km squares within the park. It has also been seen growing on a clay spoilheap in Glascote (SK2303).

**Valeriana dioica**

ES: Near Threatened

Warwickshire Scarce

**Marsh Valerian**

Native

|                               |              |      |           |                         |
|-------------------------------|--------------|------|-----------|-------------------------|
| Sutton Park                   | SP094983     | 2011 | WFG       | Little Bracebridge Pool |
| Sutton Park                   | SP0929896316 | 2009 | SJF       |                         |
| Clowes Wood NR                | SP10277389   | 2009 | SJF       |                         |
| Sutton Park, Blackroot        | SP1097       | 2015 | BBCRG     |                         |
| Jonathan's Coppice            | SP129722     | 2005 | DC        |                         |
| Creynolds Lane                | SP132756     | 2005 | DC        |                         |
| Hockley Heath                 | SP1472       | 1998 | HBA       |                         |
| Bushwood Common               | SP186682     | 1996 | JL, MrsSW |                         |
| Preston-on-Stour              | SP207497     | 1996 | HAR       |                         |
| Wroxall                       | SP2270       | 1997 | HBA       |                         |
| Kenilworth, Rocky Lane        | SP308708     | 1998 | MJS       |                         |
| Mr. Allan's Wet Meadow, Rugby | SP5329374764 | 2011 | HBA       |                         |

This species used to be more widespread in Sutton Park. Trueman *et al.* (2013) reported it from SP0996, and Readett (1971) from SP1096 and SP1097. There is also a record from the year 1859 from SP0997. The current survey team may rediscover the plant at some of these old sites. The survey for Cadbury *et al.* (1971) found it in 39 tetrads, mainly in the north and central areas of the county.

**Valerianella dentata**

GBS: Endangered

ES: Endangered

Warwickshire Rare

**Narrow-fruited Cornsalad**

Archaeophyte

|                        |          |      |     |                        |
|------------------------|----------|------|-----|------------------------|
| Dosthill, railway line | SK218006 | 2009 | MAA | A six metre long patch |
| Ufton Hill Farm        | SP387615 | 1990 | PJC | Old quarry             |

It was also seen on disturbed land near the cattle trough at Oxhouse Farm in 1986 (SP306507) and Alderminster in 1988 (SP247507). This species, and the other two Warwickshire species of *Valerianella*, have declined sharply as a result of increased agricultural intensification during the last twenty years. It is usually found on arable field edges and can only be separated from the other two species by seed characteristics. Cadbury *et al.* (1971) reported it from nine sites mainly on calcareous soil in the south and east of the county with an outlier at Oldbury near Nuneaton. There are another nine 19<sup>th</sup> century records.

**Verbena officinalis**

Warwickshire Scarce

**Vervain**

Archaeophyte

|                                  |          |      |             |                      |
|----------------------------------|----------|------|-------------|----------------------|
| Tamworth Castle Mound            | SK206038 | 2015 | JSW         |                      |
| Birmingham Botanical Gardens     | SP048852 | 2007 | JWP, MP, EC | Shrub holding area   |
| Winterbourne Botanical Gardens   | SP0583   | 2007 | JWP, MP     |                      |
| Bordon Hill Nurseries, Stratford | SP178537 | 2017 | WFG         |                      |
| Old Warwick Road, Rowington      | SP200698 | 2005 | DLW, ME     |                      |
| Bridgetown, Stratford-upon-Avon  | SP206536 | 1998 | JMP         |                      |
| Rouncil Lane, Kenilworth         | SP284699 | 2008 | SP          |                      |
| Leamington Spa                   | SP330654 | 1990 | JWP         | St Mary's allotments |
| Cubbington                       | SP3467   | 2016 | JRR, VR     |                      |
| Stretton Croft                   | SP431910 | 2011 | JJB         |                      |

This is a mainly southern species in England that grows on rough, bare ground and favours calcareous soil. It is probably under-recorded in Warwickshire due to a lack of recording from allotments and gardens. There is a 1980 record from Cross Hands Quarry (SP2629) and another from 1977 from Water Orton Sidings (SP1791). This species has always been rather uncommon, there were only two records in Cadbury *et al.* (1971), from Morton Bagot (SP1164) and Tredington (SP2543) with only a handful of 19<sup>th</sup> century records.

**Veronica scutellata**

ES: Near Threatened

Warwickshire Scarce

**Marsh Speedwell**

Native

|                         |              |      |       |                         |
|-------------------------|--------------|------|-------|-------------------------|
| Sutton Park             | SP0928898346 | 2011 | JH    |                         |
| Sutton Park             | SP09499824   | 2015 | BBCRG | Little Bracebridge Pool |
| Hawkeshaw Brook Meadows | SP140739     | 2010 | JJB   |                         |
| Middleton Lakes RSPB    | SP202991     | 2008 | LBA   |                         |
| Meriden Quarry          | SP2263881456 | 2014 | WFG   |                         |
| Packington Park         | SP227845     | 1998 | DP    |                         |
| Maxstoke Castle Grounds | SP2288       | 2003 | JWP   |                         |
| Stonebridge Meadows NR  | SP345756     | 1993 | GW    |                         |



|                       |          |      |     |
|-----------------------|----------|------|-----|
| Lighthorne Quarry     | SP346563 | 2011 | JJB |
| Whitley Business Park | SP348758 | 2014 | CWS |
| Brandon Marsh NR      | SP389751 | 2003 | JS  |

This is a plant of pool margins and wet flushes, found mainly in the north-west of the county as it prefers the acid soils there. Middleton Lakes has been surveyed intensively during the last few years but it has not been seen again. The extensive reprofiling of the reserve to improve the habitat for the birdlife was not in this area, so it is possible that the plant has survived. There is a 1982 record from Sowe Bridge (SP348747) and another from 1989 from Hampton-in-Arden (SP167808). The Meriden Quarry find was in a small pond in acid grassland near the golf course. It was also reported from SP0997 and SP1096 within Sutton Park in Readett (1971). Cadbury *et al.* (1971) reported it from 19 tetrads, including the Alvecote area. The Computer Mapped Flora also recorded three findings of *var. villosa*, which has hairy stems, from Bushwood Grange (SP1869), Eaves Green (SP2682) and Maxstoke Castle Grounds (SP2288).

***Vicia lathyroides***  
Warwickshire Rare

**Spring Vetch**  
Native

|                       |          |      |     |
|-----------------------|----------|------|-----|
| Piles Coppice, Binley | SP385768 | 2001 | MJS |
|-----------------------|----------|------|-----|

This is a mainly coastal plant in Great Britain that is easy to confuse with small plants of *V. sativa subsp. nigra* (Common Vetch). These two species are best separated by seed characteristics. The three plants seen in 2001 were found growing on a sandy bank near the coppice area. It was not recorded in the survey for Cadbury *et al.* (1971) but there are four earlier records from the 19<sup>th</sup> century.

***Vicia lutea***

**Yellow-vetch**

GBS: Near Threatened      ES: Vulnerable      (Warwickshire Rare)  
Native in GB, casual in Warwickshire

|                  |          |      |     |                         |
|------------------|----------|------|-----|-------------------------|
| Brandon Marsh NR | SP381757 | 2003 | MJS | Four plants, field edge |
|------------------|----------|------|-----|-------------------------|

John Bowra first found this colony in 1987 at SP381758 on the raised bank of the settling pool. There is another record from the meadow between the road and Brandon Wood (SP387763) from 1977. Mrs M.C. Clark reported that the meadow had been reseeded the year before (1976) with *Lolium multiflorum* (Italian Rye-grass) and that the plants may have been introduced with the grass seed. There are no other Warwickshire records. This plant is a native of coastal sites and is only considered to be a casual on waste ground inland.

***Vicia parviflora***

**Slender Tare**  
Native

GBS: Vulnerable      ES: Vulnerable      Warwickshire Scarce

|                         |            |      |     |                                |
|-------------------------|------------|------|-----|--------------------------------|
| Wellesbourne Wood       | SP268532   | 1997 | HAR |                                |
| Oxhouse Farm            | SP299508   | 2006 | DC  |                                |
| Fosseway, near Combrook | SP299520   | 1992 | HAR |                                |
| Near Lighthorne         | SP326558   | 2012 | NA  | Several plants, end of NS bank |
| Upton Quarry            | SP378452   | 2009 | JJB |                                |
| Tasker's Meadow NR      | SP43906509 | 2015 | JS  |                                |

This annual has a fondness for sticky, calcareous clays and is therefore limited to the southern part of Warwickshire. Seed characteristics and leaf shape are the best ways to separate it from the closely related *V. hirsuta* (Hairy Tare) and just relying on the number of seeds present in a pod can be misleading. Jane Sells initially found only a few plants at Tasker's Meadow, but a search by the WFG a few weeks later turned up a dozen more. There is a 1988 record from wheat stubble near Walton (SP299520) and another in the same year from the Alderminster Factory Site (SP247507). It is in Cadbury *et al.* (1971) under the earlier name of *V. tenuissima*, and was found in four different tetrads.

***Viola canina***

**Heath Dog-violet**  
Native

GBS: Near Threatened      ES: Near Threatened      Warwickshire Scarce

|                      |          |      |          |
|----------------------|----------|------|----------|
| Ipsley Alders        | SP079676 | 1999 | JD       |
| Grove Hill NR        | SP116550 | 1990 | NMW      |
| Emscote, Warwick     | SP297653 | 1996 | MJS      |
| Claybrookes Marsh NR | SP381771 | 2012 | MJS      |
| Brandon Wood Meadow  | SP386766 | 2016 | JSW, MVW |

Stretton under Fosse                      SP464805                      1994                      NMW

There used to be a colony of *V. canina* in the acidic grassland at Coombe Country Park (SP390790), and although various local botanists have mentioned it quite recently, the latest record we have is from 1982. It was not seen on the Flora group visit there in 2016. The Emscote plants were introduced with sea sand that was brought in to extinguish a coal-dump fire, and the site has since been built on. This species is more commonly found on heathy, acidic sites, so the record from the limestone grassland of Grove Hill NR is a little surprising, but there is a 1976 record from nearby Arrow (SP0650). It was reported from 5 tetrads including Coleshill Bog (SP2086) and Hartshill (SP3294) in the survey for Cadbury *et al.* (1971). Bagnall collected it from Sutton Park in the 1870's.

***Viola palustris subsp. palustris***

**Marsh Violet**

Warwickshire Scarce

Native

|                               |              |      |                 |                         |
|-------------------------------|--------------|------|-----------------|-------------------------|
| Sutton Park, Longmoor Valley  | SP090966     | 2006 | MP, ITR, PR     |                         |
| Sutton Park,                  | SP094983     | 2015 | BBCRG           | Little Bracebridge Pool |
| Sutton Park, Boldmere/Wyndley | SP1095       | 2007 | MP, PR, DA      |                         |
| Clowes Wood NR                | SP1014573996 | 2013 | JRR             |                         |
| Sutton Park                   | SP102977     | 2007 | ITR, PR, DA, JA |                         |
| Bickenhill Plantation         | SP19018435   | 2012 | WFG             |                         |
| Close Wood, Meriden           | SP255844     | 1998 | AG              |                         |
| Herald Way                    | SP383771     | 1995 | MJS             |                         |
| Brandon Marsh NR              | SP385755     | 1990 | NMW             |                         |

This species is very common in the north and west of Britain and can be found in a wide range of acidic habitats from willow carr and bogs to sand dunes. It is on the edge of its range in Warwickshire as such habitats are few. There used to be a colony at Hay Wood (SP2171) in 1987, but the species-rich wetland area both sides of the main track, its home, was badly damaged by contractors in 2013 who used it as a place to dump hardcore. Readett (1971) also reported it from SP0897 and SP1096 in Sutton Park. It was found in 13 tetrads in the survey for Cadbury *et al.* (1971).

***Viola tricolor subsp. tricolor***

**Wild Pansy**

GBS: Near Threatened

ES: Near Threatened

Native

|                           |            |      |                   |  |
|---------------------------|------------|------|-------------------|--|
| Two Gates                 | SK215016   | 2008 |                   |  |
| Dosthill                  | SK216996   | 1995 | MAA               |  |
| Hockley                   | SK235007   | 1995 | MAA               |  |
| All Saints Park           | SP045883   | 2005 | KF                |  |
| Aston                     | SP07108930 | 2003 | MP                |  |
| Sparkbrook                | SP0885     | 2003 | MP                |  |
| Heartland Parkway         | SP09288835 | 2006 | MP                |  |
| The Ackers, Cole Valley   | SP10118454 | 2005 | SAT               |  |
| Wylde Green               | SP10959390 | 1998 | SPG               |  |
| Wood End                  | SP109713   | 1998 |                   |  |
| Sutton Park, Wyndley Pool | SP11379578 | 2005 | MP, JHA, LB, SCA  |  |
| Sutton Coldfield          | SP12749589 | 2005 | MP, JHA, LB, SCA  |  |
| Heathcroft Road           | SP128987   | 1996 | WH                |  |
| Binton Verge              | SP1453     | 1993 | PJC               |  |
| Lea Ford Playing Fields   | SP152878   | 2007 | JTO               |  |
| Minworth Hall             | SP152921   | 1990 | JJB               |  |
| Roebuck Close             | SP16218810 | 2007 | JWP, MO, JHA, SCO |  |
| Stratford Parkway         | SP185565   | 2007 | WCC               |  |
| Stratford-upon-Avon       | SP194540   | 1996 | PJC               |  |
| Snitterfield              | SP2060     | 1997 | HBA               |  |
| Temple Balsall            | SP206757   | 1997 | JRR, VR           |  |
| Hampton-in-Arden          | SP206807   | 1997 | DP                |  |
| Dosthill                  | SP216996   | 1995 | MAA               |  |
| Piccadilly, Kingsbury     | SP21879812 | 2010 | JWW, MVW          |  |
| Ettington                 | SP255483   | 1996 | RJ                |  |
| Wroxall                   | SP27F      | 2017 | AD, HL            |  |
| Baddesley Common          | SP277977   | 1997 | MJS               |  |
| Walton                    | SP2852     | 2003 | JWP               |  |
| Wimpstone                 | SP289495   | 1996 | HAR               |  |
| Oxhouse Farm              | SP301508   | 1997 | PRE               |  |
| Hill Wootton              | SP302684   | 1995 | MB                |  |
| Oldbury Lane, Hartshill   | SP306941   | 2012 | JSW, MVW          |  |
| Holbrooks allotments      | SP325833   | 1997 | DP                |  |

|                             |             |      |     |
|-----------------------------|-------------|------|-----|
| Seeswood Pool, Nuneaton     | SP328904    | 1996 | MJS |
| Bermuda                     | SP350901    | 1995 | BP  |
| Piles Coppice               | SP382769    | 1994 | MJS |
| Binley Woods                | SP4078      | 1998 | HBA |
| Warmington                  | SP419482    | 1990 | HAR |
| Copstone Lodge              | SP445894    | 1996 | MJS |
| The Crescent, Lawford Heath | SP452672278 | 2017 | DL  |

It was also recorded from two different seeded brown roofs at SP0743486554 and at SP0617186843 by AB in 2007. In spite of numerous records for Warwickshire during the last twenty-five years, there have only been four recent records since 2010. This decline may be caused by the difficulties in separating this species from the many smaller forms of *V. x wittrockiana* (Garden Pansy). An up to date key that even includes all of the hybrids, can be found in the new, all colour BSBI *Viola Handbook* (Porter & Foley, 2017). Cadbury *et al.* (1971) reported it from 29 tetrads.

Appendix 1.                   **NATIVE PLANTS AND ARCHAEOPHYTES THAT  
BECAME EXTINCT BETWEEN 1970 AND 1990**

***Apium inundatum* (Lesser Marshwort)**

Last seen at Seeswood Pool (SP326905) by David Porter in 1984.

***Euphorbia platyphyllos* (Broad-leaved Spurge)**

Last seen at Walton (SP296521) by Harold Fowkes in 1988.

We failed to find the “three recent sites 1988-2002” mentioned in Falk (2009).

***Gymnocarpium robertianum* (Limestone Fern)**

Last seen growing on the Tanworth-in-Arden railway bridge (SP116711) by Matt Busby in 1979.

***Potamogeton compressus* (Grass-wrack Pondweed)**

Last seen in the Coventry Canal, Kettlebrook (SK2102) by George and Maurice Arnold in 1972.

Falk (2009) declared this species extinct in 1965.

## Appendix 2. DOUBTFUL RECORDS AND MISIDENTIFICATIONS

### ***Crepis paludosa***

### **Marsh Hawk's-beard**

|                           |          |      |     |
|---------------------------|----------|------|-----|
| Oversley Green            | SP094568 | 1999 | PBA |
| Riverside Meadows, Binton | SP142531 | 1994 | EN  |

This species was regarded as extinct in Falk (2009). It is a common species in upland Britain that is virtually absent from England south of the Wash. There is some doubt about the identification of these two records which were found recently while searching survey forms in the filing cabinets at the WBRC. It is strange that John Bowra and Pam Copson, who were both active at the time, were not informed about them and there is no supporting material in the Warwick Herbarium. There is one record in Cadbury *et al.* (1971) from a wet place near the railway in Stratford-upon-Avon in 1960 and another from Sutton Park from James Bagnall in 1891.

### ***Genista tinctoria***

### **Dyer's Greenweed**

|                             |              |      |         |
|-----------------------------|--------------|------|---------|
| Siskin Drive Bird Sanctuary | SP3653074604 | 1996 | JC, JRI |
|-----------------------------|--------------|------|---------|

This is almost certainly a misidentification as the habitat given, with its associated plant list, makes it very unlikely.

### ***Festuca ovina* subsp. *hirtula***

### **Sheep's-fescue**

This subspecies was said to be abundant at Sutton Park in Falk (2009), but it is probably an understandable error for *Festuca filiformis*. These two species are very difficult to separate and can intergrade (Cope & Grey, 2009). Most botanists choose to opt for the aggregate description instead. The only other record that the WBRC and BSBI have is from 1905 by an unknown author at SP0995 with no supporting specimen.

### ***Vicia sylvatica***

### **Wood Vetch**

|                 |          |      |     |
|-----------------|----------|------|-----|
| Bubbenhall Wood | SP367716 | 1997 | HBA |
|-----------------|----------|------|-----|

Discovered in the files of the WBRC, the Bubbenhall survey states this is "only one of two modern sites for the plant in the county, the other also being in Princethorpe Woodlands complex". Unfortunately there has been no further confirmation of the existence of the Bubbenhall plants and absolutely no trace of the other mysterious site near Princethorpe. It is unfortunate that it was not reported either to Pam Copson or John Bowra. This important population, if it ever existed, could then have been monitored and managed over the succeeding years. It would have been the first record since 1836. There is no supporting herbarium material.

### Appendix 3. PLANTS FROM FOLESHILL GASWORKS, SP343833.

The old Foleshill Gasworks used to be one of Coventry's biodiversity hotspots. Described by Steven Falk as a "marvellous brownfield site", it has been all but destroyed by the construction of the Ricoh Arena. The area was thoroughly surveyed in the 1990's by the HBA based in Coventry and the site report includes an exciting collection of plants including:

*Cerastium semidecandrum* (Little Mouse-ear)  
*Equisetum sylvaticum* (Wood Horsetail)  
*Orchis mascula* (Early Purple Orchid)  
*Papaver hybridum* (Rough Poppy)  
*Parentucellia viscosa* (Yellow Bartsia)  
*Salix aurita* (Eared Willow)  
*S. pentandra* (Bay Willow)  
*S. triandra* (Almond Willow)  
*Wahlenbergia hederacea* (Ivy-leaved Bellflower)

When the paperwork was later transferred to the HBA in Warwick only the site report itself survived and the botanical surveyor was not named. Again, records were not passed on to either the WBRC or Warwick Museum and no supporting herbarium material exists. The *Parentucellia* record has been accepted as there is an independent record of the plant from Roger Maskew and both Steven Falk and Jane Sells can remember seeing it too.

## Appendix 4. LIST OF WARWICKSHIRE NOTABLES

|   |   |  |
|---|---|--|
| <i>Achillea ptarmica</i>                              | <i>Epilobium palustre</i>                               | <i>Ornithopus perpusillus</i>                      |
| <i>Adoxa moschatellina</i>                            | <i>Epipactis helleborine</i>                            | <i>Orobanche minor</i>                             |
| <i>Agrimonia eupatoria</i>                            | <i>Equisetum fluviatile</i>                             | <i>Papaver lecoqii</i>                             |
| <i>Agrimonia procera</i>                              | <i>Equisetum palustre</i>                               | <i>Pastinaca sativa</i>                            |
| <i>Agrostis canina</i>                                | <i>Equisetum telmateia</i>                              | <i>Persicaria bistorta</i>                         |
| <i>Aira caryophyllea</i>                              | <i>Erigeron acris</i>                                   | <i>Picris hieracioides</i>                         |
| <i>Aira praecox</i>                                   | <i>Euonymus europaeus</i>                               | <i>Pimpinella major</i>                            |
| <i>Alchemilla filicaulis</i> subsp.<br><i>vestita</i> | <i>Euphorbia amygdaloides</i>                           | <i>Pimpinella saxifraga</i>                        |
| <i>Anacamptis pyramidalis</i>                         | <i>Festuca ovina</i> subsp. <i>ovina</i>                | <i>Poa angustifolia</i>                            |
| <i>Anchusa arvensis</i>                               | <i>Filipendula vulgaris</i>                             | <i>Poa compressa</i>                               |
| <i>Anthyllis vulneraria</i>                           | <i>Frangula alnus</i>                                   | <i>Poa humilis</i>                                 |
| <i>Asplenium ceterach</i>                             | <i>Galeopsis bifida</i>                                 | <i>Poa nemoralis</i>                               |
| <i>Avenula pubescens</i>                              | <i>Galium odoratum</i>                                  | <i>Polygala vulgaris</i>                           |
| <i>Berula erecta</i>                                  | <i>Galium saxatile</i>                                  | <i>Polypodium vulgare</i>                          |
| <i>Betonica officinalis</i>                           | <i>Galium uliginosum</i>                                | <i>Poterium sanguisorba</i>                        |
| <i>Bidens cernua</i>                                  | <i>Geranium columbinum</i>                              | <i>Ranunculus fluitans</i>                         |
| <i>Blackstonia perfoliata</i>                         | <i>Geranium rotundifolium</i>                           | <i>Ranunculus lingua</i>                           |
| <i>Blechnum spicant</i>                               | <i>Glyceria x pedicellata</i>                           | <i>Ranunculus peltatus</i>                         |
| <i>Brachypodium pinnatum</i>                          | <i>Hypericum androsaemum</i>                            | <i>Ranunculus trichophyllus</i>                    |
| <i>Brassica nigra</i>                                 | <i>Hypericum hirsutum</i>                               | <i>Reseda alba</i>                                 |
| <i>Brassica rapa</i> subsp.<br><i>campestris</i>      | <i>Hypericum humifusum</i>                              | <i>Reseda lutea</i>                                |
| <i>Bromopsis erecta</i>                               | <i>Hypericum pulchrum</i>                               | <i>Rhinanthus minor</i> subsp. <i>minor</i>        |
| <i>Bromus commutatus</i>                              | <i>Inula conyzae</i>                                    | <i>Rorippa sylvestris</i>                          |
| <i>Butomus umbellatus</i>                             | <i>Iris foetidissima</i>                                | <i>Rosa rubiginosa</i>                             |
| <i>Calamagrostis epigejos</i>                         | <i>Isolepis setacea</i>                                 | <i>Rumex maritimus</i>                             |
| <i>Campanula latifolia</i>                            | <i>Juncus acutiflorus</i>                               | <i>Salix aurita</i>                                |
| <i>Campanula trachelium</i>                           | <i>Juncus bulbosus</i>                                  | <i>Salix pentandra</i>                             |
| <i>Cardamine amara</i>                                | <i>Kickxia elatine</i>                                  | <i>Salix purpurea</i>                              |
| <i>Carduus nutans</i>                                 | <i>Kickxia spuria</i>                                   | <i>Saxifraga granulata</i>                         |
| <i>Carex acuta</i>                                    | <i>Lamiastrum galeobdolon</i> subsp.<br><i>montanum</i> | <i>Saxifraga tridactylites</i>                     |
| <i>Carex caryophyllea</i>                             | <i>Lamium amplexicaule</i>                              | <i>Schedonorus pratensis</i>                       |
| <i>Carex demissa</i>                                  | <i>Lamium hybridum</i>                                  | <i>Scirpus sylvaticus</i>                          |
| <i>Carex disticha</i>                                 | <i>Lathyrus linifolius</i>                              | <i>Sedum telephium</i>                             |
| <i>Carex divulsa</i> subsp. <i>divulsa</i>            | <i>Lathyrus nissolia</i>                                | <i>Senecio sylvaticus</i>                          |
| <i>Carex leporina</i>                                 | <i>Lathyrus sylvestris</i>                              | <i>Serratula tinctoria</i>                         |
| <i>Carex muricata</i> subsp. <i>pairae</i>            | <i>Leontodon hispidus</i>                               | <i>Sherardia arvensis</i>                          |
| <i>Carex nigra</i>                                    | <i>Leontodon saxatilis</i>                              | <i>Silaum silaus</i>                               |
| <i>Carex pallescens</i>                               | <i>Lepidium campestre</i>                               | <i>Silene vulgaris</i>                             |
| <i>Carex panacea</i>                                  | <i>Lepidium ruderales</i>                               | <i>Sison amomum</i>                                |
| <i>Carex paniculata</i>                               | <i>Linaria repens</i>                                   | <i>Sorbus torminalis</i>                           |
| <i>Carex pilulifera</i>                               | <i>Linum catharticum</i>                                | <i>Sparganium emersum</i>                          |
| <i>Carex spicata</i>                                  | <i>Lithospermum officinale</i>                          | <i>Stellaria alsine</i>                            |
| <i>Catapodium rigidum</i>                             | <i>Lotus tenuis</i>                                     | <i>Stellaria neglecta</i>                          |
| <i>Centaurea scabiosa</i>                             | <i>Luzula multiflora</i> subsp. <i>multiflora</i>       | <i>Thalictrum flavum</i>                           |
| <i>Chaenorhinum minus</i>                             | <i>Luzula pilosa</i>                                    | <i>Thlaspi arvense</i>                             |
| <i>Chenopodium ficifolium</i>                         | <i>Luzula sylvatica</i>                                 | <i>Thymus polytrichus</i>                          |
| <i>Chenopodium hybridum</i>                           | <i>Lysimachia vulgaris</i>                              | <i>Tilia cordata</i>                               |
| <i>Chrysosplenium oppositifolium</i>                  | <i>Melica uniflora</i>                                  | <i>Torilis nodosa</i>                              |
| <i>Cirsium acaule</i>                                 | <i>Menyanthes trifoliata</i>                            | <i>Tragopogon pratensis</i> subsp.<br><i>minor</i> |

*Cirsium eriophorum*  
*Clinopodium ascendens*  
*Clinopodium vulgare*  
*Dactylorhiza maculata*  
*Dactylorhiza praetermissa*  
*Danthonia decumbens*  
*Daphne laureola*  
*Deschampsia flexuosa*  
*Dipsacus pilosus*  
*Dryopteris carthusiana*  
*Echium vulgare*

*Milium effusum*  
*Molinia caerulea*  
*Montia fontana*  
*Myosotis ramossisima*  
*Narcissus psuedonarcissus*  
*Neottia ovata*  
*Ononis repens*  
*Ophioglossum vulgatum*  
*Ophrys apifera*  
*Orchis mascula*  
*Origanum vulgare*

*Typha angustifolia*  
*Ulex gallii*  
*Ulmus plotii*  
*Vaccinium myrtillus*  
*Valerianella locusta*  
*Verbascum nigrum*  
*Veronica anagallis-aquatica*  
*Veronica montana*  
*Viola hirta*  
*Viola reichenbachiana*  
*Zannichellia palustris*



## Appendix 5. TABLE OF STATUSES OF WARWICKSHIRE RARE AND SCARCE SPECIES

| Scientific Name                           | Common Name                   | Warwickshire Status | England Status        | Great Britain Status  |
|---|-------------------------------|---------------------|-----------------------|-----------------------|
| <i>Aconitum napellus</i>                  | Monk's-hood                   | Rare                |                       |                       |
| <i>Adiantum capillus-veneris</i>          | Maidenhair Fern               | (Rare)              |                       |                       |
| <i>Aethusa cynapium subsp. agrestis</i>   | Fool's Parsley                | Rare                |                       |                       |
| <i>Agrostis vinealis</i>                  | Brown Bent                    | Scarce              |                       |                       |
| <i>Alisma lanceolatum</i>                 | Narrow-leaved Water-plantain  | Scarce              |                       |                       |
| <i>Allium ampeloprasum</i>                | Wild Leek                     | (Rare)              |                       |                       |
| <i>Allium oleraceum</i>                   | Field Garlic                  | Scarce              |                       | Vulnerable            |
| <i>Alopecurus aequalis</i>                | Orange Foxtail                | Scarce              |                       |                       |
| <i>Anacamptis morio</i>                   | Green-winged Orchid           | No County status    | Vulnerable            | Near Threatened       |
| <i>Anagallis arvensis subsp. foemina</i>  | Blue Pimpernel                | Scarce              |                       |                       |
| <i>Anagallis tenella</i>                  | Bog Pimpernel                 | Rare                |                       |                       |
| <i>Anthemis arvensis</i>                  | Corn Chamomile                | Rare                | Endangered            | Endangered            |
| <i>Anthemis cotula</i>                    | Stinking Chamomile            | No County status    | Vulnerable            | Vulnerable            |
| <i>Anthriscus caucalis</i>                | Bur Chervil                   | (Rare)              |                       |                       |
| <i>Apera spica-venti</i>                  | Loose Silky-bent              | (Rare)              |                       | Near Threatened       |
| <i>Apium graveolens</i>                   | Wild Celery                   | Rare                |                       |                       |
| <i>Asperula cynanchica</i>                | Squinancywort                 | Rare                |                       |                       |
| <i>Astragalus glycyphyllos</i>            | Wild Liquorice                | Scarce              |                       |                       |
| <i>Atropa belladonna</i>                  | Deadly Nightshade             | Scarce              |                       |                       |
| <i>Avenula pratensis</i>                  | Meadow Oat-grass              | Scarce              |                       |                       |
| <i>Baldellia ranunculoides</i>            | Lesser Water-plantain         | Rare                |                       |                       |
| <i>Blysmus compressus</i>                 | Flat-sedge                    | Rare                | Vulnerable            | Vulnerable            |
| <i>Bolboschoenus maritimus</i>            | Sea Club-rush                 | Rare                |                       |                       |
| <i>Botrychium lunaria</i>                 | Moonwort                      | Rare                | Vulnerable            |                       |
| <i>Briza media</i>                        | Quaking-grass                 | No County status    | Near Threatened       |                       |
| <i>Bromus secalinus</i>                   | Rye Brome                     | Scarce              | Near Threatened       | Vulnerable            |
| <i>Bupleurum rotundifolium</i>            | Thorow-wax                    | (Rare)              | Critically Endangered | Critically Endangered |
| <i>Calamagrostis canescens</i>            | Purple Small-reed             | Rare                |                       |                       |
| <i>Callitriche brutia subsp. brutia</i>   | Pedunculate Water-starwort    | Rare                |                       |                       |
| <i>Callitriche brutia subsp. hamulata</i> | Intermediate Water-starwort   | Scarce              |                       |                       |
| <i>Callitriche hermaphroditica</i>        | Autumnal Water-Starwort       | Rare                |                       |                       |
| <i>Callitriche obtusangula</i>            | Blunt-fruited Water-Starwort  | Scarce              |                       |                       |
| <i>Callitriche platycarpa</i>             | Various-leaved Water Starwort | Scarce              |                       |                       |

| Scientific Name                     | Common Name                       | Warwickshire Status | England Status        | Great Britain Status  |
|-------------------------------------|-----------------------------------|---------------------|-----------------------|-----------------------|
| <i>Calluna vulgaris</i>             | Heather                           | No County status    | Near Threatened       |                       |
| <i>Campanula glomerata</i>          | Clustered Bellflower              | Rare                |                       |                       |
| <i>Campanula patula</i>             | Spreading Bellflower              | Rare                | Critically Endangered | Endangered            |
| <i>Campanula rotundifolia</i>       | Harebell                          | No County status    | Near Threatened       |                       |
| <i>Carex binervis</i>               | Green-ribbed Sedge                | Scarce              |                       |                       |
| <i>Carex canescens</i>              | White Sedge                       | Rare                |                       |                       |
| <i>Carex diandra</i>                | Lesser Tussock-sedge              | Rare                | Vulnerable            | Near Threatened       |
| <i>Carex dioica</i>                 | Dioecious Sedge                   | Rare                |                       |                       |
| <i>Carex distans</i>                | Distant Sedge                     | Rare                |                       |                       |
| <i>Carex divulsa subsp. leersii</i> | Grey Sedge                        | Rare                |                       |                       |
| <i>Carex echinata</i>               | Star Sedge                        | Rare                | Near Threatened       |                       |
| <i>Carex elata</i>                  | Tufted-sedge                      | Rare                | Near Threatened       |                       |
| <i>Carex elongata</i>               | Elongated Sedge                   | Rare                | Near Threatened       |                       |
| <i>Carex hostiana</i>               | Tawny Sedge                       | Rare                |                       |                       |
| <i>Carex laevigata</i>              | Smooth-stalked Sedge              | Rare                |                       |                       |
| <i>Carex pulicaris</i>              | Flea Sedge                        | Rare                | Near Threatened       |                       |
| <i>Carex strigosa</i>               | Thin-spiked Wood-sedge            | Rare                |                       |                       |
| <i>Carex vesicaria</i>              | Bladder-sedge                     | Scarce              | Vulnerable            |                       |
| <i>Carlina vulgaris</i>             | Carlina Thistle                   | No County status    | Near Threatened       |                       |
| <i>Carum carvi</i>                  | Caraway                           | (Rare)              | Critically Endangered | Endangered            |
| <i>Catabrosa aquatica</i>           | Whorl-grass                       | Scarce              | Vulnerable            |                       |
| <i>Centaureum pulchellum</i>        | Lesser Centaury                   | Scarce              |                       |                       |
| <i>Cephalanthera longifolia</i>     | Narrow-leaved Helleborine         | Rare                | Endangered            | Vulnerable            |
| <i>Cerastium diffusum</i>           | Sea Mouse-ear                     | Scarce              |                       |                       |
| <i>Cerastium semidecandrum</i>      | Little Mouse-ear                  | Scarce              |                       |                       |
| <i>Ceratocapnos claviculata</i>     | Climbing Corydalis                | Scarce              |                       |                       |
| <i>Ceratophyllum submersum</i>      | Soft Hornwort                     | Scarce              |                       |                       |
| <i>Chenopodium bonus-henricus</i>   | Good-King-Henry                   | Scarce              | Vulnerable            | Vulnerable            |
| <i>Chenopodium hybridum</i>         | Maple-leaved Goosefoot            | Scarce              |                       |                       |
| <i>Chenopodium urbicum</i>          | Upright Goosefoot                 | (Rare)              | Critically Endangered | Critically Endangered |
| <i>Chrysosplenium alternifolium</i> | Alternate-leaved Golden-saxifrage | Scarce              |                       |                       |
| <i>Cirsium dissectum</i>            | Meadow Thistle                    | Scarce              |                       |                       |
| <i>Clinopodium acinos</i>           | Basil Thyme                       | Scarce              | Vulnerable            | Vulnerable            |
| <i>Colchicum autumnale</i>          | Meadow Saffron                    | Scarce              |                       | Near Threatened       |
| <i>Comarum palustris</i>            | Marsh Cinquefoil                  | Scarce              | Near Threatened       |                       |
| <i>Crepis biennis</i>               | Rough Hawk's-beard                | Scarce              |                       |                       |
| <i>Cruciata laevipes</i>            | Crosswort                         | No County status    | Near Threatened       |                       |

| Scientific Name                                       | Common Name                | Warwickshire Status | England Status  | Great Britain Status |
|---|----------------------------|---------------------|-----------------|----------------------|
| <i>Cynoglossum officinale</i>                         | Hound's-tongue             | Scarce              | Near Threatened | Near Threatened      |
| <i>Cystopteris fragilis</i>                           | Brittle Bladder-fern       | Scarce              |                 |                      |
| <i>Dactylorhiza incarnata</i>                         | Early Marsh-orchid         | Rare                |                 |                      |
| <i>Deschampsia cespitosa</i> subsp. <i>parviflora</i> | Tufted Hair-grass          | Rare                |                 |                      |
| <i>Descurainia sophia</i>                             | Flixweed                   | (Scarce)            |                 |                      |
| <i>Dianthus armeria</i>                               | Deptford Pink              | (Rare)              | Endangered      | Endangered           |
| <i>Diplotaxis tenuifolia</i>                          | Perennial Wall-rocket      | Rare                |                 |                      |
| <i>Drosera rotundifolia</i>                           | Round-leaved Sundew        | Rare                | Near Threatened |                      |
| <i>Elatine hexandra</i>                               | Six-stamened Waterwort     | Rare                |                 |                      |
| <i>Eleocharis acicularis</i>                          | Needle Spike-rush          | Rare                | Near Threatened |                      |
| <i>Eleocharis palustris</i> subsp. <i>palustris</i>   | Common Spike-rush          | Rare                |                 |                      |
| <i>Eleocharis quinqueflora</i>                        | Few-flowered Spike-rush    | Rare                |                 |                      |
| <i>Eleocharis uniglumis</i>                           | Slender Spike-rush         | Scarce              |                 |                      |
| <i>Eleogiton fluitans</i>                             | Floating Club-rush         | Rare                |                 |                      |
| <i>Empetrum nigrum</i> subsp. <i>nigrum</i>           | Crowberry                  | Rare                |                 |                      |
| <i>Epilobium lanceolatum</i>                          | Spear-leaved Willowherb    | Rare                |                 |                      |
| <i>Epipactis dunensis</i>                             | Dune Helleborine           | Rare                |                 |                      |
| <i>Epipactis palustris</i>                            | Marsh Helleborine          | Rare                |                 |                      |
| <i>Epipactis phyllanthes</i>                          | Green-flowered Helleborine | Rare                |                 |                      |
| <i>Epipactis purpurata</i>                            | Violet Helleborine         | Rare                |                 |                      |
| <i>Equisetum sylvaticum</i>                           | Wood Horsetail             | Scarce              |                 |                      |
| <i>Equisetum x litorale</i>                           | Hybrid Horsetail           | Scarce              |                 |                      |
| <i>Erica cinerea</i>                                  | Bell Heather               | Rare                | Near Threatened |                      |
| <i>Erica tetralix</i>                                 | Cross-leaved Heath         | Scarce              | Near Threatened |                      |
| <i>Eriophorum angustifolium</i>                       | Common Cotton-grass        | Scarce              | Vulnerable      |                      |
| <i>Eriophorum vaginatum</i>                           | Hare's-tail Cotton-grass   | Rare                |                 |                      |
| <i>Erodium moschatum</i>                              | Musk Stork's-bill          | Scarce              |                 |                      |
| <i>Erophila glabrescens</i>                           | Glabrous Whitlowgrass      | Scarce              |                 |                      |
| <i>Erophila majuscula</i>                             | Hairy Whitlowgrass         | Rare                |                 |                      |
| <i>Erysimum cheiranthoides</i>                        | Treacle Mustard            | Scarce              | Near Threatened |                      |
| <i>Euphorbia exigua</i>                               | Dwarf Spurge               | No County status    | Vulnerable      | Near Threatened      |
| <i>Euphrasia arctica x confusa</i>                    | Hybrid Eyebright           | Rare                |                 |                      |
| <i>Euphrasia arctica x nemorosa</i>                   | Hybrid Eyebright           | Rare                |                 |                      |
| <i>Euphrasia confusa</i>                              | Confused Eyebright         | Scarce              | Vulnerable      |                      |
| <i>Euphrasia confusa x nemorosa</i>                   | Hybrid Eyebright           | Rare                |                 |                      |

| Scientific Name                             | Common Name                | Warwickshire Status | England Status        | Great Britain Status  |
|---|----------------------------|---------------------|-----------------------|-----------------------|
| <i>Euphrasia confusa x micrantha</i>        | Hybrid Eyebright           | Rare                |                       |                       |
| <i>Euphrasia micrantha</i>                  | Slender Eyebright          | Rare                | Endangered            |                       |
| <i>Euphrasia nemorosa</i>                   | Common Eyebright           | Scarce              | Near Threatened       |                       |
| <i>Festuca altissima</i>                    | Wood Fescue                | Rare                |                       |                       |
| <i>Festuca filiformis</i>                   | Fine-leaved Sheep's-fescue | Rare                |                       |                       |
| <i>Festuca ovina subsp. ophioliticola</i>   | Sheep's-fescue subsp.      | Rare                |                       |                       |
| <i>Festuca rubra subsp. commutata</i>       | Chewing's Red Fescue       | Rare                |                       |                       |
| <i>Filago minima</i>                        | Small Cudweed              | No County status    | Near Threatened       |                       |
| <i>Filago vulgaris</i>                      | Common Cudweed             | No County status    | Near Threatened       | Near Threatened       |
| <i>Fragaria vesca</i>                       | Wild Strawberry            | No County status    | Near Threatened       |                       |
| <i>Frankenia laevis</i>                     | Sea-heath                  | Rare                | Near Threatened       | Near Threatened       |
| <i>Fumaria capreolata</i>                   | White Ramping-fumitory     | Rare                |                       |                       |
| <i>Fumaria muralis subsp. boraei</i>        | Common Ramping-fumitory    | Scarce              |                       |                       |
| <i>Fumaria officinalis subsp. wirtgenii</i> | Common Fumitory            | Rare                |                       |                       |
| <i>Galeopsis angustifolia</i>               | Red Hemp-nettle            | Rare                | Critically Endangered | Critically Endangered |
| <i>Galeopsis speciosa</i>                   | Large-flowered Hemp-nettle | Rare                | Vulnerable            | Vulnerable            |
| <i>Galium palustre subsp. elongatum</i>     | Greater Marsh-bedstraw     | Rare                |                       |                       |
| <i>Galium parisiense</i>                    | Wall Bedstraw              | Scarce              | Vulnerable            | Vulnerable            |
| <i>Galium x pomeranicum</i>                 | Hybrid Bedstraw            | Rare                |                       |                       |
| <i>Gastridium ventricosum</i>               | Nit-grass                  | (Rare)              |                       |                       |
| <i>Genista anglica</i>                      | Petty Whin                 | Rare                | Vulnerable            | Near Threatened       |
| <i>Genista tinctoria</i>                    | Dyer's Greenweed           | Scarce              | Vulnerable            |                       |
| <i>Gentianella amarella subsp. amarella</i> | Autumn Gentian             | Scarce              | Near Threatened       |                       |
| <i>Geum rivale</i>                          | Water Avens                | Scarce              |                       |                       |
| <i>Glebionis segetum</i>                    | Corn Marigold              | No County status    | Vulnerable            | Vulnerable            |
| <i>Gnaphalium luteoalbum</i>                | Jersey Cudweed             | (Rare)              |                       | Critically Endangered |
| <i>Gnaphalium sylvaticum</i>                | Heath Cudweed              | Scarce              | Endangered            | Endangered            |
| <i>Groenlandia densa</i>                    | Opposite-leaved Pondweed   | Rare                | Vulnerable            | Vulnerable            |
| <i>Helianthemum nummularium</i>             | Common Rockrose            | Rare                | Near Threatened       |                       |
| <i>Helleborus viridis</i>                   | Green Hellebore            | Rare                |                       |                       |
| <i>Hieracium prominentidens</i>             | Large-toothed Hawkweed     | (Rare)              |                       | Vulnerable            |
| <i>Hieracium umbellatum</i>                 | Umbellate Hawkweed         | Rare                |                       |                       |
| <i>Hieracium triviale</i>                   | Common Hawkweed            | Rare                |                       |                       |
| <i>Hippocrepis comosa</i>                   | Horseshoe Vetch            | Rare                |                       |                       |
| <i>Hottonia palustris</i>                   | Water-violet               | (Rare)              | Vulnerable            |                       |
| <i>Hydrocotyle vulgaris</i>                 | Marsh Pennywort            | No County status    | Near Threatened       |                       |

| Scientific Name                          | Common Name                  | Warwickshire Status | England Status        | Great Britain Status |
|--|------------------------------|---------------------|-----------------------|----------------------|
| <i>Hyoscyamus niger</i>                  | Henbane                      | Scarce              | Vulnerable            | Vulnerable           |
| <i>Hypericum elodes</i>                  | Marsh St. John's-wort        | Rare                |                       | Near Threatened      |
| <i>Hypochaeris glabra</i>                | Smooth Cat's-ear             | Rare                | Vulnerable            | Vulnerable           |
| <i>Hypopitys monotropa</i>               | Yellow Bird's-nest           | Rare                | Endangered            | Endangered           |
| <i>Jasione montana</i>                   | Sheep's-bit                  | Rare                | Vulnerable            |                      |
| <i>Juncus compressus</i>                 | Round-fruited Rush           | Scarce              | Vulnerable            | Near Threatened      |
| <i>Juncus squarrosus</i>                 | Heath Rush                   | Scarce              |                       |                      |
| <i>Juncus subnodulosus</i>               | Blunt-flowered Rush          | Scarce              |                       |                      |
| <i>Knautia arvensis</i>                  | Field Scabious               | No County status    | Near Threatened       |                      |
| <i>Koeleria macrantha</i>                | Crested Hair-grass           | Scarce              |                       |                      |
| <i>Lathraea squamaria</i>                | Toothwort                    | Scarce              |                       |                      |
| <i>Legousia hybrida</i>                  | Venus's-looking-glass        | Rare                |                       |                      |
| <i>Lepidium campestre</i>                | Field Pepperwort             | No County status    | Near Threatened       |                      |
| <i>Lepidium heterophyllum</i>            | Smith's Pepperwort           | Scarce              |                       |                      |
| <i>Lepidium latifolium</i>               | Dittander                    | (Scarce)            |                       |                      |
| <i>Leymus arenarius</i>                  | Lyme-grass                   | (Rare)              |                       |                      |
| <i>Limosella aquatica</i>                | Mudwort                      | Scarce              |                       |                      |
| <i>Lithospermum arvense</i>              | Corn Gromwell                | Scarce              | Endangered            | Endangered           |
| <i>Littorella uniflora</i>               | Shoreweed                    | Rare                |                       |                      |
| <i>Luzula multiflora subsp. congesta</i> | Heath Wood-rush              | Scarce              |                       |                      |
| <i>Lythrum portula</i>                   | Water-purslane               | Scarce              |                       |                      |
| <i>Melampyrum pratense</i>               | Common Cow-wheat             | Scarce              | Near Threatened       |                      |
| <i>Mentha arvensis</i>                   | Corn Mint                    | No County status    | Near Threatened       |                      |
| <i>Mentha pulegium</i>                   | Pennyroyal                   | (Scarce)            | Critically Endangered | Endangered           |
| <i>Minuartia hybrida</i>                 | Fine-leaved Sandwort         | Rare                | Endangered            | Endangered           |
| <i>Misopates orontium</i>                | Weasel's-snout               | Rare                | Vulnerable            | Vulnerable           |
| <i>Myosotis secunda</i>                  | Creeping Forget-me-not       | Rare                |                       |                      |
| <i>Myosurus minimus</i>                  | Mousetail                    | Scarce              | Vulnerable            | Vulnerable           |
| <i>Nardus stricta</i>                    | Mat-grass                    | No County status    | Near Threatened       |                      |
| <i>Neottia nidus-avis</i>                | Bird's-nest Orchid           | Scarce              | Vulnerable            | Near Threatened      |
| <i>Nepeta cataria</i>                    | Cat-mint                     | Rare                | Vulnerable            | Vulnerable           |
| <i>Oenanthe aquatica</i>                 | Fine-leaved Water-dropwort   | Rare                |                       |                      |
| <i>Oenanthe fistulosa</i>                | Tubular Water-dropwort       | Scarce              | Vulnerable            |                      |
| <i>Oenanthe fluviatilis</i>              | River Water-dropwort         | Rare                |                       |                      |
| <i>Oenanthe lachenalii</i>               | Parsley Water-dropwort       | Rare                | Near Threatened       |                      |
| <i>Oenanthe silaifolia</i>               | Narrow-leaved Water-dropwort | Rare                |                       | Near Threatened      |
| <i>Ononis spinosa</i>                    | Spiny Restharrow             | No County status    | Near Threatened       |                      |

| Scientific Name                         | Common Name               | Warwickshire Status | England Status  | Great Britain Status  |
|---|---------------------------|---------------------|-----------------|-----------------------|
| <i>Ophrys insectifera</i>               | Fly Orchid                | Rare                |                 | Vulnerable            |
| <i>Orchis anthropophora</i>             | Man Orchid                | Rare                | Endangered      | Endangered            |
| <i>Oreopteris limbosperma</i>           | Lemon-scented Fern        | Rare                |                 |                       |
| <i>Orobanche hederaceae</i>             | Ivy Broomrape             | (Rare)              |                 |                       |
| <i>Osmunda regalis</i>                  | Royal Fern                | (Rare)              |                 |                       |
| <i>Oxalis acetosella</i>                | Wood-sorrel               | No County status    | Near Threatened |                       |
| <i>Papaver argemone</i>                 | Prickly Poppy             | Scarce              | Endangered      | Vulnerable            |
| <i>Papaver hybridum</i>                 | Rough Poppy               | Rare                |                 |                       |
| <i>Parentucellia viscosa</i>            | Yellow Bartsia            | (Scarce)            |                 |                       |
| <i>Paris quadrifolia</i>                | Herb-Paris                | Scarce              |                 |                       |
| <i>Parnassia palustris</i>              | Grass-of-Parnassus        | Rare                | Vulnerable      |                       |
| <i>Pedicularis palustris</i>            | Marsh Lousewort           | Rare                | Vulnerable      |                       |
| <i>Pedicularis sylvatica</i>            | Lousewort                 | Rare                | Vulnerable      |                       |
| <i>Persicaria minor</i>                 | Small Water-pepper        | Rare                |                 | Vulnerable            |
| <i>Petroselinum segetum</i>             | Corn Parsley              | Rare                |                 |                       |
| <i>Pinguicula vulgaris</i>              | Common Butterwort         | Rare                | Vulnerable      |                       |
| <i>Plantago major subsp. intermedia</i> | Greater Plantain          | Scarce              |                 |                       |
| <i>Plantago media</i>                   | Hoary Plantain            | No County status    | Near Threatened |                       |
| <i>Platanthera bifolia</i>              | Lesser Butterfly-orchid   | Rare                | Endangered      | Vulnerable            |
| <i>Platanthera chlorantha</i>           | Greater Butterfly-orchid  | No County status    |                 | Near Threatened       |
| <i>Poa infirma</i>                      | Early Meadow-grass        | (Rare)              |                 |                       |
| <i>Polygala serpyllifolia</i>           | Heath Milkwort            | Scarce              | Near Threatened |                       |
| <i>Polygonum rurivagum</i>              | Cornfield Knotgrass       | Scarce              |                 |                       |
| <i>Polypogon monspeliensis</i>          | Annual Beard-grass        | (Scarce)            |                 |                       |
| <i>Potamogeton berchtoldii</i>          | Small Pondweed            | Scarce              |                 |                       |
| <i>Potamogeton friesii</i>              | Flat-stalked Pondweed     | Rare                | Vulnerable      | Near Threatened       |
| <i>Potamogeton lucens</i>               | Shining Pondweed          | Scarce              |                 |                       |
| <i>Potamogeton obtusifolius</i>         | Blunt-leaved Pondweed     | Rare                |                 |                       |
| <i>Potamogeton polygonifolius</i>       | Bog Pondweed              | Scarce              |                 |                       |
| <i>Potamogeton pusillus</i>             | Lesser Pondweed           | Scarce              |                 |                       |
| <i>Potamogeton trichoides</i>           | Hairlike Pondweed         | Rare                |                 |                       |
| <i>Potentilla argentea</i>              | Hoary Cinquefoil          | Rare                | Near Threatened | Near Threatened       |
| <i>Potentilla erecta</i>                | Tormentil                 | No County status    | Near Threatened |                       |
| <i>Primula elatior</i>                  | Oxlip                     | (Rare)              |                 | Near Threatened       |
| <i>Prunus cerasus</i>                   | Dwarf Cherry              | Scarce              | Near Threatened |                       |
| <i>Ranunculus arvensis</i>              | Corn Buttercup            | No County status    | Endangered      | Critically Endangered |
| <i>Ranunculus circinatus</i>            | Fan-leaved Water-crowfoot | Scarce              |                 |                       |

| <b>Scientific Name</b>   | <b>Common Name</b>                         | <b>Warwickshire Status</b> | <b>England Status</b> | <b>Great Britain Status</b> |
|--|--|----------------------------|-----------------------|-----------------------------|
| <i>Ranunculus flammula</i>                                     | Lesser Spearwort                           | No County status           | Near Threatened       |                             |
| <i>Ranunculus hederaceus</i>                                   | Ivy-leaved Crowfoot                        | Scarce                     |                       |                             |
| <i>Ranunculus omiophyllus</i>                                  | Round-leaved Crowfoot                      | Scarce                     |                       |                             |
| <i>Ranunculus parviflorus</i>                                  | Small-flowered Buttercup                   | Scarce                     |                       |                             |
| <i>Ranunculus penicillatus</i> subsp.<br><i>pseudofluitans</i> | Stream Water-crowfoot                      | Scarce                     |                       |                             |
| <i>Ranunculus sardous</i>                                      | Hairy Buttercup                            | Rare                       |                       |                             |
| <i>Rhinanthus minor</i> subsp.<br><i>stenophyllus</i>          | Yellow-rattle subsp.                       | (Rare)                     |                       |                             |
| <i>Ribes alpinum</i>   | Mountain Currant                           | (Rare)                     |                       |                             |
| <i>Rorippa islandica</i>                                       | Northern Yellow-cress                      | Rare                       |                       |                             |
| <i>Rosa caesia</i> subsp. <i>vosagiaca</i>                     | <i>Rosa caesia</i> subsp. <i>vosagiaca</i> | Scarce                     |                       |                             |
| <i>Rosa micrantha</i>  | Small-flowered Sweet-briar                 | Rare                       |                       |                             |
| <i>Rosa sherardii</i>  | Sherard's Downy-rose                       | Scarce                     |                       |                             |
| <i>Rosa spinosissima</i>                                       | Burnet Rose                                | (Scarce)                   |                       |                             |
| <i>Rosa stylosa</i>  | Short-styled Field-rose                    | Rare                       |                       |                             |
| <i>Rosa tomentosa</i>  | Harsh Downy-rose                           | Scarce                     |                       |                             |
| <i>Rumex acetosella</i> subsp.<br><i>pyrenaicus</i>            | Sheep's Sorrel subsp.                      | Rare                       |                       |                             |
| <i>Rumex acetosella</i> subsp.<br><i>tenuifolius</i>           | Sheep's Sorrel subsp.                      | Rare                       |                       |                             |
| <i>Rumex palustris</i>   | Marsh Dock                                 | Rare                       |                       |                             |
| <i>Rumex pulcher</i>   | Fiddle Dock                                | Scarce                     |                       |                             |
| <i>Sagina nodosa</i>   | Knotted Pearlwort                          | Rare                       | Vulnerable            |                             |
| <i>Salix cinerea</i> subsp. <i>cinerea</i>                     | Grey Willow                                | Scarce                     |                       |                             |
| <i>Salix repens</i>  | Creeping Willow                            | (Rare)                     | Near Threatened       |                             |
| <i>Salix triandra</i>  | Almond Willow                              | Scarce                     |                       |                             |
| <i>Salvia pratensis</i>  | Meadow Clary                               | (Rare)                     | Near Threatened       | Near Threatened             |
| <i>Salvia verbenaca</i>  | Wild Clary                                 | Scarce                     | Near Threatened       |                             |
| <i>Sambucus ebulus</i>   | Dwarf Elder                                | Rare                       |                       |                             |
| <i>Samolus valerandi</i>                                       | Brookweed                                  | Rare                       |                       |                             |
| <i>Sanicula europaea</i>                                       | Sanicle                                    | No County status           | Near Threatened       |                             |
| <i>Scabiosa columbaria</i>                                     | Small Scabious                             | Scarce                     |                       |                             |
| <i>Scandix pecten-veneris</i>                                  | Shepherd's-needle                          | Scarce                     | Endangered            | Critically Endangered       |
| <i>Schoenoplectus tabernaemontani</i>                          | Grey Club-rush                             | Scarce                     |                       |                             |
| <i>Scleranthus annuus</i>                                      | Annual Knawel                              | Scarce                     | Endangered            | Endangered                  |
| <i>Scrophularia umbrosa</i>                                    | Green Figwort                              | Rare                       |                       |                             |

| Scientific Name                 | Common Name              | Warwickshire Status | England Status  | Great Britain Status |
|---------------------------------|--------------------------|---------------------|-----------------|----------------------|
| <i>Scutellaria minor</i>        | Lesser Skullcap          | Rare                |                 |                      |
| <i>Senecio aquaticus</i>        | Marsh Ragwort            | No County status    | Near Threatened |                      |
| <i>Silene flos-cuculi</i>       | Ragged-robin             | No County status    | Near Threatened |                      |
| <i>Silene noctiflora</i>        | Night-flowering Catchfly | Scarce              |                 | Vulnerable           |
| <i>Silene uniflora</i>          | Sea Campion              | (Rare)              |                 |                      |
| <i>Sinapis alba</i>             | White Mustard            | Scarce              |                 |                      |
| <i>Solidago virgaurea</i>       | Goldenrod                | Rare                | Near Threatened |                      |
| <i>Spergula arvensis</i>        | Corn Spurrey             | No County status    | Vulnerable      | Vulnerable           |
| <i>Spirodela polyrhiza</i>      | Greater Duckweed         | Scarce              |                 |                      |
| <i>Stachys arvensis</i>         | Field Woundwort          | Scarce              | Near Threatened | Near Threatened      |
| <i>Stellaria pallida</i>        | Lesser Chickweed         | Scarce              |                 |                      |
| <i>Stellaria palustris</i>      | Marsh Stitchwort         | Rare                | Vulnerable      | Vulnerable           |
| <i>Stratiotes aloides</i>       | Water-soldier            | No County status    |                 | Near Threatened      |
| <i>Suaeda vera</i>              | Shrubby Sea-blite        | (Rare)              |                 |                      |
| <i>Succisa pratensis</i>        | Devil's-bit Scabious     | No County status    | Near Threatened |                      |
| <i>Thymus pulegioides</i>       | Large Thyme              | Scarce              |                 |                      |
| <i>Torilis arvensis</i>         | Spreading Hedge-parsley  | Scarce              | Endangered      | Endangered           |
| <i>Trichophorum germanicum</i>  | Deergrass                | Rare                |                 |                      |
| <i>Trifolium fragiferum</i>     | Strawberry Clover        | Scarce              | Vulnerable      |                      |
| <i>Trifolium scabrum</i>        | Rough Clover             | Rare                |                 |                      |
| <i>Trifolium striatum</i>       | Knotted Clover           | Scarce              |                 |                      |
| <i>Trifolium subterraneum</i>   | Subterranean Clover      | Rare                |                 |                      |
| <i>Triglochin palustris</i>     | Marsh Arrowgrass         | Scarce              | Near Threatened |                      |
| <i>Ulmus minor</i>              | Small-leaved Elm         | Scarce              |                 |                      |
| <i>Umbilicus rupestris</i>      | Navelwort                | Rare                |                 |                      |
| <i>Utricularia australis</i>    | Bladderwort              | Rare                |                 |                      |
| <i>Vaccinium oxycoccos</i>      | Cranberry                | Rare                |                 |                      |
| <i>Vaccinium vitis-idaea</i>    | Cowberry                 | Rare                |                 |                      |
| <i>Valeriana dioica</i>         | Marsh Valerian           | Scarce              | Near Threatened |                      |
| <i>Valerianella dentata</i>     | Narrow-fruited Cornsalad | Rare                | Endangered      | Endangered           |
| <i>Valerianella officinalis</i> | Common Valerian          | No County status    | Near Threatened |                      |
| <i>Verbena officinalis</i>      | Vervain                  | Scarce              |                 |                      |
| <i>Veronica officinalis</i>     | Heath Speedwell          | No County status    | Near Threatened |                      |
| <i>Veronica scutellata</i>      | Marsh Speedwell          | Scarce              | Near Threatened |                      |
| <i>Vicia lathyroides</i>        | Spring Vetch             | Rare                |                 |                      |
| <i>Vicia lutea</i>              | Yellow-vetch             | (Rare)              | Vulnerable      | Near Threatened      |



| Scientific Name                         | Common Name      | Warwickshire Status | England Status  | Great Britain Status |
|---|------------------|---------------------|-----------------|----------------------|
| <i>Vicia parviflora</i>                 | Slender Tare     | Scarce              | Vulnerable      | Vulnerable           |
| <i>Viola canina</i>                     | Heath Dog-violet | Scarce              | Near Threatened | Near Threatened      |
| <i>Viola palustris subsp. palustris</i> | Marsh Violet     | Scarce              |                 |                      |
| <i>Viola tricolor subsp. tricolor</i>   | Wild Pansy       | No County Status    | Near Threatened | Near Threatened      |

**Notes:**

- Brackets in Warwickshire Status i.e. (Rare) and (Scarce) refer to species that are native or archaeophytes in Great Britain but only rarely found in Warwickshire as casuals.
- England Status is stated according to “A Vascular Plant Red List for England” (Stroh *et al.*, 2014) and Great Britain Status according to “A Vascular Plant Red List for Great Britain” (Cheffings *et al.*, 2005).
- Species that do not have a Warwickshire county status (too many records exist in Warwickshire for these species) but are listed as Near Threatened in England are included. Refer to page 8 for full information.

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