

RARE PLANT REGISTER  
for  
Warwickshire  
(Vice County 38)



John Walton and Monika Walton  
BSBI Recorders for Warwickshire

March 2018

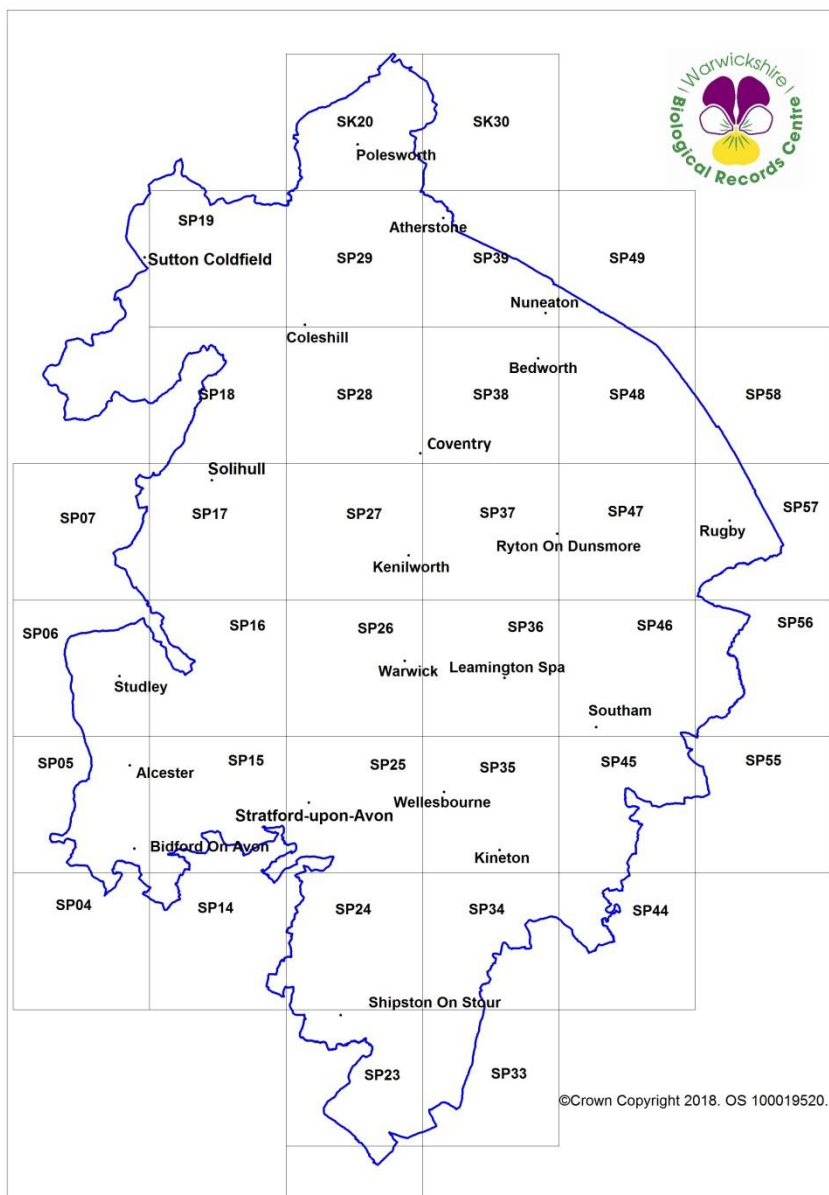


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Front cover: *Orchis anthropophora* (Man Orchid), *Parnassia palustris* (Grass-of-Parnassus) and  
*Botrychium lunaria* (Moonwort)

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 *Miriophyllum 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 hermaphrodita*  
*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*  
*Ceratocapnos 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

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AG	Ali Glaisher	GAF	Gary Farmer	KH	K. Henegan
AI	Anton Irving	GC	Glyn Clarke	KK	Katie Kibble
AJL	Alex Lockton	GCS	G. C. Slawson	KL	Kris Long
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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 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	
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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, occasional
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
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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
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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
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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***

Warwickshire Rare

**Autumnal Water-Starwort**

Native

Sutton Park, Longmoor Pool	SP095957	2006	JWP
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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***

Warwickshire Scarce

**Blunt-fruited Water-Starwort**

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***

Warwickshire Scarce

**Various-leaved Water Starwort**

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***

Warwickshire Rare

**Clustered Bellflower**

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***

GBS: Endangered

ES: Critically Endangered

Warwickshire Rare

**Spreading Bellflower**

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
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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)
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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**

Warwickshire Rare

**Smooth-stalked Sedge**

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**

ES: Near Threatened

Warwickshire Rare

**Flea Sedge**

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**

Warwickshire Rare

**Thin-spiked Wood-sedge**

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**

ES: Vulnerable

Warwickshire Scarce

**Bladder-sedge**

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**

GBS: Endangered

ES: Critically Endangered

(Warwickshire Rare)

**Caraway**

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, Combrook	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 Juckes 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-henricus***

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***

**Basil Thyme**  
Native

GBS: Vulnerable      ES: Vulnerable      Warwickshire Scarce

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***

**Meadow Saffron**

GBS: Near Threatened      Warwickshire Scarce      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***

**Early Marsh-orchid**

Warwickshire Rare

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***

**Tufted Hair-grass**

Warwickshire Rare

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***

**Flixweed**

(Warwickshire Scarce)

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***

**Deptford Pink**

GBS: Endangered ES: Endangered (Warwickshire Rare)

Native in GB, casual in Warwickshire

Water Orton Sidings	SP166913	1992	HHF
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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	
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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	
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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
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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
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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
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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 Trickleby 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 Trickleby 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	
Bodysmoor 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 Bodysmoor 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

Marcliff, Bidford-on-Avon	SP0991550738	2013	JBA, SJ
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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
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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
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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
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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	
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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	
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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	
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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	
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*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
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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 Duddeston (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
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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
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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 Kineton, 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
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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. Apted 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
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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
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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
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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
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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 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
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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

Earlwood	SP1131974363	2010	BL
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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
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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
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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
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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	
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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
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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
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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
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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	
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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
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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
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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
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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
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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
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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. <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. <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. <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. <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		

Scientific Name	Common Name	Warwickshire Status	England Status	Great Britain Status
<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. <i>pseudofluitans</i>	Stream Water-crowfoot	Scarce		
<i>Ranunculus sardous</i>	Hairy Buttercup	Rare		
<i>Rhinanthus minor</i> subsp. <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. <i>pyrenaicus</i>	Sheep's Sorrel subsp.	Rare		
<i>Rumex acetosella</i> subsp. <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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