

NOTABLE FLORA

MALVERN HILLS CONSERVATORS



Notable flora recorded on land owned or otherwise managed by the Malvern Hills Conservators.

Pre 2005 Information provided by Keith Barnett and Peter Garner.

This booklet lists in one convenient document all of the notable plant species native to the area that are currently to be found on land under the jurisdiction of the Malvern Hills Conservators (MHC) or where apposite contiguous with it. Plants are 'notable' in this context if they are scarce or rare, either in Worcestershire or nationally: however, some more common plants have also been included if they may require protective management because they are scarce or rare on MHC land.

Each species has a sheet describing briefly its habitat, national distribution and management requirements. Also given is a summary of local historical records together with a complete listing of records that have been made since 1987 (the commencement date of the Worcestershire Flora Project). Habitat and national distribution information has largely been drawn from *The New Atlas of the British and Irish Flora* (Preston et al. 2002) and *New Flora of the British Isles* (Stace, 1997). Worcestershire distribution follows *A Checklist of the Worcestershire Flora* (Day, 2001).

The booklet is for the sole use of the MHC Conservation Officer and staff and is primarily intended to assist them in pursuance of the Conservators' statutory duty to preserve the natural aspect of the land under their control. The records contained herein are copyright and may not, without the express prior permission of the authors, be published, or used for any other purpose.

K BARNETT

P G GARNER

Revised October 2009

RECORDERS

JB	Jonathan Bills – Conservation Officer
BB	Beck Baker - Community and Conservation Officer
JP/JG	Jenny Palmer (née Grantham) - Deputy Conservation Officer
MR	Mark Roberts – Deputy Conservation Officer
PGG	Peter G Garner – the Botanical Society of the British Isles (BSBI) recorder for Herefordshire (VC 36)
SR	Simon Roberts – MHC Warden
RV	Rich Vale – MHC Warden
KB	Keith Barnett – author of "The Wild Flowers of the Malvern Hills" (1991)
MJ	Mark Jannink – botanist
RM	Roger Maskew – BSBI, British Pteridological Society
NQ	N Quinn – Former MHC Warden
WAR	AW Reid – Bert Reid; BSBI / Worcestershire Biological Records Centre recorder for Worcestershire VC37
WAT	WA Thompson
JJD	JJ Day - John Day; the Botanical Society of the British Isles (BSBI) recorder for Worcestershire VC37
RSK	RSK Environment – Dr Richard Carter – NVC Survey 2013
Carter	Carter Ecological – Dr Richard Carter – NVC Survey 2006
DN	Danny Newman - Land Management Adviser (Worcs), Natural England
HW	Hilary Ward (former Natural England)
P.I.G.	Plant Identification Group
KS	Katey Stephen – Natural England Countryside Consultants (Phase 2 survey 2003)

Revised September 2016

MHC Notable Plants List

Anacamptis morio	Epilobium lanceolatum	Oenanthe silaifolia M
Anagallis minima	Epilobium palustre L	Ophrys apifera Huds
Anagallis tenella	Epipactis helleborine	Oreopteris limbosperma
Apium inundatum	Epipactis purpurata Sm	Paris quadrifolia L
Avenula (Helictotrichon) pratense	Eriophorum angustifolium Honck	Persicaria minor
Avenula (Helictotrichon) pubescens	Erodium moschatum	Polygala serpyllifolia
Blysmus compressus	Euphrasia nemorosa	Potentilla argentea L
Bupleurum tenuissimum	Filago minima	Potentilla tabernaemontani
Calluna vulgaris	Filago vulgaris Lam	Ranunculus auricomis
Campanula patula L	filipendula vulgaris	Ranunculus parviflorus L
Cardamine impatiens L	Galeopsis speciosa Mill	Ranunculus peltatus Shrank
Carex binervis Sm	Genista anglica L	Ranunculus trichophyllus Chaix
Carex distans L	Helianthemum nummularium	Rosa agrestis Savi
Carex disticha Huds	Hieracium subcrassum	Rumex pulcher ssp
Carex echinata Murray	Hordelymus europaeus	Sagina nodosa (L.) Fenzi
Carex hostiana DC	Hypochaeris glabra L	Salix cinerea ssp
Carex pulicaris L	Juncus x kern	Samolus valerandi L
Carex x fulva Gooden	Koeleria macrantha	Scleranthus annuus L
Centaureum pulchellum	Lepidium heterophyllum Benth	Solidago virgaurea L
Ceratocarpus claviculata	Linum bienne	Sphagnum sp
Chamaemelum nobile	Lysimachia vulgaris L	Spiranthes spiralis
Cirsium dissectum	Lythrum portula	Stellaria pallida
Dactylorhiza maculata ssp	Marrubium vulgare L	Taraxacum palustre
Dactylorhiza praetermissa	Molinia caerulea sub	Teesdalia nudicaulis
Dactylorhiza x grandis	Montia fontana L	Torilis nodosa
Dactylorhiza x transiens	Myosotis ramosissima	Trifolium ornithopodioides L
Diphysastrum complanatum ssp	Neottia nidus-avis	Trifolium scabrum L
Eleocharis quinqueflora	Neottia ovata (L.) Bluff & Fingerh.	Triglochin palustre L
Eleocharis uniglumis (Link) Schult.	Oenanthe fistulosa L	Valeriana dioica
Eleogiton fluitans	Oenanthe lachenalii C	Viola canina L
	Oenanthe pimpinelloides L	

***Anacamptis morio* R. M. Bateman, Pridgeon & M.W. Chase**
(*Orchis morio* L.)
Green-winged Orchid
***Orchidaceae* – Orchid family**



Habitat and National Distribution

A native perennial that grows in damp to dry, base-rich to mildly acidic, soils. It is most frequent in hay meadows and pastures, but also grows on sand dunes, heaths and roadsides, and in quarries, gravel-pits, churchyards and lawns. Formerly frequent over most of England, Wales, Ireland and the Channel Islands, it is now local after a steady decline throughout C19 and C20 due to ploughing and improvement of grasslands. It is also found in Ayrshire.

Red Data Book status: UK Near Threatened

Maintenance requirements

This species requires short, undisturbed grassland.

Local Distribution and Early Malvern Area Records

First recorded in C19 from Malvern Link and (unlocalised) in a Malvern Hills plant list of 1843, was originally found on MHC land only on Malvern (Poolbrook) Common but an individual specimen was recorded on the Old Hills in 2016. It also occurs in a number of other nearby unimproved grassland sites such as in Welland.

Worcestershire Status: Scarce

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Malvern Common , boggy area SO 787443	6.5.93 1	PGG	among <i>Ophioglossum vulgatum</i> / Adderstongue
	2005 not seen	KB	
	2006-2011 not seen	KB	
	13.5.12	AWR	
SO7847944287 Boggy area adjacent to pond off Longridge Road	18.5.2015 - 4	JP	(PGG thinks this may be the same site as 1993 above but grid ref mis-recorded – ESE of pond; MR)
	10/05 & 24/05/2016 – not seen	MR / PGG	However Welland crop flourishing at this time. Too wet? Mild winter / late spring prior.
Old Hills Open hay meadow SO 8264 4881	11/5/2016 - 1	MR	First spotted by wife of board member Martin Cordey. 60m NE of trig point.

Revised May 2016

***Anagallis minima* (L.) E.H.L. Krause**
(A.K.A. *Centunculus minimus*)
Chaffweed
***Primulaceae* –Primrose family**



Habitat and National Distribution

A native annual of bare sandy ground on heaths and in woodland rides, usually on acidic soils. Scattered over most of the British Isles (mainly coastal in the W), it is declining nationally, perhaps because of changes in heathland management.

Maintenance requirements

A poor competitor, this species requires grazing, frequent trampling or other habitat disturbance.

Local Distribution and Early Malvern Area Records

First recorded in the county from a bog on Moseley Common near Birmingham in 1838, this species had long been feared lost until it was discovered in 2001 at a BSBI field meeting on Castlemorton Common. Since then it has been found in another site near the Shropshire border. Worcestershire Status: Very rare

***Anagallis minima* (L.) E.H.L. Krause**

Chaffweed

***Primulaceae* –Primrose family**

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, Dried-up pool N edge of common opposite drive to Boulter's Farm SO 786394	11.8.01 c.20	BSBI Field Mtg. RM et al.	
	2.7.03 quantity unknown	PGG	
	18.8.04 quantity unknown	PGG	
	18.08.05 not found	KB	
	25.08.05 not found	PGG	
	31.07.06 not found	PGG	
	12.09.06 many	PGG	In seed, turned pink. Scattered on bare patches (photograph)
	08.09.07 not found	KB	
	01.07.09 20+	PGG	photograph
	15.07.09 c.6	KB	78653944
	01.09.15 not found	PGG/JP	
	8.7.16 not found	MR	

01 December 2016

***Anagallis tenella* (L.) L.**
Bog Pimpernel
***Primulaceae* – Primrose family**



Habitat and National Distribution

A native perennial of bogs, wet open sites, flushes and damp peaty ground. Scarce in much of the UK, only being common in Wales, western Scotland and south-west England. Absent from much of the E and declining in S and E England because of grassland improvement, eutrophication and drainage. This delicate and small plant is procumbent, barely reaching above 8 inches, and rooting at the nodes.

Maintenance requirements

Sites must be kept open and wet.

Local Distribution and Early Malvern Area Records

There are C19 records from 'Malvern Hill' and the Worcestershire base of the Worcestershire Beacon, and it can now be found in wet flushes on Castlemorton Common and Hay Slad bog. Amphlett & Rae (1909) described this species as '*a charming little plant with rose-coloured flowers, large in proportion to the size of the plant*' which was however '*vanishing in Worcestershire*'. Worcestershire Status: Very rare

***Anagallis tenella* (L.) L.**
Bog Pimpernel
Primulaceae – Primrose family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Berrow Downs - 'Dales Hall Bog' NW corner below Pink Cottage. Raised bog in willow scrub immediately west of bridle path SO 7665 3865	7.6.92 quantity unknown	PGG	
With <i>Eriophorum angustifolium</i>	18.07.14 Good sized patch	Roger Bates	Photo
	5/10/2016 large patch	Wildlife Panel Outdoor Meeting	PGG – "the most I have seen here". Tree clearance work carried out by volunteers – more light.
Berrow Downs – 'Swinyard Flush' wet flush at base of Swinyard Hill. Just west of track to Foxhall. SO 7643 3818	12.6.92 small sparse patches in flower	PGG	First seen in tracks made by Conservators' vehicle
With <i>Sphagnum subnifens</i>	17.7.02 2 or 3	KB	
	30.6.05 at least 1	KB	Not in flower
	15.7.09 1	PGG	3 seed heads showing
	05.07.14 1 or 2 only	PGG	Getting overgrown
	2015	PGG	
	5/10/16 not seen	Wildlife Panel Outdoor Meeting	Was visible in leaf at Dales Hall bog (see above)
Hay Slad middle of bog SO 766 447	04.10.91 2 clumps	PGG	Discovered since PGG's clearance work.

01 December 2016

***Apium inundatum* (L.) Rchb.f.**

Lesser Marshwort

Apiaceae – Carrot family



Habitat and National Distribution

A native biennial to perennial found in permanent shallow water in streams, ditches, ponds, canals and backwaters; and in sites which are subject to periodic desiccation such as the muddy edges of lakes, pools and reservoirs, and dune-slacks. It is confined to oligotrophic (poor in nutrients and plant life, rich in oxygen) or mesotrophic habitats, and most sites are base-poor. Scattered over most of the British Isles, the species is considerably declining as a result of the destruction of shallow water bodies, drainage and eutrophication.

Red Data Book 2014 - Vulnerable (VU) in England

Maintenance requirements

This species requires wet, undisturbed sites that dry out periodically.

Local Distribution and Early Malvern Area Records

The first Worcestershire record is from the side of rivulets on Malvern Chase in 1787. Other C19 records include Newland Common, Castlemorton Common (where it may still be seen in a number of places): and also Barnards Green where it was rediscovered after about a century in 2005 and hopefully not lost following rigorous MHC maintenance work in 2011. Worcestershire Status: Very rare

***Apium inundatum* (L.) Rchb.f.**

Lesser Marshwort

Apiaceae – Carrot family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, small pool in NE corner of the common (Welland end) which lies to the W of the B4208. SO 792395	8.5.87 quantity unknown	PGG	Long-standing record, well-known site. Small muddy pool which often dries up in summer
	1989 quantity unknown	PGG	
	1992 quantity unknown	PGG	
	8.7.05 good colony	KB	
	30.7.06 good colony	KB	
	15.7.09 none seen	PGG	Pool dry and full of Glyceria
	12.6.13 2 or 3	KB	7821939584
	27.8.14, not seen	MHC Wildlife Panel	Needs more grazing, overgrown with Glyceria and Persicaria hydropiper
Castlemorton Common, stream SO 785391	18.8.91 Quantity unknown	Janet Jones	
Castlemorton Common, stream SO 788394	20.8.91 Quantity unknown	Janet Jones	
Castlemorton Common, pool, extreme E corner SO 797393	29.6.93 lots	PGG	
	2.8.07 a few	RM/KB/PGG	
	30.08.2016 not seen	MR/PGG	Pond dry and inundated with Crassula.
Castlemorton Common, marsh SO 783393	11.8.01 Several, scattered	BSBI Field Mtg. RM et al.	

***Apium inundatum* (L.) Rchb.f.**

Lesser Marshwort

***Apiaceae* – Carrot family**

Castlemorton Common, marsh below The Poplars SO 772385	28.7.02 a few, non- flowering	BSBI Field Mtg. RM et al.	
Castlemorton Common, pool SO 791391	2.7.03 common	RM	
Barnards Green, 'The Flodder', small pond off Hall Green (road) SO 799454	17.6.05 good colony	KB	
	2.8.06 good colony	KB	
	13.6.08 a few	KB	
	13.8.09 a few	KB	
	7.13 not seen	KB	
	2014, not seen	KB	

Revised June 2016

***Avenula (formerly Heliotrichon) pratense* (L.) Besser**
Meadow Oat-grass
Poaceae – Grass family



Habitat and National Distribution

A native perennial of calcareous rendzina and brown earth soils, usually over chalk or limestone, but also over glacial deposits and basic igneous rocks. It is characteristic of well-grazed chalk and limestone downland, but is also found on screes, cliffs and limestone pavements, and occasionally in open *Fraxinus* woods, on sand dunes and on montane ledge communities. Found more or less throughout Britain, except in the Outer Isles, C Wales and extreme SW England, its distribution is stable, although apparent losses in SE England may be significant indicators of a decline in the lowlands. It often grows with *Avenula (Heliotrichon) pubescens*.

This is quite a common grass of the summer time but could be confused with the very common Arrhenatherum elatius (False Oat-grass) or its cousin Avenula pubescens (Downy Oat-grass) which has hairy socks. (The lower culm sheaths are slightly pubescent).

Maintenance requirements

This species cannot tolerate artificial fertilisers or vigorous competition.

Local Distribution and Early Malvern Area Records

There are C19 records from the Old Hills, 'west of the Hills, Malvern' and 'Silurian eminences'. It is now known only from Malvern (Poolbrook) Common and Hollybed Common. Worcestershire Status: Very scarce

***Avenula (formerly Heliotrichon) pratense* (L.) Besser**
Meadow Oat-grass
Poaceae – Grass family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Malvern (Poolbrook) Common , by St. Andrew's Church on a steep S-facing slope and above the slope SO 789444	22.6.92 sizeable patch, over 10 square metres	PGG	conf. RM/WAT
Hollybed Common , grassland beside pond SO 779374	28.7.02 1 clump	WFP Field Mtg.	
Hollybed Common , grassland SO 776377	28.7.02 locally frequent	WFP Field Mtg.	

February 2016

***Avenula (formerly Heliotrichon) pubescens* (Huds.) Pilg.**

Downy Oat-grass

Poaceae – Grass family



Habitat and National Distribution

A native perennial that grows in a wide range of moist or dry, neutral and calcareous grasslands in meadows and pastures, on roadsides and railway banks, in open woodland and rides, coastal cliffs, fixed dunes, mildly acidic grassland over gravel and some less acidic heaths. It is found more or less throughout the British Isles, and is common on chalk and limestone in England. It often grows with *Avenula (Heliotrichon) pratense*. Downy oat-grass is a loosely tufted perennial with an attractive inflorescence growing to about 90cm. The leaf blades are soft and covered with soft hairs although these can rub off with age. It can be confused with false oat-grass (*Arrhenatherum elatius*) and its cousin, meadow oat grass (*Avenula pratensis*)

Maintenance requirements

This species tolerates moderate mowing, grazing and manuring, but not artificial fertilisers or competition from vigorous fodder-grasses.

Local Distribution and Early Malvern Area Records

There are some unlocalised C19 records from the Malvern area, but its first specific record was from Hollybed Common in 2002. Worcestershire Status: Scarce

***Avenula (formerly Helictotrichon) pubescens* (Huds.) Pilg.**

Downy Oat-grass

Poaceae – Grass family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Hollybed Common, grassland SO 774360	28.7.02 locally frequent	WFP Field Mtg.	
Hollybed Common, grassland SO 776377	28.7.02 locally frequent	WFP Field Mtg.	

February 2016

***Blysmus compressus* (L.) Panz. ex Link**

Flat-sedge

Cyperaceae – Sedge family



Habitat and National Distribution

A native perennial of open areas in marshes and fens, and in short, sedge-rich damp grassland, calcareous flushes and stream borders that are subject to flooding. Locally frequent in England, but extinct in many places in Wales and very local in Scotland. Severely declining, much loss being due to drainage, the loss of unimproved grassland, falling water tables, eutrophication and the cessation of grazing.

Red data Book 2014 UK– VU (Vulnerable)

Maintenance requirements

Sites must be kept open and wet.

Local Distribution and Early Malvern Area Records

The first Worcestershire record is from 'the margins of springy spots on the hills, especially about the Wells', where it was described by Lees (1843) as abundant. There is also an old record from 'bog, west side of Worcestershire Beacon'; and 'Malvern Common'. It now grows on Castlemorton Common and Hollybed Common. Worcestershire Status: Very rare

***Blysmus compressus* (L.) Panz. ex Link**

Flat-sedge

Cyperaceae – Sedge family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Hollybed Common , NW corner 'flush' Huntsbridge SO 772378	18.11.90 quantity unknown	PGG	
	20.6.00 quantity unknown	PGG	
	24.7.01 quantity unknown	PGG	
	28.7.02 very small patch	WFP Field Mtg.	
	04.09.05 not found	PGG	Overgrown
	25.06.06 At least 1	Worcs. Recording Field Meeting JJD et al.	In small depression near flush.
	20.08.06 not found	PGG	Much clearance but still not suitable
Castlemorton Common , grassland/marsh SO 776394			
	25.6.02 very thinly scattered	RM	.
Castlemorton Common , damp grassland SO 783391, 783392	24.5.90 locally common	JJD	
	25.6.02 very thinly scattered	RM	
Castlemorton Common , flush/raised bog below Pink Cottage SO 766386	7.6.92 very small area but locally plentiful	PGG	
Castlemorton Common Damp grassland SO 784 309	16.06.05 several	KB/AWR	

01 December 2016

***Bupleurum tenuissimum* L.**

Slender Hare's-ear

***Apiaceae* – Carrot family**



Habitat and National Distribution

A declining native annual, primarily a colonist of thinly vegetated or disturbed coastal sites, including coastal banks, sea walls, drained estuarine marshes and the margins of brackish ditches. Mainly found on the coasts of S Britain from Monmouthshire to SE Yorkshire and Flintshire, there are some inland populations on commons. A slender, wiry plant, not much like the other umbellifers in the Carrot family, it is often difficult to see amongst grasses.

Red Data Book status: UK Nationally Scarce / England Vulnerable

Maintenance requirements

This species requires grazing to maintain a short sward.

Local Distribution and Early Malvern Area Records

First recorded in Worcestershire from 'the common by the roadside just before Garford (sic) Court, Barnard's Green' in 1834, there are a number of old local records, including Welland Common; Malvern Link Common; roadside near The Rhydd; roadside near the Turnpike beyond Newland Common from Worcester; and the Old Hills. It is still present on Hollybed Common (in quantity) and Castlemorton Common, with a few plants perhaps surviving on Link Common. Worcestershire Status: Very rare

***Bupleurum tenuissimum* L.**

Slender Hare's-ear

Apiaceae – Carrot family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common , bank of stream just west of main bridge on the S side. Dry grassy bank above small stream. SO 788394	28.8.87 quantity unknown	PGG	In 1989, a large part of the bank was washed away by the stream
	1990 c.30	PGG	
	23.8.94 a few	PGG	
	1995 4 or 5	PGG	
	18.8.04 flourishing	PGG	
	2005 not found	KB/AWR and PGG	
	31.7.06 15	PGG	
	8.9.06 30+	KB	78933936
	25.8.10 not found	PGG	
	6.9.11 not found	PGG	Bank erosion (stream and cattle): stream dry
	9.9.13 not found	PGG	
	26.7.14 not found	PGG	
	01.09.15 not found	PGG/JP	Stream took bank away
Hollybed Common , dry grassy E-facing bank beside man-dug (marl) pool (often dry) SO 776376	13.9.89 1	PGG	Trees recently planted round the top
	1990, 1991 not found	PGG	
	8.8.01 2 small plants	PGG	
	11.8.01 quantity unknown	BSBI Field Mtg. RM et al.	
	11.6.06 several	KB	
	21.8.07 several	PGG	
	26.7.14 2	PGG	On early visit
	01.09.15 4	PGG/JP	Scattered

***Bupleurum tenuissimum* L.**

Slender Hare's-ear

Apiaceae – Carrot family

[illegible]

Revised August 2016

***Bupleurum tenuissimum* L.**

Slender Hare's-ear

Apiaceae – Carrot family

Hollybed Common, beside and near to pond SO 77863743	28.7.02 c.100	WFP Field Mtg.	
	7.9.03 plenty	PGG	
	26.8.04 rampant	PGG	6m in from pond
	29.7.05 1	KB	On a single anthill
	4.9.05 plenty	PGG	
	15.6.06 very many	JJD et al.	Worcs Recorders Field Mtg.
	20.8.06 plenty	PGG	
	21.8.07 present	PGG	Slightly fewer than in 2006
	28.8.10 many	PGG	
	3.9.11 a few	PGG	1 or 2 nearest the water 1': others (tiny) on anthills
	13.8.13 not found	PGG & JB	
	31.8.13 not found	PGG	
	24.7.14 9	PGG	On anthill
	27.8.14 number unknown	PGG/BB	Anthills
	01.09.15 not found	PGG/JP	
	10.08.2016 8	MR/PGG	Anthill at NW bank of pond
Castlemorton Common, calcareous roadside bank 77483836	7.13 c.3 or 4, in bud	R. Carter (Carter Ecological)	7748938363
	9.13 22, plus 17 on the bank above the slope on flat surface	PGG	77489383, in NW. 7750238364, in 15m stretch of roadside bank in SE
	16.9.13 1	KB	7750038366
	16.7.14 45	JB	
	5.8.14 50+	PGG/RM	Even though verge cut by Highways Department
	5.8.16 c 50	PGG	+ Alison & Mike Uren, Margaret Vernon

Bupleurum tenuissimum L.

Slender Hare's-ear

Apiaceae – Carrot family

Hollybed Common, small rounded hill in NW corner above 80m. Near top and on the S edge of the top itself: quite an extensive area wherever the grass is thinner SO 773376	14.8.94 100s	PGG	
	Late 7.95 showing well in bud	PGG	When revisited (9.9.95) most had been grazed down. But not much threat to colony
	6.9.98 many 1000s	PGG/RM	Much more extensive, rampant over area 100m x 10m.
	8.9.00 still flourishing	PGG	
	26.8.04 flourishing, dense patches	PGG	
	4.9.05 flourishing	PGG	
	25.6.06 flourishing	Worcs. Recording Field Mtg. JJD et al.	
	松 田 山 脊 EÜ Å	KB	1000's. 77303768
	ý 田 田 田 田 田 田 田	PGG	c.2 acres, in full flower
	21.8.07 plentiful	PGG	But not as prolific as in 2006
	24.8.09 100+	PGG	Much reduced, almost in full flower
	28.8.10 2-3,000	PGG	
	6.9.11 1000+	PGG	—y
	23.8.13 c.30	PGG & JB	V. small
	28.8.13 a few more	PGG	
	12.9.13 very few	PGG	Tiny plants
	20.7.14 400+	JB	
	27.8.14 1000+	MHC Wildlife Panel	
	2015	Botany group	Found on bank near John Plant's house.
	01.09.15 100+	PGG/JP	
	05.08.16 300 - 500	PGG	+ Alison & Mike Uren, Margaret Vernon
	10.08.16 1000+	MR/PGG	Widespread on anthills

***Calluna vulgaris* (L.) Hull**
Heather
***Ericaceae* – Heather family**



Habitat and National Distribution

A native perennial low shrub, often dominant on heaths, moors and nutrient-poor grasslands, and also found in open woodland on acidic, mainly sandy or peaty, soils, ranging from dry exposed habitats to wet bogs. Abundant in suitable places throughout the British Isles, but declining through loss of suitable habitat, particularly in much of England since 1950, because of loss of heathland to forestry, agriculture, mineral workings and scrub. **Maintenance requirements**

This species requires open sites and cannot tolerate continued heavy grazing.

Red Data Book 2014 England – Near Threatened;

UK – Locally Common

Local Distribution and Early Malvern Area Records

The first county record dates from 1829, when it was noted as growing on the Malvern Hills. In 1884 it was noted from Castlemorton Common but was not recorded from there again until 1976 (F Fincher). It is now widespread but local on the Hills and Castlemorton Common. Worcestershire Status: Uncommon

***Calluna vulgaris* (L.) Hull**
Heather
Ericaceae – Heather family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
British Camp, E slopes SO 762396, 763401	1987 abundant	PGG	
	Mar / April 2003	KS	H8e community
	2013 several populations	Carter Ecological	'Several populations are present around British Camp where the species is grazed to form small mounds'
	2016 plentiful	PGG	Much rabbit grazed
Rushy Valley, bottom of valley SO 772454			
	1988 few plants	PGG	With <i>Vaccinium</i>
Worcestershire Beacon, hill grassland SO 773449, 773453	26.6.90 locally common	JJD	
	Mar / April 2003	KS	H8e communities on east and west slopes
British Camp Reservoir, heath SO 7645 3980	1988 quantity unknown	T Warwick	
	Mar / Apr 2003	KS	H8 e community on south east shore of reservoir
Castlemorton Common, grassland/scrub SO 786391, 786392,	10.8.91 very small patch	Janet Jones	
	28.5.93 small patch	PGG	

Castlemorton Common, SO 781391	19.9.91 quite a large patch	PGG	An area in the centre of the common that was cleared of scrub 2 years ago. Appears to be new plants and spreading. About the size of a tennis court, but very fragmented
	12.8.94 tall and luxuriant	PGG	Much more extensive
Castlemorton Common, anthill near marsh at bottom of Hancock's Lane. SO 781394	15.4.93 quantity unknown	PGG	
Swinyard Hill, beside the track to Pink Cottage from The Gullet and up the bank on the side of the hill. SO 763387	4.9.94 many small clumps	PGG	
Castlemorton Common, N edge. SO 792395	8.8.01 several clumps	PGG	
	1.9.04 small patch	KB	SO 79153956
	01.09.15 several clumps	PGG/JP	
	17.08.2016	Plant Identification Group (PIG)	SO794396 area towards top of triangle formed by the B4208, a minor road and a footpath
Castlemorton Common SO 784390	5.7.04 small patch	KB	

01 December 2016

***Campanula patula* L.**
Spreading Bellflower
***Campanulaceae* – Bellflower family**



Habitat and National Distribution

A native biennial of dry, well drained sunny sites on fairly infertile sandy or gravelly soils. It is found in open woodland and hedgebanks and on banks and rock outcrops. Very local in S Britain N to Leics. and Salop, it is in serious national decline: in woodland through the cessation of coppicing and other disturbance, and on roadsides and railway banks because of the increased use of herbicide. It is sometimes found as a naturalised garden escape.

Red Data Book UK – EN, Eng – CT

Maintenance requirements

The seed of this species requires a disturbed habitat for germination, but is long-lived allowing the plant to reappear after long absences.

Local Distribution and Early Malvern Area Records

First recorded in Worcestershire in 1726 by the Wiltshire botanist Samuel Brewer from 'a wood called Ebury Hill, about a mile from Worcester', there were no records on MHC land until KB found it in 2001 growing in a ditch beside a field known as 'Bowling Green' near Clevelode. Worcestershire Status: Very scarce

***Campanula patula* L.**
Spreading Bellflower
***Campanulaceae* – Bellflower family**

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Bowling Green, Clevelode, ditch, SO 830466	22.8.02 several	KB	
Approx. 30m along north eastern hedge line from small bridge over ditch by road	13.7.05 4 or 5	KB	
	17.9.06 small colony	KB	At risk of becoming overgrown by brambles
	10.9.07 small colony	KB	Brambles cut back 2006
	11.9.08 2 or 3	KB	82924673. Brambles need cutting back
	16.8.09 4 or 5	KB	
	6.9.09 30+ non-flowering rosettes and another c.12 in flower	BSBI Field Mtg. JJD, AWR et al.	
	16.9.10 several	KB	82999 46653 to 82982 46619
	26.8.13 at least 6	KB	82998 46653 82994 46659
	22.7.14 none found	PGG/BB	
	02.07.15 3 found flowering	JP	Brambles cut back 2014
	02.10.15 8 flowering	CL	
	09.12.15 2 clumps flowering	RV	Ditch and brambles cleared 22/4/2015
	03/10/2016 2 flower heads	MR	SO 83032 46621

Revised September 2016

***Cardamine impatiens* L.**
Narrow-leaved Bitter-cress
***Brassicaceae* – Cabbage family**



Habitat and National Distribution

This is a native annual or biennial found in woodland, on moist limestone rocks and stable screes, by rivers and beside damp roadsides. It is locally frequent in Britain N to S Scotland, but is absent from SW, CE and NE England. Populations fluctuate markedly from year to year and from site to site, and it can be invasive in recently disturbed habitats. There is some evidence that it may be vulnerable to late frosts.

Red Data Book status: UK Nationally Scarce and Near Threatened.

Maintenance requirements

Sites must be kept open, as this species is intolerant of competition.

Local Distribution and Early Malvern Area Records

First recorded in Worcestershire from Clifty (*sic*) Wood near Hanley in 1801, where it is still to be found, and also from 'Malvern Hill' in C19. It is now found in a number of wooded areas on the Hills and also in Horsecroft Coppice, West Malvern.

Worcestershire Status: Very scarce

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Chase End Wood , plantation SO 761350	21.5.87, 1.6.89 c.10 – 100	PGG	Site known for 3 years, size of colony varies
Hollybush Roughs , dry stony hillside (wooded) opposite Hillside Cottage SO 763372, 763377	24.8.91 huge population, 100+	PGG	
	4.9.91 another patch	PGG	Suffering from drought
Ragged Stone Hill , area of cleared woodland, S slopes, damp ground by seepage line SO 761360	1.6.95 c.50	PGG	
Horsecroft Coppice , West Malvern. SO 761466	15.6.04 quantity unknown	D Whitehorne	
	26.4.09 1	PGG	Rosette of leaves at very N end
North Hill , E side beside path in woodland SO 774465	1988-1989 Quantity unknown	PGG	
	2.6.91 1	PGG	
	30.6.13 1	MJ	
	2013 4	Carter Ecological	'A small population of 4 individuals was found in the woodland understory on the east side of the hills.' SO774464

Revised July 2016

***Carex binervis* Sm.**
Green-ribbed Sedge
Cyperaceae – Sedge family



Habitat and National Distribution

A native perennial found on both wet and dry acidic soils found in a wide range of habitats from lowland heaths and *Nardus* grassland to heather moors, rocky hillsides and mountain summits. Sites are generally open, but it also occurs in shady places including deciduous and mixed woodland, and is also occasionally found on coastal cliffs. It is frequent throughout most of the British Isles, and is common in suitable habitats particularly in N and W Britain.

Maintenance requirements

This species prefers an open habitat

Local Distribution and Early Malvern Area Records

The first county record is an unlocalised one from the Malvern district in 1900. There were no other local records until 1981 when it was found on Castlemorton Common, where it still grows. In 1993 it was also discovered on Malvern Common. Worcestershire Status: Very rare

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, damp grassland. SO 783391	24.5.90 occasional	JJD	
Malvern Common, (Poolbrook), damp grassland either side of central brook SO 787443	11.7.93 c.50 clumps	PGG	Det. RM/JJD
	30.6.01 c.12	KB	Conf. RM

01 December 2016

***Carex distans* L.**
Distant Sedge
Cyperaceae – Sedge family



Habitat and National Distribution

A native perennial found on sea cliffs, rocky shores, in coastal grasslands and the uppermost part of salt marshes, usually growing in bare rock crevices or on free-draining sandy or gravelly substrates. Also found in flushes and seepage zones on cliffs, and where streams debouche onto the shore. Inland it grows in wet meadows, marshes and fens on mineral-rich soils. It occurs round most coasts of the British Isles, and is frequent inland in S Britain although rarely so elsewhere. Declining inland due to the drainage and improvement of its wetland habitats.

Maintenance requirements

Inland this species requires moist, open sites.

Local Distribution and Early Malvern Area Records

The first county record is an unlocalised one from the Malvern district in 1881. There were no other local records until 2001 when it was found on Castlemorton Common. In 2003 it was also seen on Malvern Common. Worcestershire Status: Very rare

***Carex distans* L.**
Distant Sedge
Cyperaceae – Sedge family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, marsh. SO 783398	11.8.01 a few	BSBI Field Mtg. RM et al.	
	2005	KB	
Castlemorton Common, grassland/marsh SO 776394	25.6.02 very thinly scattered	RM	
	2005	KB	
Malvern Common, damp grassland, both sides of main ditch. SO 785443	17.6.03 frequent	RM	

01 December 2016

***Carex disticha* Huds.**

Brown Sedge

Cyperaceae – Sedge family



Habitat and National Distribution

This is a native rhizomatous perennial found in wet meadows, marshes and fens, by ditches and streams, on the margins of lakes and ponds and occasionally in dune-slacks. It almost invariably grows in well-illuminated sites, particularly on base-enriched substrates, and favours areas with a fluctuating water table. Frequent throughout most of the British Isles, it has declined in many areas of England due to drainage. It can be easily overlooked when present only as scattered non-flowering shoots.

Maintenance requirements

This species requires an undisturbed, wet habitat.

Local Distribution and Early Malvern Area Records

The first county record was from 'boggy meadows on the side of Malvern Chase' (1787), and there are also C19 records from Barnards Green, Sherrards Green and 'eastern commons'. It is now known locally only from Castlemorton Common.

Worcestershire Status: Very scarce

***Carex disticha* Huds.**
Brown Sedge
Cyperaceae – Sedge family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, Berrow Downs, very damp grassland and flushes below Pink Cottage SO 767387	2.7.91 quantity unknown	PGG	Det. JJD
	31.05.05 1 patch	KB	766 386
Castlemorton Common, boggy ground near stream, central Common slightly W of opposite Hunter's Hall SO 781390	3.5.93 small dense patch	PGG	781 390
	05.06.05 Substantial patch	KB	782 393
	16.06.05 large patch	KB/AWR	780389

01 December 2016

***Carex echinata* Murray**
Star Sedge
***Cyperaceae* – Sedge family**



Habitat and National Distribution

This species is a native perennial of seasonally or permanently waterlogged habitats on acidic to base-rich substrates. It grows in a wide range of mires, wet heaths, upland flushes and springs, rush-pastures, wet meadows and flushed grassland on hill-slopes. Rarely, it also occurs in wet woodland rides. Although found throughout the British Isles, and still common in the W and N, it was lost from many lowland areas in England in C19 and since then further losses have occurred through drainage and agricultural improvements. It is scattered in C and E England.

Red Data Book 2014 – Eng NT

Maintenance requirements

This species requires a waterlogged site.

Local Distribution and Early Malvern Area Records

One of the two first county records is from a 'bog on the W side of Malvern Hill' in 1817, almost certainly Hay Slad Bog from where the species was subsequently recorded in 1834. It was last seen there in 1992. It is still present on Castlemorton Common where it was first noted in 1968 by R G Payne. Worcestershire Status: Very rare

***Carex echinata* Murray**
Star Sedge
***Cyperaceae* – Sedge family**

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Swinyard Hill, wet flush to NE of Gullet Quarry SO 764381, 768385	1988 locally dominant	Trevor Warrick	764381
	17.7.02 1, probably more gone over	KB	764381
	31.5.05 many	KB	768385
	13.6.05 a few	KB	764381
	15.7.09 many	PGG	764381
Swinyard Hill/Berrow Downs SO 766386	29.6.09 many	PGG	The 'Cotton Grass' flush

Castlemorton Common , damp grassland SO 776394, 779394, 780395	24.5.90 common	JJD	779394
	16.9.87 common	PGG	780395
	25.6.02 3	RM	776394
	9.6.05 2	KB	772384
	11.7.05 locally frequent	KB	779394
Castlemorton Common , very damp meadow/marsh close to stream/pond SO 793395	8.91 quantity unknown	Janet Jones	
Hollybed Common , seasonal pool SO 773379	22.9.92 quantity unknown	Janet Jones	
	25.6.06 not found	Worcs. Recorders Field Mtg. JJD et al.	
British Camp Reservoir , wet flush SO 765399	13.6.03 quantity unknown	JJD	
	2013 small number	RSK Environmental	'A small number of individuals were found in an M23* flush occurring on the SE slope of British Camp.' SO 764 394
Hay Slad Bog , beside the stream SO 766447	7.6.92 1 clump	PGG	

* (M23; *Juncus effusus/acutiflorus* – *Galium palustre* rush-pasture)

01 December 2016

***Carex hostiana* DC.**
Tawny Sedge
Cyperaceae – Sedge family



Habitat and National Distribution

A native perennial of inland and maritime damp, base-rich grassland and flushes that is found in fens, flushed valley bogs and mires, wet meadows and marshes. Although common in W and N Britain, and locally frequent in Ireland and the rest of Britain, it has declined (mostly since 1950), particularly in S England and S Ireland. In upland areas, the distribution is more stable.

Maintenance requirements

This species requires undisturbed, damp sites.

Local Distribution and Early Malvern Area Records

There are C19 records from 'flat eastern commons' (Lees, 1842) and 'by the West side of the Worcestershire Beacon', but then no other local record until 2002 when some thinly scattered plants were found by RM in two marshy spots on Castlemorton Common. A year later another larger colony was discovered nearby and RSK Environmental found 2 individuals on Malvern Common in 2013 as part of their NVC survey. Worcestershire Status: Very rare

***Carex hostiana* DC.**
Tawny Sedge
Cyperaceae – Sedge family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, grassland/marsh SO 777393	25.6.02 very thinly scattered	RM	
	7.6.05 ditto	KB/RM	
	2013 small popn.	RSK Environm- ental	'Small populations of this species were found.'
Castlemorton Common, grassland/marsh SO 784392	25.6.02 thinly scattered	RM	
	7.6.05 ditto	KB/RM	
	29.5.08 ditto	KB/RM	
Castlemorton Common, marsh SO 783391	19.6.03 fairly common	RM	
	7.6.05 ditto	KB/RM	
	23.5.06 ditto	KB/RM	
Malvern Common mire Quadrat 1 (No Grid Ref; SO786443 approx.)	6.2013 2	RSK Environm- ental	'In wetter parts of the common, to the north of the MG5 grassland, the vegetation develops into a species-rich mire community (M23). The two vegetation types are separated on the ground by a very shallow watercourse, which is presumably wet in winter and dry in summer.'

01 December 2016

***Carex pulicaris* L.**
Flea sedge
Cyperaceae – Sedge family



Habitat and National Distribution

This is a native perennial of damp or wet neutral or calcareous soils, and of more acidic soils where these are flushed by mineral-enriched groundwater. Habitats include short sedge mires, damp meadows and pastures, fen-meadows, wet heaths, flushes and springs, montane rock-ledges and *Dryas* heath. It occurs rarely on N-facing slopes in chalk and limestone districts. Although frequent throughout most of the British Isles it is absent from much of C and E England. Losses from the lowlands have accelerated in recent years through drainage and the destruction of damp meadows and pastures.

Maintenance requirements

This species requires undisturbed, damp or wet sites.

Local Distribution and Early Malvern Area Records

First recorded locally from Malvern Chase in 1787, there are also C19 records from the base of the Worcestershire Beacon, 'eastern commons' (and more specifically Castlemorton Common, in 1884), and in 1895 Malvern Common. It was rediscovered on Castlemorton Common in 1981. It was also found in a wet flush near Gullet Quarry in 2005. Worcestershire Status: Very rare

***Carex pulicaris* L.**
Flea sedge
Cyperaceae – Sedge family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common , damp grassland/marsh SO 781393, 782391, 783391	24.5.90 common	PGG	Det. JJD
	25.6.02 thinly scattered	RM	
	2.7.03 frequent	RM	
	7.6.05 frequent	KB/RM	
	23.5.06 frequent	KB/RM	
Castlemorton Common , damp grassland SO 779394	24.5.90 common	JJD	
Castlemorton Common , flush below Pink Cottage SO 767387	31.5.92 scarce	PGG	Conf. JJD/RM/WAT
Castlemorton Common , rough grassland, on E side of track where it leaves metalled road to Broomhill Coppice SO 773385	19.6.92 quantity unknown	PGG	
British Camp Reservoir SO 765399	14.6.03 quantity unknown	JJD	
Gullet Quarry , wet flush to NE of quarry SO 764381	13.6.05 several	KB	

01 December 2016

***Carex x fulva* Gooden**

Cyperaceae – Sedge family



Habitat and National Distribution

A native sterile hybrid between *Carex hostiana* and *Carex viridula* that is found in fens, wet meadows, heathland and marshes, and on lake margins especially where there is flushing with base-rich water. The most frequent of all sedge hybrids in the British Isles, it is frequent throughout most of Britain and Ireland wherever *C. hostiana* meets any of the three subspecies of *C. viridula*.

Maintenance requirements

This species requires marshy conditions

Local Distribution and Early Malvern Area Records

There are no early Worcestershire records for this species, which was first recorded in the county during a BSBI Field Meeting in 2001. Worcestershire Status: Very rare

***Carex x fulva* Gooden**

Cyperaceae – Sedge family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, marsh SO 783398	11.8.01 several	BSBI Field Mtg. RM et al.	Det. G M Kay, conf. A Chater
	7.6.05 several	KB/RM	
	23.5.06 several	KB/RM	
	29.5.08 several	KB/RM	
Castlemorton Common, grassland/marsh SO 782391, 783391	25.6.02 small clump	RM	Different site from above
	19.6.03 several clumps	RM	
	7.6.05 several clumps	KB/RM	

01 December 2016

***Centaurium pulchellum* (Sw.) Druce**

Lesser Centaury

***Gentianaceae* – Gentian family**



Habitat and National Distribution

A native annual, growing inland on mildly acidic to calcareous soils in woodland rides, dry open grassland and heaths, marl pits and other open disturbed ground. On the coast, it is found in open sandy and muddy grassy places, often by estuaries, sand dunes and upper saltmarsh. It is local in Britain N to Cumberland and NE Yorkshire, the Channel Islands and S and E Ireland, with some evidence of decline on heathland because of lack of management (particularly grazing).

Maintenance requirements

This species requires grazing to maintain a short sward.

Local Distribution and Early Malvern Area Records

First recorded in the county from 'near Malvern' in 1852, there are surprisingly few other old local records and its only known local site is Castlemorton Common.

Worcestershire Status: Very rare

***Centaurium pulchellum* (Sw.) Druce**
Lesser Centaury
Gentianaceae – Gentian family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, 'winter pool' opposite Boulter's Farm drive SO 786394, 786395	23.8.91 small dense patch	PGG/RM/ WAT	
	5.8.92 a few	PGG	
	5.7.94 1 tiny plant	PGG	
	8.8.01 c.20	PGG	
	11.8.01 1 or 2 small patches	BSBI Field Mtg. RM et al.	
	2003 quantity unknown	PGG	
	1.9.04 many	KB	78653946
	18.8.05 about 5	KB	
	25.8.05 not found	PGG	
	31.7.06 c.10 tiny plants	PGG	
	8.9.06 not found	KB	
	1.7.09 c.20	PGG	photographs
	15.7.09 4	KB	
	06.07.14 12 found	PGG/RV	photographs
	22.07.14 c30	PGG/BB	
	01.09.15 Not found	PGG/JP	
	19.07.2016 5	MR	

01 December 2016

***Ceratocapnos claviculata* (L.) Lidén**

Climbing Corydalis

***Fumariaceae* – Fumitory family**



Habitat and National Distribution

A native annual of freely draining, acidic or peaty soils in deciduous and coniferous woodland, especially in clearings and in recently felled areas, other shady places, under bracken and in scrub, and occasionally over rock outcrops. It is widespread but local over most of the British Isles.

Maintenance requirements

This species requires shade and soil drainage.

Local Distribution and Early Malvern Area Records

The first county record was 'in rough stony places by the side of Malvern Hill above Great Malvern Town' in 1781; and there are also many C19 and early C20 records. It is now widespread in suitable places on the Hills and in 'at least 16 woodlands' (RSK). Worcestershire Status: Scarce

"common species in areas of woodland and scrub. The plant was particularly abundant in areas of recently felled woodland, but common in more open wooded areas throughout." *RSK Environment NVC Survey 2013*

***Ceratocapnos claviculata* (L.) Lidén**

Climbing Corydalis

***Fumariaceae* – Fumitory family**

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Ragged Stone Hill , at the bottom of the county boundary path leading to the W peak SO 761359	24.5.90 large patch	PGG	
Swinyard Hill to Clutters Cave Rough ground to SE SO 763383?, 763393	1987 many patches	PGG	Especially where there has been disturbance or clearing
	29.1.89 quantity unknown	PGG	
	6.2013 Frequent	RSK	
Hollybush Roughs , (E slopes of Midsummer Hill) SO 763372	24.8.91 many	PGG	
	6.2013 a few	RSK	
Castlemorton Common Western end, Bowling Green, 8 oaks, Berrow Downs SO 77 38	6.2013 A few scattered (present)	RSK	
British Camp / Tinkers Hill Woods	6.2013 a few	RSK	
Upper Dingle , SO 766456	11.88 quantity unknown	PGG	In gorse

***Ceratocapnos claviculata* (L.) Lidén**

Climbing Corydalis

***Fumariaceae* – Fumitory family**

Rushy Valley , nearby paths GR unknown	2.6.89 quantity unknown	PGG	
North Hill , many sites beside the footpath all along the E side SO 773464, 773452, 773448	17.2.90 flourishing	PGG	On freshly burnt ground
	6.2013	RSK	Locally frequent.
North Hill to Table Hill , among bracken, gorse or loose rock SO 767464	5.88 to 12.88 ubiquitous	PGG	Where gorse has been cut or burnt
	89 ubiquitous	PGG	ditto
	6.2013	RSK	Locally frequent.
Earnslaw Quarry , above quarry SO 769443	17.2.90 lots		
The Wyche , S of cutting, beside path SO 770433	31.5.90 quantity unknown	PGG	
Black Hill , beside paths and in wood SO 767404	2.6.90 abundant	PGG	
	6.2013 Locally frequent	RSK	
Malvern Wells , acidic rocky hillside beside upper path above Malvern Wells SO 768423, 768433	2.6.90 quantity unknown	PGG	
	21.4.96 quantity unknown	PGG	

***Ceratocapnos claviculata* (L.) Lidén**
Climbing Corydalis
***Fumariaceae* – Fumitory family**

Malvern Wells , in the woodland beside paths behind Wells House School SO 770424	7.6.90 quantity unknown	PGG	
Link Common , broken ground SO 779470	8.9.00 1 clump	PGG	
Malvern Hills (N) , beside hill paths SO 769411, 769413, 771418	10.6.90 quantity unknown	PGG	

01 December 2016

***Chamaemelum nobile* (L.) All**

Chamomile

Asteraceae – Daisy family



Habitat and National Distribution

A **Nationally Scarce** native perennial of short grassy places on moderately acid seasonally wet grassland, especially on sandy commons and pastures where mowing, trampling or grazing discourages competition. Also found in coastal grassland and on cliffs which have a short sward. Although it is locally frequent in the Channel Islands, S Britain and SW Ireland, and scattered N to W Norfolk and Caernarvonshire, it is extinct in most of C Britain and still declining because of drainage and the cessation of grazing.

Red Data Book UK 2005 & England 2014 – VU (Vulnerable)

Maintenance requirements

This species requires sites that are subject to grazing or trampling and seasonal water.

Local Distribution and Early Malvern Area Records

First recorded in the county from Hanley Common and Malvern in 1817, there are a number of old records from Barnard's Green; Welland Common; Newland Common and Malvern Link Common. Its sole Midland site is now Castlemorton Common, where there have been widespread small patches. Worcestershire Status: Very rare

***Chamaemelum nobile* (L.) All**
Chamomile
Asteraceae – Daisy family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, permanent pasture, short turf, N of main bridge beside track SO 787395	1988 quantity unknown	PGG	By <i>Bupleurum tenuissimum</i> site
	8.7.16 not found	MR	
Castlemorton Common, extreme E end on the E side of B4208 SO 7974 3939	22.7.89 several patches	PGG	
	1996 quantity unknown	PGG	
	18.8.04 quantity unknown	PGG	
	26.8.04 small patch	KB	
	08.07.16 not found	MR	
Castlemorton Common, Short turf close to the Gullet road near Bowling Green. SO 773 385 & 77497 38529 & 7770 3866	5.8.95 at least 100	KB & PGG	
	2000 many	KB	
	11.8.01 scattered	BSBI Field Mtg. RM et al.	
	09.06.05 several patches	KB	7770 3866
	07.2006 several patches	KB	
	08.2007 many plants	KB	
	14.07.09 small patch	PGG	Quite tall 7-8inches in tight bud
	24.08.2009 several patches	PGG	South side of road
	23.07.11 several patches	KB	77497 38529
	06.09.11 1	PGG	1 robust plant benefiting from cow dung
	05.07.14 not found	PGG	
	08.07.16 not found	MR	

Chamaemelum nobile* (L.) All*Chamomile****Asteraceae – Daisy family**

Castlemorton Common, SO 766 383	11.8.01 small patch	BSBI Field Mtg. RM et al.	
	08.07.16 not found	MR	
Castlemorton Common, SO 790395	11.8.01 small patch	BSBI Field Mtg. RM et al.	
Castlemorton Common, SO 782394	11.8.01 large patch, over 50 sq. m.	BSBI Field Mtg. RM et al.	
	12.7.2016 not seen	MR	Very little short grass in the grid ref vicinity. Scrub and long grass principally.
Castlemorton Common, short and bare turf SO 78603890	14.6.04 a few patches	KB	
	2007 not seen	KB	

08 December 2016

***Cirsium dissectum* (L.) Hill**

Meadow Thistle

Asteraceae – Daisy family



Habitat and National Distribution

A native perennial of fens, fen meadows, flood pastures, bog margins and poorly drained meadows on acidic to neutral, usually peaty, soils. It often grows in sites subject to marked vertical or lateral movement of water. Local in England and Wales N to NE Yorkshire and Merionethshire, throughout Ireland, and very local in SW Scotland. Declining as its sites undergo succession to scrub or woodland.

Maintenance requirements

This species requires both grazing and the presence of water.

Local Distribution and Early Malvern Area Records

The first Worcestershire record was from swampy meadows near Robinson's End, Malvern Chase in 1787. There are a number of C19 references to its presence in the Malvern area, but although A. McDonald of the Nature Conservancy Council recorded it on Castlemorton Common in 1987, several searches since then have proved fruitless. Worcestershire Status: Very rare

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, E of B4208, permanent pasture SO 791391	20.5.87 quantity unknown	A. McDonald (NCC)	
	Not seen since		

08 December 2016

***Dactylorhiza maculata* ssp. *ericetorum* (E F Linton) P F Hunt & Summerh.**

Heath Spotted Orchid
***Orchidaceae* – Orchid family**



Habitat and National Distribution

A native perennial found on a range of well-drained or wet acidic soils in a wide variety of habitats, including grasslands, moors, heaths, flushes and bogs. It also occurs in pockets of peat on limestone and, more rarely, in open woodland. Found more or less throughout the British Isles, it is the most common orchid in Scotland and Ireland. It is declining, particularly in lowland heaths and bogs, through habitat destruction and drainage. Cessation of grazing on heaths causing reversion to woodland also accounts for some losses. It can however be very abundant in some habitats.

Maintenance requirements

Once established, this species requires an undisturbed habitat.

Local Distribution and Early Malvern Area Records

There are C19 records from between Midsummer Hill and Hollybush Hill, and from Welland. First recorded on Castlemorton Common by JJD in 1981, it was not noted there again until 2002 when a small number were found by RM. Worcestershire Status: Rare

***Dactylorhiza maculata ssp. ericetorum* (E F Linton) P F Hunt & Summerh.**

Heath Spotted Orchid
Orchidaceae – Orchid family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common grassland/marsh SO 782391, 785391	25.6.02 1 or 2	RM	
	19.6.03 2	RM	
	29.05.2007 several	PGG/RM	
	15/6/2016	MR	Only Common Spotted Orchids present in their hundreds. (Like looking for a needle in a haystack.)
Castlemorton Common, marsh SO 779390, 779394	19.6.03 12	RM	
	16.06.2016 a few	MR	1 clump of 3 at 77956 39318 side of path though scrub stand - needs clearing. 1 at 77675 39404 wet grassland undergone scrub clearance in previous winter.
Swinyard Hill Juncus Mire M23 (although listed under Hollybush roughs)	6.2013 frequent	RSK	
Ballard's Land grassland SO 766 425	06.2004 at least 100	PGG	VC36
	07.06.2005 60+	PGG	
	03.06.09 many	PGG	Similar numbers as before
	2012 at least 500	JP	
	16.6.2016 100's	MR	
Walmspout Coppice West Malvern SO 762 467	16.06.02 2	PGG	Conf. RM
	07.06.09 not seen	PGG	
	16.06.2016 none seen	MR	100's of Common Spotted in central flush. A couple of possible hybrids.

01 December 2016

***Dactylorhiza praetermissa* (Druce) Soó**

Southern Marsh Orchid

***Orchidaceae* – Orchid family**



Habitat and National Distribution

A native perennial found in slightly acid to calcareous damp places in heathland, fens, marshes, bogs, dune-slacks, meadows and roadsides, although avoiding areas that are inundated for long periods. It is also rarely found in drier sites such as chalk downland. Quarries, gravel-pits and waste ground such as alkali- or ash-tips may also be colonised and it may have increased in these artificial habitats. Despite local losses since 1930 due to drainage and habitat destruction, it is still frequent in suitable places in Britain N to S Northumberland and W Lancashire and the Channel Isles, and it is the most common Marsh Orchid in S and C England and S Wales.

Maintenance requirements

Once established, this species requires an undisturbed habitat.

Local Distribution and Early Malvern Area Records

There is an unlocalised record for the Malvern Hills (1842), but 150 years passed before it was noted again, from a flush below Pink Cottage in 1992. Since then it has been found both on Castlemorton Common in small numbers and also Malvern Common where there is a large colony. Worcestershire Status: Very scarce

Dactylorhiza praetermissa* (Druce) Soó*Southern Marsh Orchid****Orchidaceae – Orchid family****Post-1987 Records**

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, flush below Pink Cottage SO 767382	31.5.92 - quantity unknown	PGG	
	15.6.2016 None seen	MR	In flower on Malvern Commons.
Castlemorton Common, grassland/marsh SO 77990 39093	25.6.02 1	RM	
SO 78002 39059	19.6.03 2	RM	
	03.07.05 2	KB	
	24.6.2016 6	MR	Scattered individuals and one small cluster.
Castlemorton Common SO 785392	1.6.03 c.6	KB	
	15.6.2016 none seen	MR	In flower on Malvern Commons.
Malvern Common, damp grassland SO 786443,787443,787444	5.02 c.12	A J Hughes	'first found 5 years ago'
	2.6.03 5	KB	78754437, 78624436, 78644435
	17.6.03 at least 50	RM	
	29.5.04 5	KB	78704427, 78734429
	15.05.11 several	KB	787 443
	2012	JP	At least 5000?
	07.2013 many	KB	
	06.2013	RSK	Quadrat 1
	06.2014 abundant	KB	
	22.06.2016 abundant	MR	
Malvern Common (West) SO 77836 44281	06.2016 1	BB	
Link Common SO 781472	7.6.2016 abundant	JB/BB	Followed green hay spread from Malvern Common in 2012 by volunteers.
Townsend Way Community Woodland SO 79644 48012	15.6.2016 1	MR/BB	In section 9, scrub edge next to previously burnt area west of path.

01 December 2016

***Dactylorhiza x grandis* (Druce) P. F. Hunt**

Orchidaceae – Orchid family



Habitat and National Distribution

A native perennial hybrid between Common Spotted Orchid (*Dactylorhiza fuchsii*) and Southern Marsh Orchid (*Dactylorhiza praetermissa*) which is commonly found where the parents grow together, typically in habitats such as marshes, fens and wet meadows, but also on dry chalk downland. It is especially frequent in quarries, industrial wasteland and other man-made habitats. This hybrid frequently back-crosses with the parents, creating long-lived hybrid swarms. The most frequent *Dactylorhiza* hybrid, and perhaps the most common hybrid orchid in S Britain, it occurs throughout the range of *D. praetermissa* in Britain. Its overall distribution appears to be stable.

Maintenance requirements

Once established, this species requires an undisturbed habitat.

Local Distribution and Early Malvern Area Records

Although recorded from the 'Malvern district' by Towndrow in 1900, this hybrid was not subsequently noted until 2002 when it was found growing in small quantity in marshy ground on Castlemorton Common. Worcestershire Status: Very rare

***Dactylorhiza x grandis* (Druce) P. F. Hunt**

***Orchidaceae* – Orchid family**

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, grassland/marsh SO 782390, 782391, 783391	25.6.02 2	RM	
	19.6.03 8	RM	
	29.5.07 20+	PGG/RM	Stood out tall and darker
Malvern Common No data	2007	RM	http://www.wbrc.org.uk/WO/RCRECD/Issue%2025/vascular_plant_records_for_2007.htm
Castlemorton Common, marsh SO 779390	19.6.03 1	RM	
Poolbrook Common, SO 787444	5.6.11 many	KB	With plentiful <i>D. fuchsii</i> and <i>D. praetermissa</i>
	7.13 many	KB	Ditto
	6.14 many	KB	
Link Common SO 781472	7.6.2016 many	JB/BB	Followed green hay spread from Malvern Common in 2012 by volunteers.

Revised June 2016

***Dactylorhiza x transiens* (Druce) Soó**

Orchidaceae – Orchid family



Habitat and National Distribution

A native perennial hybrid between Common Spotted Orchid (*Dactylorhiza fuchsii*) and Heath Spotted Orchid (*Dactylorhiza maculata* ssp. *ericetorum*) which is occasionally found where base-rich and base-poor soils coexist, allowing the parents to grow together, such as where sandstones are interbedded with limestones or where limestones are overlain by acidic peaty deposits. Habitats include grassland, heathland, marshes, wet meadows and woodland margins. It is sterile and usually only single or very few plants are found. It is scattered throughout Britain, but is uncommon and some records may be errors for variants of either parent. Some losses have occurred due to habitat destruction, but most are probably due to the transient nature of the hybrid.

Maintenance requirements

This species requires an undisturbed habitat.

Local Distribution and Early Malvern Area Records

This hybrid was not recorded in the county until 1999 and there have been very few records since. Its only known local site is on Malvern (Poolbrook) Common, where RM found it in 2003. Worcestershire Status: Very rare

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Malvern Common, Poolbrook grassland, SO 787443	17.6.03 at least 2	RM	

29 March 2016

***Diphasiastrum complanatum* ssp. *issleri* (Rouy) Jermy**

Issler's Clubmoss

***Lycopodiaceae* – Clubmoss family**



Habitat and National Distribution

Clubmosses are an ancient group represented today by only a few species. They are small creeping plants with branched stems and leaves. Spores are produced in spore cases in the axils of the upper leaves and develop into prothalli underground in close association with soil fungi.

A native perennial, probably derived from hybrids with *D. alpinus* (L.) Holub (Alpine Clubmoss), which is no longer present in Worcestershire, Issler's Clubmoss is found on heaths and moors typically on well-drained, sandy, often skeletal soils in dwarf *Calluna* heath. It is now found in very few sites, burning and grazing of heaths having perhaps caused its extinction in most of lowland England. **Red Data Book status: UK Near Threatened**, and declining in its lowland sites because of agricultural improvement.

Maintenance requirements

This species requires an open site.

Local Distribution and Early Malvern Area Records

The earliest record from the Malvern area is from the Worcestershire Beacon in 1893. It was first recorded more specifically from near the British Camp Reservoir in 1981 (JJJ), but has not been seen there since 1997. Worcestershire Status: Very rare

***Diphasiastrum complanatum* ssp. *issleri* (Rouy) Jermy**

Issler's Clubmoss

***Lycopodiaceae* – Clubmoss family**

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
British Camp Reservoir heath on S side SO 764398	7.88 quantity unknown	PGG	det. by A C Jermy as <i>D. x issleri</i> var. <i>decipiens</i>
	1990 quantity unknown	PGG	
	29.5.96 2 small but fresh looking	PGG	
	26.1.97 lots	PGG	
	2002 not found	PGG	
	2003 not found	PGG	
	22.8.04 not found	PGG	Long search
	25.9.05 not found	PGG/R Havard	bracken encroachment
	1.2.10 not found	PGG/R Havard	Much moss clearance carried out
	18.03.15 not found	Martin Ricard	

Revised February 2016

***Eleocharis quinqueflora* (Hartman) O. Schwarz**
Few-flowered Spike-rush
Cyperaceae – Sedge family



Habitat and National Distribution

A native perennial of base-rich marshes and fens, calcareous flushes on peaty soils, stony and muddy areas with seeping water, wet paths and short turf on banks: also on coastal cliff-flushes, dune-slacks and the upper part of salt marshes. Found throughout the British Isles, and commonest in the NW. Many sites have been lost in lowland England because of drainage and lack of grazing.

Maintenance requirements

This species requires open sites and is often dependent on grazing, cutting or disturbance.

Local Distribution and Early Malvern Area Records

The first Worcestershire record dates from 1842, when it was noted as growing on the Malvern Hills. In 1867 it was recorded from Castlemorton Common but was not seen there again until 1981 when it was rediscovered by JJD, and where it still grows. Worcestershire Status: Very rare

***Eleocharis quinqueflora* (Hartman) O. Schwarz**
Few-flowered Spike-rush
Cyperaceae – Sedge family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common , damp grassland/marsh SO 782390, 782391, 783391, 783393	24.5.90 locally common	PGG	det. JJD
	11.8.01 a few	BSBI Field Mtg. RM et al.	
	25.6.02 thinly scattered	RM	
	6.7.05 thinly scattered	PGG	782391
	2002 11 thinly scattered	RM	Along runnels in damp grassland
Hollybed Street , small flush at N end SO 772378	10.7.91 abundant	PGG	det. JJD
	4.9.05 no sign	PGG	overgrown
	25.6.06 no sign	Worcs. Recorders Field Mtg. JJD et al.	
Berrow Downs , 'raised bog' flush NW of the Downs in willow scrub below Pink Cottage SO 766386	7.6.92 abundant	PGG	conf. RM/WAT

Revised February 2016

***Eleocharis uniglumis* (Link) Schult.**
Slender Spike-rush
Cyperaceae – Sedge family



Habitat and National Distribution

A predominantly coastal native perennial of damp dune slacks, short brackish grassland and pools in the spray zone, this species is also found inland in base-rich wet meadows and calcareous marshes. It is scattered throughout Britain and Ireland. The coastal distribution of *E. uniglumis* has probably remained stable in recent years, although it is much better recorded now than in the 1962 Atlas. There are many more records from inland areas, where it may previously have been overlooked.

Maintenance requirements

Sites for this species must remain undrained.

Local Distribution and Early Malvern Area Records

First recorded in the county from Malvern Chace in 1787, with a number of old records from bogs at the foot of the Malvern Hills, Barnard's Green and Welland Common. It is now only found on Castlemorton Common and Hollybed Common and in a wet flush near the Gullet Quarry. Worcestershire Status: Very rare.

***Eleocharis uniglumis* (Link) Schult.**
Slender Spike-rush
Cyperaceae – Sedge family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Hollybed Common , wet flush to NW SO 772378	20.06.00 quantity unknown	PGG	
	28.07.02 quantity unknown	WFP Field Mtg.	
	04.09.05 no sign	PGG	overgrown
	25.06.06 locally frequent	Worcs, Recorder s Field Mtg.	Some clearance
Castlemorton Common wettest areas on damp grassland SO782391, 783391, 783392	24.05.90 2 very small patches	PGG	
	25.06.02 thinly scattered	RM	
	02.07.03 scattered	RM	
	06.07.05 scattered	PGG	782391
Castlemorton Common flush in pasture SO 790374	25.04.92 locally abundant in very small patch	PGG/RM	
Castlemorton Common 'raised bog' (Cottongrass bog) in NW corner of Berrow Downs. Willow scrub below Pink Cottage SO 766374	07.06.92 scarce	PGG	With <i>E. quinqueflora</i> and <i>E. pallustre</i>
Gullet Quarry , wet flush to NE of quarry SO 764381	30.06.05 small colony	KB	76423818

Revised September 2016

***Eleogiton fluitans* (L.) Link**
(*Isolepis fluitans* (L.) R. Br.)
Floating Club-rush
Cyperaceae – Sedge family



Habitat and National Distribution

A native perennial found on peaty, acidic substrates floating in, or growing on the margins of, slow-flowing streams, ditches, pools and the sheltered shores of some larger lakes, often on seasonally flooded sites. It is also seen in muddy hollows in grasslands and heaths, and the wet floors of disused quarries, sand and gravel pits. Fairly frequent throughout the British Isles, it is more common in the W, and in the E is declining through drainage or loss of heathland.

Maintenance requirements

This species requires sites that are subject to at least seasonal inundation.

Local Distribution and Early Malvern Area Records

First recorded in Worcestershire from the Malvern Hills (1843), it has also been recorded in the C19 from Welland Common and Malvern Chase. It was thought have been lost from the Malvern area until rediscovered on Castlemorton Common by W. Watson in 2002. Worcestershire Status: Very rare

***Eleogiton fluitans* (L.) Link**
(*Isolepis fluitans* (L.) R. Br.)
Floating Club-rush
Cyperaceae – Sedge family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, small pond to E. of road leading to Welland Stone SO 797395	26.8.02 large patch	Will Watson	Conf. JJD
	23.6.05 large patch	KB	
	28.8.07 abundant	RM/KB/PGG	
	14.7.09 healthy population	PGG	Over half the pond now covered with <i>Crassula</i> ; needs attention
	2010 abundant	RM	
	12.12.13 plentiful	PGG	Blanketing several quite large patches round the margins in the southern half of the pool. <i>Crassula</i> much diminished.
	22.7.14 none found	PGG/BB	Pond clogged with <i>Crassula helmsii</i>
	01.09.15 none found	PGG/JP	Ditto. Note in Alien Plants; "Floating clubrush taken out" 2015
	30.08.2016 not found	PGG/MR	Pond dried up and clogged with <i>Crassula</i> .

Revised August 2016

<http://www.wbrc.org.uk/WORCRECD/Issue13/Eleogiton.htm>

DISCOVERY OF *ELEOGITON FLUITANS* (L.) LINK (FLOATING CLUB-RUSH) ON CASTLEMORTON COMMON

Keith Barnett

Eleogiton fluitans, the Floating Club-rush, is a native aquatic perennial with bright green grass-like leaves, usually found floating in dense mats in still water, mostly on acidic soil. Although it is nationally 'fairly frequent throughout British Isles, commoner in W' (Stace 1991), in Worcestershire it is many years since it could be described, as it was by Amphlett in 1909, as 'not uncommon' in the county. Indeed, it could not be found (W A Thompson/K Barnett) in July this year in its last known county site on Hartlebury Common, and was feared lost.

***Epilobium lanceolatum* Sebast. & Mauri**

Spear-leaved Willowherb

***Onagraceae* – Willowherb family**



Habitat and National Distribution

A native perennial of various dry habitats including roadsides, walls, banks, quarries, streets and dunes: it also occurs as a garden weed. It is locally frequent in S Britain and the Channel Islands N to Leicestershire and Merioneth.

Maintenance requirements

This species requires dry open sites.

Local Distribution and Early Malvern Area Records

This species was first recorded locally in 1989 and 1990 in North Quarry and Gullet Quarry (PGG). Since then it has also been recorded in Hollybush Quarry (VC36), Earnslaw Quarry and Berrington's Quarry. Worcestershire Status: Very rare

***Epilobium lanceolatum* Sebast. & Mauri**
Spear-leaved Willowherb
***Onagraceae* – Willowherb family**

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
North Quarry, E part, scree slope SO 770468, 771468	1989 many	PGG	
	7.7.90 many	PGG	conf. T D Pennington
	1.8.98 thinly scattered	RM/WAT	det. G Kitchener
	2005 quantity unknown	PGG	
Gullet Quarry SO 762380	17.6.90 quantity unknown	PGG	Most in VC 36, but some in VC37 (east side).
	18.6.05 several	KB/AWR	
	9.9.08 many	PGG	VC36
	8.11 several	Simon Harrap	VC36
	3.7.14 4 or 5	PGG	VC36
Hollybush Quarry	2005 quantity unknown	PGG	
Earnslaw Quarry lake SO 771445	30.6.06 1	KB	
Berrington's Quarry SO 768412	2.7.09 plentiful	PGG	Mainly on the scree
	22.7.14 many	PGG/BB	On spoil heap

Revised February 2016

***Epilobium palustre* L.**
Marsh Willowherb
***Onagraceae* –Willowherb family**



Habitat and National Distribution

This is a native perennial of wet acidic sites, occurring in bogs, marshes, flushes and ditches, and in stream or lake margins. Although frequent throughout the British Isles, since 1950 it has declined, particularly in SE England, probably due to agricultural improvement, drainage and eutrophication.

Maintenance requirements

This species requires permanently wet sites.

Local Distribution and Early Malvern Area Records

First recorded locally in C19 from the Herefordshire Beacon, it was not noted again until 1975 when W J Lewis found it on Castlemorton Common. Since then it has also been seen on Hollybed Common and near the British Camp reservoir.
Worcestershire Status: scarce

***Epilobium palustre* L.**
Marsh Willowherb
***Onagraceae* –Willowherb family**

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Hollybed Common small flush in NW corner SO 772378	10.7.91 several	PGG	conf. JJD
	28.7.02 plenty	WFP Field Mtg.	
	04.09.05 no sign	PGG	Flush overgrown
	20.08.06 no sign	PGG	Clearance but not yet suitable
Castlemorton Common , flush below Pink Cottage SO 767387	31.5.92 quantity unknown	PGG	
	12.07.05 1	KB	7641 3820
Hollybed Common , marsh at The Poplars SO 770384, 770386	28.7.02 common	WFP Field Mtg.	
British Camp Reservoir , SO 7639	14.6.03 quantity unknown	JJD	
Castlemorton Common marshy grassland SO 771384 771385	12.07.05 1 found	KB	77113840
	19.07.05 locally frequent	KB	

29 March 2016

***Epipactis helleborine* (L.) Crantz**

Broad-leaved Helleborine

***Orchidaceae* – Orchid family**



Habitat and National Distribution

A native of calcareous to slightly acidic soils, this perennial may be found in coniferous and deciduous woodland, scrub, hedgerows, sandy banks, streamsides, roadsides, alder carr, dune slacks, limestone pavement and screes: it may invade secondary woodland and also often occurs in urban habitats, particularly abandoned gardens. Frequent in Britain and Northern Ireland, except for N Scotland where it is rare.

Maintenance requirements

This species requires light shade.

Local Distribution and Early Malvern Area Records

The first county record was from the Dingle at Pedmore, near Stourbridge, in?, and also Devil's Glen at Clifton on Teme. The first Malvern area record was from ?
Worcestershire Status: Uncommon

***Epipactis helleborine* (L.) Crantz**
Broad-leaved Helleborine
Orchidaceae – Orchid family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Malvern Clock Tower SO 771470	11.6.87 10-25 spikes	PGG	Deep shade under lime trees with ivy ground cover
	1988 20 spikes	PGG	
	1989 quantity unknown	PGG	
	26.7.09 2	PGG	770469, edge of car park
	29.05.11 4 spikes	PGG	ditto
Malvern Wells SO 772422	4.7.92 1	PGG	In full flower. Back garden of house on Hills side of Wells Road opposite top of Green Lane, in a vegetable plot next to rhubarb. First time known to flower
Malvern (Wells) Common SO 778443	9.8.01 2	KB	Woodland at E end of Common
Dales Hall Farm, W of Castlemorton Common SO 767389	8.8.91 24-30 spikes	PGG	In the edge of blackcurrant field opposite Dales farm, in long grass beneath he hedge on the field side of the track
	24.07.14 numerous spikes	Katie Stephen	
	05.08.14 c. 50 spikes	PG/RM	

29 March 2016

***Epipactis purpurata* Sm.**
Violet Helleborine
***Orchidaceae* – Orchid family**



Habitat and National Distribution

A native perennial found in a wide range of woodland types, mostly in densely shaded beech woods, particularly those on clay-with-flint deposits but also on calcareous, and occasionally acidic, sands and clays in mixed woodland and hazel and hornbeam coppice. Frequent in SE and SC England, N to Shropshire and Leicestershire. Declining because of woodland clearance.

Maintenance requirements

This species requires a particular balance between light and shade

Local Distribution and Early Malvern Area Records

The first Worcestershire record was 'on the stump of a maple or hazel in a wood near the Norrest Farm at Leigh' (1807), with other old records from Malvern Link and Newland. Now, as always, it is sporadic in appearance. Worcestershire Status: Scarce

***Epipactis purpurata* Sm.**
Violet Helleborine
Orchidaceae – Orchid family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Park Wood , 10m east into wood from Brockhill Lane behind old quarry 'engine house' (lime kilns?) SO 762443	6.8.90 quantity unknown	PGG	
	26.7.93 1 in bud	PGG	
	7.04 2	PGG	
	31.7.05 26 spikes	PGG	Only 2 in full flower
	2011	R Havard	With MHC coppice worker
	2009	HW	SO 762 444 – 1 SO 763 444 – 1
	30.7.14 3	PGG	2 in bud
	2015 several	HW	To the right of track running diagonally up slope to behind lime kilns. Approx. 50yds from Brockhill Rd, before sharp left bend, past silver birch and old hazel stool.
SO 76215 44322	10.8.2016 12 +	MR/PGG	E1 - Amongst trees in middle of western boundary of coupe 8. Large amount of ash seedlings may need pulling.
	14.9.2016	MR/ HW	One diminutive spike at E3 (right in front of the 6/7 coupe marker post)
Castlemorton Common beside Gullet stream S of 'The Cottage' - SO 762379, 763379	Summer 1988 8	PGG	Wooded gorge under lime and S up bank
	11.8.90 2	PGG	
	1991 2	PGG	Beside lane to upper car park (on N side)
	8.8.05 3	PGG	
	23.8.05 1	KB	Shady roadside verge 76293798
	15.7.10 4	PGG	Quite tall spikes in full bud
	30.7.14 not found	PGG	
	5.8.14 not found	PGG	
	5.8.16 not found	PGG	+ Alison & Mike Uren, Margaret Vernon

***Eriophorum angustifolium* Honck.**

Common Cottongrass

Cyperaceae – Sedge family



Habitat and National Distribution

A native perennial of open wet, peaty ground, both calcareous and acidic, often growing in standing water. Habitats range from upland blanket bogs and hillside flushes to wet heaths and marshy meadows in the lowlands. Common in suitable places throughout the British Isles, it is concentrated in N and W England and Wales. It is however declining because of drainage, ground water extraction and the cessation of grazing at some lowland sites.

Red Data Book 2014 England – VU Vulnerable

Maintenance requirements

This species requires open, wet conditions

Local Distribution and Early Malvern Area Records

The first Worcestershire record was from a bog on the western side of the Malvern Hills in 1830. It has suffered greatly in the county since C19 and now perhaps grows in only one Malvern area site on Berrow Downs. Worcestershire Status: Very rare

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Berrow Downs - 'Dales Hall Bog' NW corner below Pink Cottage. Raised bog in willow scrub SO 7665 3865 Immediately west of bridlepath	7.6.92 1 in flower	PGG	
	2005 not seen	KB	
	29.6.09 not seen	PGG	Despite excellent clearance work by Conservators
	27.6.11 not seen	PGG	Ditto
	5.7.14 not seen	PGG	
	5/10/2016 not seen	Wildlife Panel Outdoor Meeting	

Revised October 2016

***Erodium moschatum* (L.) L'Hér.**

Musk Stork's-bill

***Geraniaceae* – Crane's-bill family**



Habitat and National Distribution

An annual or biennial of barish places in short grassland near the sea, in disturbed sand dunes, on roadsides, wall-tops, field margins and waste ground. Found on the coasts of W Britain from W Cornwall and W Sussex to the Isle of Man and the Channel Islands and Ireland, and considered to be native in at least some of these areas, but also widespread, uncommonly, as a casual in inland Britain. **Red Data**

Book status: UK Nationally Scarce

Maintenance requirements

This species prefers bare or disturbed ground.

Local Distribution and Early Malvern Area Records

There is a C19 record from 'on Lumbertree Bank, Welland Common'; probably not far away from a site discovered by KB in Welland village in 1994. Its only known site on MHC land is as a perhaps established casual beside the Beacon Road – Upper Colwall (vc36)- on mown bank outside last house on left. No other records. Worcestershire Status: Rare (as a casual)

***Erodium moschatum* (L.) L'Hér.**

Musk Stork's-bill

Geraniaceae – Crane's-bill family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Worcestershire Beacon, beside the Beacon Road SO 768440	18.4.04 quantity unknown	PGG	Has been seen here previously VC36
	4.05 2 x 3 m ²	PGG	
	30.4.07 3 patches	KB	Not yet in flower
	10.09 (late)	PGG	No change, some still flowering after mowing
	24.7.11	PGG	No change, healthy colony
	17.5.12	PGG	No change
	28.5.13 2 large plants only	PGG	3 flowers open. Considerable decrease in population.
	23.5.14 abundant	PGG	Masses, never seen so much; and very large plants
	5.15	PGG	Present but fewer – close to ground photo.
	28.05.15	PGG/JP	Decrease in population from previous year
	10.05.16	PGG/MR	Small numbers but maybe too early as a late spring. Consider creating bare / disturbed ground?

Revised May 2016

***Euphrasia nemorosa* (Pers.) Wallr.**

Eyebright

***Scrophulariaceae* – Figwort family**



Habitat and National Distribution

A native annual of short grasslands, heaths, downs, dunes, open scrub, woodland rides, upland moorland and in Scotland, dunes. Found throughout the British Isles, but less frequent in C England and absent from agriculturally improved land. This is the most common and ecologically diverse of the British eyebrights, and which forms hybrids with many other *Euphrasia* species.

Red Data Book 2014 England – NT Near Threatened

Maintenance requirements

This species requires more or less open, undisturbed ground.

Local Distribution and Early Malvern Area Records

There are a number of local C19 records from east of the Malvern Hills and also the Old Hills. It is now known locally only from Castlemorton Common. Worcestershire Status: Scarce

***Euphrasia nemorosa* (Pers.) Wallr.**

Eyebright

***Scrophulariaceae* – Figwort family**

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, W of road bridge W of B4208, short-cropped grass on top of small S-facing bank SO 786394	1987 several sizeable patches	PGG	<i>Euphrasia</i> agg.
	5.7.94 3	PGG	Det. P F Yeo
	9.94 9	PGG	Grass not grazed enough
Castlemorton Common, short turf, grassy path off B4208 SO 79153934	26.8.04 c.15-20	KB	<i>Euphrasia</i> agg.

01 December 2016

***Filago minima* (Sm.) Pers.**
Small Cudweed
Asteraceae – Daisy family



Habitat and National Distribution

A native annual of dry, open, infertile, acidic to neutral soils in a wide range of habitats, including arable fields, open grassland, quarries and mine spoil, woodland tracks, sandy heaths, sandpits and dunes. It is found throughout most of the British Isles, but is absent from most of N and W Scotland and is declining slowly across much of its range.

Red Data Book 2014 England - NT

Maintenance requirements

This species requires dry, open sites.

Local Distribution and Early Malvern Area Records

The first Worcestershire record is from 'Malvern Hill' in 1817, and there are other local C19 records from North Hill, Malvern Common and Link Common. It is now found on Hangman's Hill and possibly still in various places on Castlemorton Common, Hollybed Common and in quarries, but appears to be no longer on any of Malvern's urban commons. Worcestershire Status: Rare

***Filago minima* (Sm.) Pers.**
Small Cudweed
Asteraceae – Daisy family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Gullet Quarry , bare stony ground at E end SO 763380	1987 quantity unknown	PGG	
	2005 not seen	KB	
Gullet Quarry , small disused quarry just N of Gullet Quarry SO 763383	1987 quantity unknown	PGG	
	2005 not seen	KB	
Hangman's Hill , SE slopes, dry grassy/stony bank SO 765387	1990 quantity unknown	PGG	Conf. JJD
	15.5.05 several	KB	
	16.6.05 plenty	PGG	
	27.4.06 several	KB/RM	
	4.06 a few	PGG	
	29.6.09 several	PGG	
	30.3.11 a few	PGG & JG	
	17.5.13 a few	PGG	Just showing
	6.2013	RSK	SO 765 389
	10.05.2016 a few	PGG/MR	
Hangman's Hill , Black Rocks top of Hill SO 763390	5.91 quantity unknown	PGG	
Hollybed Common , S-facing slope on NW of Common. On side of large, deep, grassy hollow. SO 777377	13.9.91 quantity unknown	Janet Jones	Conf. JJD
	25.6.06 not seen	Worcs Recorders Field Mtg. JJD et al.	
	8.7.06 not seen	KB	
Castlemorton Common , grassy rock SO 775387	11.8.01 a few small clumps	BSBI Field Mtg. RM et al.	

***Filago minima* (Sm.) Pers.**
Small Cudweed
Asteraceae – Daisy family

West of England Quarry, at S end, bare stony ground SO 767446, 767449	8.87 a few patches	PGG	
	11.6.94 quantity unknown	PGG	
Berrington's Quarry, slag heaps/bare banks around entrance to quarry SO 769412, 770412	4.93 quantity unknown	PGG	
	30.10. 94 plenty	PGG	High up on the scree in the quarry
	2.7.09 c.6	PGG	
Gold Mine, Beacon Road, nearby bare rocky banks SO 768441	13.4.93 quantity unknown	PGG	
SO 769 445	6.2013	RSK	
SO76904417	26.5.14 7	PGG	
SO790452	27.5.14 several patches	PGG/NQ/BB	
SO768447	1.8.14 many	PGG	On ridge path, S side
Hollybush, roadside verge SO 756367	20.5.08 c.10, scattered	PGG	VC 36
	31.5.11 a few (less than 10)	PGG	VC 36
Swinyard Hill, top of hill above Gullet Quarry SO 762381	19.7.06 small but dense colony	PGG with MHC Wildlife Panel	
Clutters Cave SO76223943, N and S either side	10.5.13, a few	PGG	
SO76243935	16.3.14, a few	PGG	In short turf
	22.05.15, several	JP	Ditto

***Filago vulgaris* Lam.**

Common Cudweed

Asteraceae – Daisy family



Habitat and National Distribution

A native autumn or spring-germinating annual of dry, open, acidic to neutral and occasionally calcareous habitats including open grassland, quarries and rocky ledges, sand-pits and dunes, sandy heaths and tracks, and arable and other cultivated land. It is found throughout most of the British Isles, but is absent from most of N and W Scotland. Populations may fluctuate in size in response to climatic conditions and disturbance. Declining, most markedly in S and W England, largely as a result of changing agricultural practices and the cultivation of marginal land.

Red Data Book status: UK Near Threatened

Maintenance requirements

This species requires dry, open sites.

Local Distribution and Early Malvern Area Records

The first Worcestershire record is from the base of the Hills in 1834, and there is another record from Malvern Common in 1842. There have been only a few local sightings since 1987, including colonies on Hangman's Hill and Berrington's Quarry. Worcestershire Status: Rare

***Filago vulgaris* Lam.**
Common Cudweed
Asteraceae – Daisy family

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Hangman's Hill , grassy track going up the SE slopes SO 765387	1987 1 or 2 very small specimens	PGG	
	15.5.05 several	KB	
	16.6.05 c.10	PGG	
	29.6.09 c.12	PGG	Photograph
	10.5.13 3 or 4	PGG	Just showing
	10.5.2016 several	PGG / MR	
Berrington's Quarry (disused), Little Malvern SO 769412	30.8.00 abundant	PGG/RM	
	21.8.07 several extensive patches	PGG	Robust plants: more than ever seen before here, photograph
	2.7.09 abundant	PGG	Scattered across bare patches on quarry floor: photograph
	22.7.14	PGG/BB	Carpeting the ground in many places in the quarry
	28.05.15, 40	JP/PGG	Ground flora in Berrington's poorer than in previous years. Cattle dungey? Warm or wet enough? Reduced significantly.
	30.08.2016 6	MR/PGG	Stumbled onto on path on south facing bank. Probably more. Now outside grazing area.
Hollybush , beside A 438 SO 756367	17.6.08 plenty	PGG	VC36
	31.5.11 lots	PGG	More than in previous years

Revised August 2016

***Filipendula vulgaris* Moench**

Dropwort

Rosaceae – Rose family



Habitat and National Distribution

A native perennial that mainly occurs in calcareous grassland on chalk and limestone downs, and in rough pasture; also found on coastal and inland heaths over limestone, chalk and other basic rocks, including serpentine. It is very locally frequent in Britain N to C Scotland. Grown in gardens, it is sometimes naturalised elsewhere. It is declining in its chalk habitats in S England because of the lack of grazing, or conversion of grassland to arable, but the distribution seems unchanged elsewhere.

Maintenance requirements

This species requires dry, open sites.

Local Distribution and Early Malvern Area Records

The first local record is from the Old Hills, where Lees noted it in 1834 and 1842. It was also observed there at field meetings in 1897 and 1905, the next records coming between 1965 and 1978 (F Fincher). It is still present in this locality, and also on Malvern (Poolbrook) Common. Worcestershire Status: Scarce

Filipendula vulgaris* Moench*Dropwort****Rosaceae – Rose family****Post-1987 Records**

Site/GR	Date and quantity	Recorder	Comments
Malvern (Poolbrook) Common , grassland outside St. Andrew's Church SO 789444	22.6.92 c.20	PGG	Conf. RM/WAT
	4.6.03 3	KB	
	2005 not seen	KB	
	2006 not seen	KB	
	29.08.10 strong colony	KB	In fruit
	5.11 strong colony	KB	In flower
	9.13 strong colony	KB	In flower
Old Hills , grassland N, E & W of trig pt SO 826489, 828487, 824487	1993 a few scattered plants	Neil Waddingham	
	14.7.97 a few plants	KB	GR SO 824487
	6.7.02 locally plentiful	KB	GR SO 828487
	24.06.07 locally plentiful	Worcs. Recorders Field Meeting KB/AWR/JJD	
	6.2013	RSK	MG6b NVC Community
	13.7.16 locally plentiful	DN (Natural England)	SO 828487 part of NE team site visit
	7.2016 Frequent	SR	Nr Brian Pilchers house. SO 824 487

07 December 2016

***Galeopsis speciosa* Mill.**
Large-flowered Hemp-nettle
Lamiaceae – Dead-nettle family



Habitat and National Distribution

A naturalised annual of arable land and waste places, this species is often found as a weed in root crops especially potatoes. Although it is locally common in C and N Britain and N Ireland, it is scattered and rare in S Britain and C and S Ireland and is severely declining as a consequence of modern methods of cultivation and weed control.

Red data Book 2014 England – VU (Vulnerable); UK 2005 VU.

Maintenance requirements

This species requires regular soil disturbance.

Local Distribution and Early Malvern Area Records

The earliest local record is for 'one plant in arable field, Barnard's Green' (1898). It was next seen over a century later as a single plant on Malvern Common in 2003, in grassland thought to have been disturbed by Severn Trent Water during pipe-laying. Worcestershire Status: Very rare

Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Malvern Common Poolbrook, disturbed grassland SO 788455	30.6.03 1 plant	KB	
	6.04 not found	KB	Site grassed over
Grid Ref for Barnards Green football fields between shops and Science Park.			

07 December 2016

the 'information' and 'communication' fields. The 'information' field is defined as:

...the study of the processes of information production, distribution, access, use and evaluation, and the study of the social, cultural, economic and political contexts in which these processes take place. (p. 10)

The 'communication' field is defined as:

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The 'information science' field is defined as:

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The 'information studies' field is defined as:

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***Genista anglica* L.**
Petty Whin
***Fabaceae* – Pea family**



Habitat and National Distribution

In the lowlands, this native small spiny shrub grows in humid sandy and peaty grass heaths and moors, and around the drier fringes of bogs. In upland areas it is found in damp, heathy unimproved pastures. The species occurs in suitable habitats throughout most of Britain, but apart from in the New Forest, there has been a very substantial decline in England and S Scotland. The inherent infertility of many of its heathland sites means that they are frequently vulnerable to agricultural improvement, or else are apt to become quickly overgrown following the cessation of grazing or other management.

Red Data Book status: UK 2005 Near Threatened; England 2015 Vulnerable

Maintenance requirements

This species requires an open, grazed habitat.

Local Distribution and Early Malvern Area Records

As well as mid-C19 records from Welland Common and 'near the British Camp Hotel', there are two early C20 records from Malvern Link Common. The first modern record from Castlemorton Common dates from 1974 (O Wilson), and this is now its only known site on MHC land. Worcestershire Status: Very rare

Genista anglica* L.*Petty Whin*****Fabaceae* – Pea family****Post-1987 Records**

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, (South) Rough grazed grassland SO 785390, 785391, 786390	8.5.87 many plants in patches	PGG	
	14.5.89 ditto	PGG	
	5.7.04 c.12-15	KB	78503908
	30.4.05 1	KB	78553917
	30.4.05 at least 8	KB	78603903
	23.5.06 very many patches	KB/RM	
	9.5.07 very many patches	KB	
	14.5.12	KB	Several scattered plants
	5.12 not found	PGG	Feared mown
	5.13 not found	PGG	
	6.7.14 not found	PGG/RV and Nick Saunders	
	7.14 4 or 5	Rob Havard	
	5.8.14 JB <i>et al</i> not found		
	27.8.14 not found	PGG/Rob Havard	
	2015 not found	JP/PGG	
	May 2016 not found	MR	

Revised February 2016