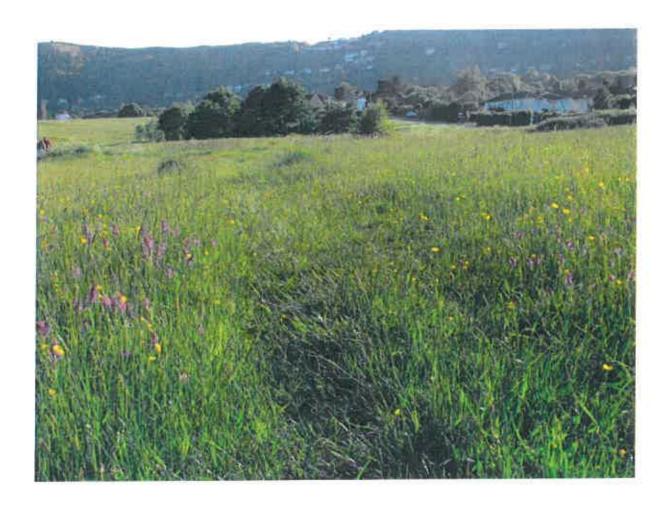
# **NOTABLE FLORA**

# **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
ВВ	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)

#### **MHC Notable Plants List**

Anacamptis morio

Anagallis minima

Anagallis tenella

Apium inundatum

Avenula (Heliotrichon) pratense

Avenula (Heliotrichon) pubescens

Blysmus compressus

Bupleurum tenuissimum

Calluna vulgaris

Campanula patula L

Cardamine impatiens L

Carex binervis Sm

Carex distans L

Carex disticha Huds

Carex echinata Murray

Carex hostiana DC

Carex pulicaris L

Carex x fulva Gooden

Centaurium pulchellum

Ceratocapnos claviculata

Chamaemelum nobile

Cirsium dissectum

Dactylorhiza maculata ssp

Dactylorhiza praetermissa

Dactylorhiza x grandis

Dactylorhiza x transiens

Diphasiastrum complanatum

ssp

Eleocharis quinqueflora

Eleocharis uniglumis (Link)

Schult.

**Eleogiton fluitans** 

Epilobium lanceolatum

Epilobium palustre L

**Epipactis helleborine** 

Epipactis purpurata Sm

Eriophorum angustifolium

Honck

**Erodium moschatum** 

Euphrasia nemorosa

Filago minima

Filago vulgaris Lam

filipendula vulgaris

Galeopsis speciosa Mill

Genista anglica L

Helianthemum nummularium

Hieracium subcrassum

Hordelymus europaeus

Hypochaeris glabra L

Juncus x kern

Koeleria macrantha

Lepidium heterophyllum Benth

Linum bienne

Lysimachia vulgaris L

Lythrum portula

Marrubium vulgare L

Molinia caerulea sub

Montia fontana L

Mvosotis ramosissima

Neottia nidus-avis

Neottia ovata (L.) Bluff &

Fingerh.

Oenanthe fistulosa L

Oenanthe lachenalii C

Oenanthe pimpinelloides L

Oenanthe silaifolia M

Ophrys apifera Huds

Oreopteris limbosperma

Paris quadrifolia

Persicaria minor

Polygala serpyllifolia

Potentilla argentea L

Potentilla tabernaemontani

Ranunculus auricomis

Ranunculus parviflorus L

Ranunculus peltatus Shrank

Ranunculus trichophyllus

Chaix

Rosa agrestis Savi

Rumex pulcher ssp

Sagina nodosa (L.) Fenzi

Salix cinerea ssp

Samolus valerandi L

Scleranthus annuus L

Solidago virgaurea L

Sphagnum sp

Spiranthes spiralis

Stellaria pallida

Taraxacum palustre

Teesdalia nudicaulis

Torilis nodosa

Trifolium ornithopodiodes L

Trifolium scabrum L

Triglochin palustre L

Valeriana dioica

Viola canina L

# Helianthemum nummularium (L.) Mill.

#### Common Rock-rose

Cistaceae - Rock-rose family



#### **Habitat and National Distribution**

A native prostrate sub-shrub occurring in short dry, calcareous grassland, and rather strictly confined to chalk and limestone in England, but extending into mildly acid pastures and heaths on well-drained soils in E Scotland, and on base-rich soils over basalt in NE England and E Scotland. It is common in suitable places over most of Britain, but is absent from many areas and declining because of the conversion of chalk grassland to arable and its reversion to scrub.

#### Red Data Book England 2014 Near Threatened

#### **Maintenance requirements**

This species requires dry, open sites.

#### **Local Distribution and Early Malvern Area Records**

The first Worcestershire record is an unlocalised one from the Malvern district in 1828 with first localised records from the Herefordshire Beacon in 1834 and 1842. It is now present in some quantity on the slopes of Hangman's Hill. Worcestershire Status: Scarce

# Helianthemum nummularium (L.) Mill. Common Rock-rose

## Cistaceae - Rock-rose family

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Hangman's Hill, SE slopes in short, well-drained herb-rich turf. SO 765387	9.5.87 several square metres of dense patches	PGG	
	1990 quantity unknown	PGG	
	11.8.01 scattered	BSBI Field Mtg. RM et al.	Grassy rock, 765387
	16.6.05 flourishing	PGG	
	27.4.06 flourishing	KB/RM	
	29.6.09 flourishing	PGG	
British camp / Clutters Cave SO 761 391 – 760 400	6.2013	RSK	Present around British Camp summit and to south past Clutters Cave. CG10a NVC community
Gullet Quarry SO 761381	9.9.08 I large patch	PGG	

Revised July 2016

# Hieracium subcrassum (Alonq.) ex Dahlst Hawkweed

Asteraceae - Daisy family



(non-specific hawkweed variety)

#### **Habitat and National Distribution**

This native perennial belongs to Group *Hieracium*, a particularly critical Hawkweed group. It requires an open, well-drained habitat and can be found in broken soils such as can be found in former quarries. Its distribution is not yet fully established, but it appears to be at least nationally scarce and is probably at the S end of its range in Worcestershire.

#### **Maintenance requirements**

This species requires an open, well drained site

#### **Local Distribution and Early Malvern Area Records**

The first county record was from Dingle Quarry in 1996, and this remains the only local record. Another colony has since been noted in the county from the Abberley area. Worcestershire Status: Very rare

Site/GR	Date and quantity	Recorder	Comments
Dingle Quarry, West Malvern. S edge at top of wooded bank	6.7.96 c.60	PGG	det. J Bevan & P Sell
SO 764455			
	2001 c.100	PGG	
	2002 ditto	PGG	
	2003 ditto	PGG	
	8.04 c.60	PGG	Some clearance needed; colony reduced
	8.07 c.40	PGG	Ditto (photograph)
	19.06.11	PGG	The colony has spread up the hill into the area felled by MHC in 2010



## Hordelymus europaeus Wood barley Poaceae





#### **Habitat and National Distribution**

A perennial herb of woods and copses on calcareous soils, especially in sheltered beech woodlands and along medieval boundary banks and old hedgerows.

UK Red Data List 2005 – Plant Network

#### **Maintenance requirements**

#### Local Distribution and Early Malvern Area Records

Generally lowland, but reaching 440 m at Brough (Westmorland). England, from Hampshire and Kent northwards to Northumberland, occasional but locally common in Chilterns and Cotswolds. Although now better recorded since the 1962 *Atlas*, *H. europaeus* has declined across much of its range mainly due to the removal of hedge banks and the coniferisation of deciduous woodland. It has not been seen in Ireland since 1949.

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Park Wood SO 762443, 763444	2009 2 @ 762443 4 @ 763444	HW	
H1 & H3 by large brash pile, north side of coupe 8 between diagonal path and main east / west access track from Brockhill Rd.	26.08.2016	HW	'Wood barley doing OK in usual sites plus a few others'. SO 76208 44357 ( 2 plants) SO 76217 44404 ( 6/7 plants) SO 76245 44445 (6/7 plants)
H2 + new sites H4 and H5	14/9/2016	MR / HW	H2 76343 44449 large patch H4 SW corner of coupe 7- 2 plants. H5 76230 44426 - 4 plants. Alongside old sunken track that runs north/south. Boundary of coupe 6/7.

Revised September 2016

# Hypochaeris glabra L. Smooth Cat's-ear Asteraceae – Daisy family



#### **Habitat and National Distribution**

A native annual of open summer-parched grasslands and heathy pastures, on usually acidic, nutrient-poor sandy or gravelly soils; also in dune grassland and on sandy shingle: formerly widespread also as a weed of arable fields and as a wool-shoddy alien. Frequent in East Anglia and the Channel Islands, scattered elsewhere in Britain N to NE Scotland, it is declining in semi-natural habitats and lost from some areas because of agricultural improvement or loss of grazing. This species can be overlooked, particularly as the flowers close in the afternoon.

Red Data Book status: UK 2005 Vulnerable. England 2014 Vulnerable.

#### **Maintenance requirements**

This species requires short turf on unimproved soil.

## Local Distribution and Early Malvern Area Records

There are C19 records from North Hill, Malvern Common and Malvern Wells, and C B Westall recorded it from North Hill in 1985. It was recorded by PGG from Hangman's Hill in 1991 and in 2003 by JJD from the British Camp Reservoir. Worcestershire Status: Very rare

Site/GR	Date and quantity	Recorder	Comments
Hangman's Hill, SE slopes, short turf. SO 765388, 766388	2.7.91 2	PGG	Conf. JJD
	2006/7 quantity unknown	Carter Ecological	"On top of Hangman's Hill"
	29.6.09 not found	PGG	
	10.5.2016 a few	PGG/MR	
British Camp Reservoir, SO 765399	14.6.03 1	JJD	
Chase End VC 34 - Vice County 34, West Gloucestershire	2006/7 no details	Carter Ecological	Not found by PGG VC34
Ragged Stone Hill, SO 759363	8.09 & 9.09 not found	PGG	
(On Eastnor land; Vice County 36, Herefordshire)	31.5.11 c.100	PGG and MJ	75933634 Just in VC 36
	No date	Carter Ecological	
	13.6.12 100 plus	PGG	
	18.6.13 14 only	PGG	Several were microscopic
	30.4.14 many	PGG	Rosettes, just one in flower
	2015	PGG/JP	
Hollybush roadside verge			
SO75643639	2.6.14 many	PGG/MJ	Densely growing in small area of verge

## Juncus x kern-reichgeltii Jansen & Wacht ex. Reichg.

#### Juncaceae - Rush family



(Juncus effusus)

#### **Habitat and National Distribution**

A native perennial hybrid between the common *Juncus effusus* L. and *Juncus conglomeratus* L. that with the parents in Britain (mainly the N and W) and E and W Cork occurs sporadically in ditches, marshes, bogs, wet meadows, damp woods, and beside rivers and lakes, mostly on acid soils. It is intermediate in all its characters, but due to its high fertility it is difficult to determine other than in the field with its parents.

#### Maintenance requirements

This species requires a wet site.

#### Local Distribution and Early Malvern Area Records

The only county record for this hybrid is from Berrow Downs, where it was discovered during a Worcestershire Flora Project Field Meeting in 2002. Worcestershire Status: Very rare

Site/GR	Date and quantity	Recorder	Comments
Berrow Downs, damp grassland S0 768386	28.7.02 locally frequent	WFP Field Mtg.	det. WAT, conf. A O Chater

# Koeleria macrantha (Ledeb.) Schult. Crested Hair-grass Poaceae – Grass family



#### **Habitat and National Distribution**

A very variable native perennial found on dry, short limestone or sandy base-rich grassland and dunes, and also around rock outcrops, screes, grassy heaps and old lead workings. Throughout most of the British Isles: in the S mostly on calcareous soils and in the N mostly coastal. It is declining due to habitat destruction and intensification of grassland management.

#### **Maintenance requirements**

This species requires short, dry grassland.

#### **Local Distribution and Early Malvern Area Records**

There are a number of C19 records from near the Wyche, Malvern Common and the Old Hills. It has only been seen recently on Castlemorton Common at Eight Oaks. Worcestershire Status: Rare

# Koeleria macrantha (Ledeb.) Schult. Crested Hair-grass Poaceae – Grass family

### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Eight Oaks, Castlemorton Common, dotted about on and below calcareous grassy bank SO 777383	26.6.94 small population	PGG	Growing with Bromopsis erecta, Cirsium acaule, Carlina vulgaris, Linum catharticum and Ononis repens
	16.6.05 several hundreds	KB/AWR	
	4.9.05 small population	PGG	
	29.6.09 frequent	PGG	In a confined area immediately N of the 'winter pool'
	23.7.12 several	PGG	
	15.10.13	PGG	Dead flowering heads visible
	6.7.14 several	PGG	
Broad Down, British Camp area	2007	Carter Ecological	Not looked for by PGG

Revised February 2016

# Lepidium heterophyllum Benth. Smith's Pepperwort

Brassicaceae - Cabbage family



#### **Habitat and National Distribution**

A native perennial, rarely biennial, of dry open grassland, banks, walls, shingle, railway ballast, waysides and, less commonly, arable fields. Scattered but locally common in much of the British Isles, mostly in the W, it appears to be declining in SE England. It is tolerant of grazing.

#### Maintenance requirements

This species requires a dry open habitat.

#### Local Distribution and Early Malvern Area Records

There is a C19 record from Welland Common, but then nothing on MHC land until PGG's discovery in Berrington's Quarry in 1994. Since then, it has been found as a casual in disturbed soil on Malvern (Poolbrook) Common, the British Camp Reservoir and the Little Malvern Priory car park. Worcestershire Status: Very scarce

# Lepidium heterophyllum Benth. Smith's Pepperwort

Brassicaceae - Cabbage family

Site/GR	Date and quantity	Recorder	Comments
Berrington's Quarry	30.10.94 1	PGG	High up in the quarry at the top of the scree.
SO 768411			the top of the scree.
Malvern (Poolbrook) Common, disturbed soil at edge of Peachfield Road SO 783441	26.5.03 1	КВ	Disturbance by Severn Trent
Publish Comp Pages rais	45.5.02	D.Mashvard/	Lawrendenes of
British Camp Reservoir SO 766398	15.5.93 small dense patch	B Westwood/ PGG	Lower slopes of reservoir bank
	15.7.09 many	PGG	Below the dam wall on the flat ground
Little Malvern Priory, car park SO 770404	15.7.09 3 or 4	PGG	On the Eastern edge
Ragged Stone Hill (SO 759363 - On Eastnor land VC 36; Vice County 36 Herefordshire)	31.5.11 12	PGG & M Jannick	Rocky outcrop beside the path, just inside VC36 (with Hypochaeris glabra SO 759363)
	13.6.12 15	PGG	
	18.6.13 c.20	PGG	Increasing
	20.07.2016 1 Multi stemmed individual	MR	On very edge of encroaching gorse / bramble.

## Linum bienne Mill. Pale Flax

**Linaceae** – Flax family



#### **Habitat and National Distribution**

A native annual, biennial or short-lived perennial of dry grassy places in scrub; beside paths, roadsides and railway banks; and in old quarries, favouring warm south-facing slopes on relatively infertile soil. Local in the British Isles, it is found mainly in southern coastal areas.

#### Maintenance requirement

This species requires dry sites on poor soil that dries out periodically.

#### **Local Distribution and Early Malvern Area Records**

The first county record is from Castlemorton Common in 1978 from which general area it has been seen in varying quantity, but not despite searches since 2005. Worcestershire Status: Very rare

# Linum bienne Mill. Pale Flax Linaceae – Flax family

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common SO 7839	7.78 quantity unknown	P. Day and F. Fincher	
Castlemorton Common SO 767382	28.7.02 occasional	WFP Field Mtg. TDK/RM/W AT	
Castlemorton Common, SO 770382	16.6.05 1	KB/AWR	Ditch
SO7708638423	9.9.13 1	PGG	Roadside, large plant, one flower and a couple of buds still to open
SO77483836	23.7.14 1	PGG	Large plant, with Bupleurum tenuissimum
Drugger's End			
(Not MHC land) Dry bank beside B4208, SO 787382	8.6.91, 100+	PGG	Conf. RM/WAT
SO 785375	5.93 smaller colony than above	PGG	
	25.7.94 plentiful	КВ	
SO 786382, several metres stretch	8.6.02 plentiful	KB	
SO 785375	4.6.05 sizeable colony	КВ	

# Lysimachia vulgaris L. Yellow Loosestrife

Primulaceae - Primrose family



#### **Habitat and National Distribution**

A native perennial spreading vegetatively to form large colonies in permanently wet places on organic (less commonly, mineral) soils. Its habitats include river banks and streamsides, marshes, tall-herb fens, fen-carr, ponds and ditches. It withstands some shade in wet open woodland. Scattered throughout most of the British Isles except N Scotland, some losses have occurred since 1950 through drainage and the clearance of watercourses. It can, however, readily colonise suitable new sites, perhaps assisted by waterfowl.

#### **Maintenance requirements**

This species requires a permanently wet site.

#### Local Distribution and Early Malvern Area Records

Although recorded by Amphlett in 1900 as being in the Malvern district, its only localised sighting was in 2004 when one large clump appeared in a dried-up roadside pool/ditch, not apparently recently disturbed, at Hall Green, Barnards Green (KB). Worcestershire Status: Scarce

# Lysimachia vulgaris L. Yellow Loosestrife Primulaceae – Primrose family

### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Barnards Green, dried-up ditch/pool at Hall Green SO 799454	22.6.04 1 clump	КВ	
	6.05 1 clump	KB	
	7.06 1 clump	KB	
	8.07 1 clump	KB	becoming overgrown
	8.10 1	KB	
	6.11 1	KB	Very overgrown
	7.13 1	KB	Clinging on

Revised February 2016

# Lythrum portula (L.) D. A. Webb Water-Purslane

Lythraceae - Purple-loosestrife family



#### **Habitat and National Distribution**

A native annual of acidic or calcium-deficient silty soils at the muddy margins of open pools and in temporarily flooded habitats such as rutted tracks, woodland rides, heathland pools and the draw-down zone of reservoirs. It avoids the most acidic and nutrient-poor soils and is rarely found over peat. Scattered throughout most of the British Isles, there have been many losses since 1950 because ponds have become overgrown or drained, and because rutted tracks have been resurfaced or filled in.

#### Maintenance requirements

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

## Local Distribution and Early Malvern Area Records

There are a number of local C19 records from Welland Common, Newland Common, Link Common and Barnards Green. It has been seen more recently on Castlemorton Common and Hollybed Common, the Old Hills, and from beside a pool at Barnards Green. Worcestershire Status: Rare

# Lythrum portula (L.) D. A. Webb Water-Purslane

Lythraceae – Purple-loosestrife family

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, dried- up pool/damp grassland SO 781389	24.5.90 1 clump	JJD	
Castlemorton Common, 'winter pool' opposite the drive to Boulter's Farm 786388, 786394, 786395	23.8.91 many very small plants	PGG	With Centaurium pulchellum and Persicaria minor
	11.8.01 common	BSBI Field Mtg. RM et al.	
	1.9.04 frequent	KB	78653946
	16.6.05 several	KB	Pond at 786388
	30.7.06 several	KB	
	1.7.09 plentiful	PGG	
	15.7.09 frequent	KB	
	06.2013	RSK	
-	5.7.14 plentiful	PGG	
	01.09.15 not found	PGG/JP	
	19.7.2016 plentiful	MR	(Verified by PGG 30/8)
Castlemorton Common, 'winter pool' near main road	25.8.91 abundant	PGG	
SO 791395	15.7.09 small patch	PGG	In deepest depression, 79223958
	20.8.14 quite a lot	MHC Wildlife Panel	

# Lythrum portula (L.) D. A. Webb Water-Purslane

## Lythraceae – Purple-loosestrife family

			,
Hollybed Common, beside the pool, Hollybed Street SO 779374	14.5.89 quantity unknown	PGG	Conf. JJD
	28.7.02 occasional	WFP Field Mtg.	
<u> </u>	21.5.06 occasional	Worcs Recorders Field Mtg. JJD et al.	
	15.8.09 small colony	AWR	77733740
	06.2013	RSK	777 373 dry ditch
	26.7.14 small colony	PGG	
<b>Berrow Downs</b> , pond SO 767381, 767382	29.4.93 quantity unknown	PGG (?)	Det. JJD
	28.7.02 locally frequent	WFP Field Mtg.	Dried-up pool
Castlemorton Common, small pond to E of road to Welland Stone SO 797395	26.8.02 several	КВ	
Old Hills, edge of dried-up	12.7.91 abundant	RW	Conf. JJD
pond SO 825492	2.9.99 plentiful	Taverner KB	
	13.10.00 locally frequent	JJD	
<del>-</del> .			
Old Hills, pond by main car park SO 828486	1996 2	W Watson	
	13.10.00 10 to 20	JJD	
Old Hills, muddy depression SO 830485	30.5.00 plentiful	КВ	

#### Lythrum portula (L.) D. A. Webb Water-Purslane Lythraceae - Purple-loosestrife family 12.7.03 abundant KB Barnards Green, muddy parts of small pond at Hall Green 'The Fladder' SO 799454 KB 7.05 Abundant KB 7.06 Present 7.09 Present KB Pond drained 8.2011: 6.11 Present KB future of colony uncertain KB 7.13 Plentiful 9.6.05 large patch KB Castlemorton Common, seasonally wet depression SO 77593889

**Revised August 2016** 

# Marrubium vulgare L. White Horehound

Lamiaceae - Dead-nettle family



#### **Habitat and National Distribution**

A perennial that is probably native only near the sea in S and W Britain from E Sussex to Denbighshire on open, exposed cliff-top grassland and slopes overlying limestone and chalk; and on sandy banks and verges in Breckland. Elsewhere in Britain it is naturalised with a scattered distribution and found in rough and waste places. Native sites are probably declining due to lack of grazing, and it is also declining outside its native areas.

Red Data Book status: (Nationally Scarce - BSBI) Locally Common

#### **Maintenance requirements**

This species requires short grassland or open ground.

#### **Local Distribution and Early Malvern Area Records**

There are C19 records from Welland Common; Castlemorton Common; Wells Common; 'rocks above Malvern above Malvern Chace'; the Herefordshire Beacon and near Keys End. It is now found only sporadically, mostly on Malvern's urban commons but has not been recorded on MHC land since 2004.

Worcestershire Status: Very rare

# Marrubium vulgare L. White Horehound Lamiaceae – Dead-nettle family

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, Huntsbridge, under a hedge beside the Common SO 774382	25.11.90 3 or 4	PGG	
	14.7.09 not found	PGG	
	5.7.14 not found	PGG	
		<del>                                     </del>	
Berrington's Quarry, spoil heap just E of quarry SO 769412	1988 quantity unknown	T Warwick	
	Late 1980's Single plant	Gerry of P.I.G.	
	28.3.99 2	PGG	
	22.7.14 not found	PGG/BB	
	30.08.16 not found	MR/PGG	PGG recalls it was on western quarry face scree slopes.
	16/9/16 not found	P.I.G	
Link Common railway bridge in SE corner of Common SO 782471	1987 quantity unknown	PGG	
	1989 quantity unknown	PGG	
	1990 1	PGG	
	1993 not found	PGG	
	13.8.01 2 or 3	KB	
	23.7.14 not found	PP/BB	
	30.08.2016 not found	MR/PGG	
Malvern Common, grassy area off Poolbrook Road nr junction with Britten Drive on N side of Longridge Road SO 786445	27.9.94 small patch	КВ	Saved from mower by a marker stone, on N side of Longridge Road
	2004 not found	KB	
	2005 not found	KB	
	2006 not found	KB	
	22.7.14 not found	PGG/BB	
	8/7/16 not found	MR	
	30.08.16 not found	MR/PGG	
Wells Common, where crossed by the railway, just near the bridge SO 779441	3.7.01 3	КВ	2 or 3 other (dead) plants nearby, uprooted and left
(Clarify which side of bridge and road. Grid Ref for near Rosa agrostis site)	8.3.04 1	КВ	
	2005 not found	KB	
	2006 not found	KB	
	2007-11 not found	КВ	
	22.7.14 not found	PP/BB	
	8/7/16 not found	MR	

# Molinia caerulea ssp. caerulea (L.) Moench Purple Moor-grass

Poaceae - Grass family



#### **Habitat and National Distribution**

This sub-species is a native perennial found in a wide range of habitats, especially open heaths, moors, bogs and fens, but also in open birch woods, mountain grassland and cliffs, and stony lake margins. It is found on mildly basic to strongly acidic peat and mineral soils which are permanently or seasonally wet. It is common in suitable places throughout the British Isles, and although it has declined in some lowland areas through habitat destruction it has increased in frequency where grazing has ceased.

The native perennial sub-species *arundinacea* (Shrank) K. Richt. grows in fens, fenscrub and fen-type vegetation by rivers and canals, and is scattered but frequent in suitable places in C and S Britain, and very scattered N to S and W Scotland and in S Ireland and Guernsey.

#### **Maintenance requirements**

This species requires a site that is permanently or seasonally wet.

#### **Local Distribution and Early Malvern Area Records**

The first local record ('Malvern District') ~ for the aggregate ~ dates from 1900, and as such it was next noted from Castlemorton Common in 1990. Sub-species arundinacea was not known to be present in the county until it was identified on Castlemorton Common by a BSBI Field Meeting in 2001. Worcestershire Status: ssp caerulea Rare; ssp. arundinacea Very rare.

# Molinia caerulea ssp. caerulea (L.) Moench Purple Moor-grass Poaceae – Grass family

### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, damp grassland SO 783392	24.5.90 quantity unknown	JJD	agg., but probably ssp. arundinacea, see the next entry below
Castlemorton Common, marsh SO 782391, 783398	11.8.01 a few	BSBI Field Mtg. RM et al.	Ssp. <i>arundinacea</i> . Det. G M Kay, conf. RM
	3.7.05 large patch	KB	782391
	6.7.14 large patch	PGG	
Castlemorton Common, damp grassland SO 790395	12.6.91 quantity unknown	PGG	
	21.8.07	PGG	population stable; area size of 2 tennis courts
	29.5.08	KB/RM	
Castlemorton Common, grassland/marsh SO 779393	25.6.02 small patch	RM	

Revised February 2016

# Montia fontana ∟. Blinks

Portulaceae - Blinks family



#### **Habitat and National Distribution**

A native annual to perennial found in many kinds of damp places. There are four sub-species of which three are found in the county. Sub-species *amporitana* Sennen is scattered over most of the British Isles, is locally common in SW England and is rare in Scotland. It grows in permanently wet places or as an aquatic. Sub-species *chondrosperma* (Fenzl.) Walters is scattered over most of the British Isles, is rare in N and locally common in S and C Britain. It grows in drier habitats than the other two sub-species, usually over sand and gravel in places that are moist or flooded in winter but dry out in summer. It rarely grows submerged in water, and is relatively intolerant of competition. Sub-species *variabilis* Walters is scattered over most of Britain and Ireland, but is rare in S and E England. It grows in streams, springs and permanently wet places.

#### Maintenance requirements

This species requires damp open sites.

### **Local Distribution and Early Malvern Area Records**

The first county record is from 'Malvern, in a bog on the west side of the hill' in 1817, and there are numerous other C19 records from commons near Malvern, Malvern Link, Old Hills and Castlemorton Common. One or more sub-species is now known to be present in various places on the Hills, Castlemorton Common, Link Common, Malvern (Poolbrook) Common, Old Hills and Sherrards Green. Carter Ecological 2005 – "Fairly common throughout the hills, mainly on paths and lichen-rich calcifugous turf. Present in 22 out of 118 locations" (see map)

Worcestershire Status:

As the aggregate, Very scarce:

Sub-species amporitana and variabilis: Very rare;

Sub-species chondrosperma: Rare (Barnett & Garner 2005 - commonest of the subspecies in Malvern Hills)

# Montia fontana L. Blinks

### Portulaceae - Blinks family

Site/GR	Date and quantity	Recorder	Comments
Old Hills, E side of road, well- trodden grassy paths SO 829483	1991 many small patches	PGG	Agg.
Old Hills, short turf SO 823498	21.4.05 locally frequent	KB/A W Reid	Agg.
Old Hills, sheep-grazed turf. SO 820488	18.4.00 common	КВ	Ssp. chondrosperma
Link Common, damp area SO 783473	10.5.01 several	KB	Agg.
Sherrards Green, bare patch on grass verge SO 800463	19.3.97 several  10.5.99 now common	KB	Ssp. chondrosperma
Guariford Road, n, bare patch in verge SO 801453	5.5.99 a few	KB	Ssp. chondrosperma
Malvern (Poolbrook) Common, SO 788443	3.5.01 locally abundant	KB	Ssp. chondrosperma
North Hill, 2 small flushes E side of summit SO 771465	10.6.90 quantity unknown	PGG	Ssp. <i>variabilis</i> . Det. Dr. S M Walters
	10.6.90 very few	PGG	Ssp. amporitana Det. Dr. S M Walters

# Montia fontana L. Blinks

### Portulaceae – Blinks family

	Portuaceae - Dilliks	lailing	
Table Hill, bare patch beside path, W side of hill SO 763462	25.5.91 quantity unknown	PGG	Agg.
Gold Mine, short herb-rich turf covering rocky outcrops SO 769441	1.5.91 1	PGG	Agg.
British Camp N SO 7625 4025	2006 quantity unknown	Carter Ecological	Ssp. chondrosperma
British Camp S SO 7595 3942	2006 quantity unknown	Carter Ecological	Ssp. chondrosperma
Broad Down, Shire Ditch SO 7630 3925	2006 quantity unknown	Carter Ecological	Ssp. chondrosperma
Hangman's Hill, short turf, SE slopes SO 765388	15.4.90 quantity unknown	PGG	Ssp. chondrosperma Det. Dr. S M Walters
	15.4.90 quantity unknown	PGG	Ssp. <i>variabilis</i> Det. Dr. S M Walters
Hangman's Hill, S valley on rocky outcrops near path SO 764390	4.5 91 quantity unknown	PGG	Agg.
Hangmans / Swinyard Hill Col SO 7617 3895	2006 quantity unknown	Carter Ecological	Ssp. chondrosperma
Swinyard Hill, Shire Ditch SO 7618 3837	2006 quantity unknown	Carter Ecological	Ssp. chondrosperma

# Montia fontana L. Blinks

### Portulaceae - Blinks family

Castlemorton Common, beside pools, on bare mounds and in short turf SO 791391	9.5.91 quantity unknown	PGG	Agg.
			Recorded in unknown location on Castlemorton Common by KB in 2005
	_		
Castlemorton Common, damp grassland in short turf, just N of footbridge opposite Hunter's Hall SO 786394	22.4.91 dense patch	PGG	Agg.
Hollybed Common, short turf N end SO 773378	9.5.91 quantity unknown	PGG	Agg.
	27.05.06 abundant	JJD et al	Worcs. Recorders Meeting
Eight Oaks, short turf, road triangle SO 778382	9.5.91 quantity unknown	PGG	Agg.
	1000	BOO	0
SO 765383	1990 quantity unknown	PGG	Ssp. <i>chondrosperma</i> Det. Dr. S M Walters
	1990 quantity unknown	PGG	Ssp. <i>variabilis</i> Det Dr. S M Walters
Berrow Downs, Huntsbridge. SO 773 381	4.4.92 many small patches in flower	PGG	Agg.
			A1 (1 / 4 / - 1 - 1)
Ragged Stone Hill SO 7593 3633	2006 quantity unknown	Carter Ecological	Along path / county / site boundary ssp. chondrosperma with Stellaria pallida.
Chase End short turf	22 5 99 obundent	BCC	Aca
<b>Chase End</b> , short turf SO 759351, 760351	22.5.88 abundant	PGG	Agg.
	4.5.90 quantity unknown	PGG	Ssp. <i>variabilis</i> Det. Dr. S M Walters
	4.5.90 quantity unknown	PGG	Ssp. chondrosperma Det. Dr. S M Walters
	2006 quantity unknown	Carter Ecological	7613 3540 east side of trig point. Ssp. <i>chondrosperma</i> with Stellaria pallida
		<u> </u>	

# Myosotis ramosissima Rochel Early forget-me-not Boraginaceae – Borage family



#### **Habitat and National Distribution**

A native annual of dry open places, found on chalk and limestone grassland, sandy heaths and banks, stabilised dunes, borders of sandy cultivated fields, railway banks, rocks, walls, gravel-pits, quarry soil and waste ground. Locally common over most of the lowland British Isles, especially in the E and the Channel islands, there has recently been some decline in inland areas caused by the loss of suitable close-grazed, semi-natural communities.

#### Maintenance requirements

This species requires a dry, open habitat.

#### **Local Distribution and Early Malvern Area Records**

The first localised Worcestershire record was from near Hagley in 1837. The first Malvern area record was by Lees (1843), from 'some of the highest rocks of the [Malvern] hills', where it can still be found. Worcestershire Status: Scarce

# Myosotis ramosissima Rochel Early forget-me-not Boraginaceae – Borage family

### Post-1987 Records

Site/GR	Date and quantity	Record er	Comments
British Camp Reservoir SO 765399	21.4.90 not many	PGG	
Berrington's Quarry	24.4.91 100s	PGG	
SO 769412	24.4.31 1005	1 00	
Hangman's Hill SO 764390, 765388	27.4.06 locally abundant	KB/RM	SO 764390 Short turf on 'Black Rocks'
	27.4.09 2	PGG	SO 765388 2 multi-stemmed plants
	8.4.10 1	PGG	1 tiny plant in flower
	30.03.12 none found	PGG	
	13.6.12 4 or 5	PGG	
	18.4.13 several	PGG	

Revised February 2016

## Neottia nidus-avis (L.) Rich. Bird's-nest Orchid Orchidaceae – Orchid family



Photo - HW (Park Wood)

#### **Habitat and National Distribution**

A native saprophytic perennial found mostly in leaf-litter in densely shady woods, often of beech on calcareous soils. Less commonly, it grows in mixed deciduous woodland and mature hazel coppice on soils derived from limestone and base-rich clays and sands. It is scattered throughout most of Britain and Ireland, and is locally frequent in S England. Declining, it is very vulnerable to habitat disruption, losses probably being due to changes in woodland management and the planting of conifers.

Near Threatened Britain 2005 Red Data List. Vulnerable England 2014.

#### **Maintenance requirements**

This species requires a deeply shaded, undisturbed woodland habitat.

#### **Early Malvern Area Records**

The first local records are from 'Silurian eminences' and Malvern Wells in the C19. The only fairly recent records are from Park Wood. Worcestershire Status: Rare

# Neottia nidus-avis (L.) Rich. Bird's-nest Orchid Orchidaceae – Orchid family

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Park Wood, 10m into the wood directly behind the 'old engine house'*. Old coppiced woodland. SO 762443	6.8.90 1 dead spike	PGG	
*Old engine house = lime kilns?	27.6.98 3 spikes: 2 in seed, 1 with dead florets	PGG	On bank covered in ivy
	2009 quantity unknown	R Havard	At field meeting
	6.2016	MR	Not seen. Large log pile by path may be obscuring location.
Park Wood, bank beside the Purlieu SO 763442	9.6.91 quantity unknown	PGG	Mowed next day
	2011 several	R Havard & JG	MHC staff
	2011	HW	
	6.2016	MR /HW	Not seen. Bank overgrown so difficult to see esp. with non-specific location.
		1.044	
Park Wood SO 7623544352	08.07.15, 1 at old brash pile in coupe 8 near entrance	HW	the edge of an old brash pile to the right of the main central track, approx 50yds from Brockhill Rd just past a silver birch and an old hazel stool ( with Epipactis purpurata?)
	6.16	MR/HW	Not seen. Coupe 8 coppiced Jan 2016 so very open. Large new brash pile in general area.

Revised June 2016

## Neottia ovata (L.) Bluff & Fingerh. Common Twayblade Orchidaceae – Orchid family



#### **Habitat and National Distribution**

A native perennial of open or shady, wet or dry, woods, hedgerows, grassy fields, scrub, dune slacks and limestone pavement; also found on railway banks and disused quarries. Mostly occurring on calcareous soils, it can grow on all but very acidic heaths or moorlands. Although still sometimes found in very large colonies, it is declining through ploughing of grassland and hedgerow removal and other intensive agricultural activity. Found throughout the British Isles, perhaps the most widely distributed of our orchids.

#### **Maintenance requirements**

This species requires an undisturbed habitat.

#### **Local Distribution and Early Malvern Area Records**

The first Worcestershire record is from Hurcott Wood in 1792. The only recent local records are from the British Camp Reservoir (2003) and damp grassland near The Gullet (2005) Worcestershire Status: Uncommon

# Neottia ovata (L.) Bluff & Fingerh. Common Twayblade Orchidaceae – Orchid family

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
British Camp Reservoir SO 765394	14.06.03	JJD	
The Gullet SO 764381	15.06.05 1 damp grassland flush.	M Nelson conf. KB	
	15.07.09 not found	PGG	
	<u> </u>	<del>                                     </del>	

Revised March 2016

## Oenanthe fistulosa L. Tubular Water-dropwort Apiaceae – Carrot family



#### **Habitat and National Distribution**

A native perennial of damp or wet habitats usually found in areas of winter flooding. It occurs in meadows, and pastures in the flood plains of rivers, in marshes and fens, and in emergent and fringing vegetation by rivers, streams, canals, ditches, lakes and ponds. Locally frequent throughout the British Isles N to C Scotland, and common in much of E England, it has declined appreciably because of drainage and the re-seeding of old grassland, or its conversion to arable.

Red Data Book status: England 2014 - Vulnerable

#### **Maintenance requirements**

This species requires damp or wet habitats.

#### **Local Distribution and Early Malvern Area Records**

There are C19 records from Malvern Common and 'several places East of the Hills', but its first modern local record is from Castlemorton Common in 1968 (R G Payne). Since then it has been noted there regularly, in its only local site. Worcestershire Status: Very scarce

# Oenanthe fistulosa L. Tubular Water-dropwort Apiaceae – Carrot family

#### Post-1987 Records

Date and quantity	Recorder	Comments
1.7.87 quantity unknown	PGG	
27.4.06 good colony	KB/RM	
15.7.09 good colony	PGG	All in flower, but not as tall as usual 79153947
5.7.14 present	PGG	
01.09.15 not found	PGG/JP	
00 E 00 from top	BCC	
10.7.05 plentiful	KB	787393
5.7.14 small patch	PGG	
24.5.90 fairly common	JJD	
25.6.03 small patch	RM	
24.5.90 quantity unknown	JJD	
23.8.91 1 or 2	PGG	
28.7.02 a few	WFP	
	Field Mtg.	
	1.7.87 quantity unknown  27.4.06 good colony  15.7.09 good colony  5.7.14 present  01.09.15 not found  30.5.88 frequent  10.7.05 plentiful  5.7.14 small patch  24.5.90 fairly common  25.6.03 small patch  24.5.90 quantity unknown	1.7.87 quantity unknown PGG  27.4.06 good colony PGG  5.7.14 present PGG  01.09.15 not found PGG/JP  30.5.88 frequent PGG  10.7.05 plentiful KB  5.7.14 small patch PGG  24.5.90 fairly common JJD  25.6.03 small patch RM  24.5.90 quantity unknown JJD

Revised February 2016

## Oenanthe lachenalii C.C. Gmel. Parsley Water-dropwort Apiaceae – Carrot family



#### **Habitat and National Distribution**

A native perennial found in coastal areas in the uppermost parts of salt marshes, in rough grassland in drained estuarine marshes, by brackish dykes and the lower reaches of tidal rivers. Also found inland in base-rich habitats including marshes, fen-meadows and tall-herb fen. It occurs along all the coasts of the British Isles where, except in N and E Scotland, it is still widespread and locally plentiful. In England it is scattered inland, but sites have been lost to drainage and landfill.

#### Red Data Book England 2014 - Near Threatened

#### **Maintenance requirements**

This species requires wet, open sites.

#### Local Distribution and Early Malvern Area Records

The first Worcestershire record is from Welland Marshes (1845), and it is still locally common on Castlemorton Common and less so on Hollybed Common. Found 'in the wetter areas of Castlemorton Common' by RSK Environment in 2013 although they were non-specific of its location. Worcestershire Status: Rare

## Oenanthe lachenalii C.C. Gmel. Parsley Water-dropwort

Apiaceae - Carrot family

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, beside stream, pool and ditches on damp ground SO 792395	28.8.87 widespread	PGG	
Castlemorton Common, beside stream SO 785393, 786390, 783390	30.5.88 quantity unknown	PGG	
	10.7.05 scattered	KB	786390
	6.7.14 c.12	PGG	783390, in quite a confined area
	01.09.15, 6 seen	PGG/JP	Found in tall vegetation
Castlemorton Common	01.09.15 c.20 seen.	PGG/JP	Scattered
Between Bridge SO 78473913 NW off damp ground and SO 78833940 beside stream			
Castlemorton Common, damp grassland SO 778394, 779390, 779394, 780392, 780394	24.5.90 fairly common	JJD	
	11.8.01 thinly scattered	BSBI Field Mtg. RM et al.	
	11.7.05 thinly scattered	KB	779390, 780394
	11.7.05 locally abundant	КВ	780392
Castlemorton Common, damp	23.8.91 fairly common	PGG	
grassland SO 781389			
Castlemorton Common, damp grassland SO 779389	23.8.91	PGG	
	2.8.07 fairly common	RM/KB/PG G	
		<u> </u>	

# Oenanthe lachenalii C.C. Gmel. Parsley Water-dropwort Apiaceae – Carrot family

Hollybed Common, N edge SO 773378	24.7.01 3 or 4	PGG	
	26.7.06 not seen	КВ	
	44.0.04.11.1	DODLE: II	
Castlemorton Common, grassland SO 778394	11.8.01 thinly scattered	BSBI Field Mtg. RM et al.	

Revised February 2016

# Oenanthe pimpinelloides L. Corky-fruited Water-dropwort Apiaceae – Carrot family

Site/GR	Date and quantity	Recorder	Comments
<b>Golden Valley</b> , SO 769367, 771365	7.6.92 720	Meadow Survey	Not checked
Hollybed Common, SO 773377, 778365	15.7.01 1	PGG	conf. RM
773311, 176303	10.6.06 c.12	KB	778365 conf. JJD
Newland Green, grassland near pond SO 797488	10.4.90 4 or 5	JJD/RM	Grazed by gypsies' ponies before they set seed
	23.6.01 2 in flower	КВ	
Old Hills, damp grassland SO 824492, 825492	24.6.00 c.6 damp grassland	КВ	
	24.6.00 c.8 near field pond	KB	
	24.6.07 c.12	Worcs. Recorders Field Mtg. KB/AWR/JJD	
	13.6.08 c.12	КВ	
Guarlford Road, Barnards Green, grassland SO 80084533	22.6.04 1 or 2	KB	
	12.6.08 2 or 3	КВ	
	40.005 and 40.00	KB/AWR	Opposite Plume of
Castlemorton Common, grassland SO 786388	12.6.05 substantial colony, 100+	ND/AVVK	Feathers, growing with O. silaifolia
	29.5.08 1	RM/KB	Definitely identified
	15.8.09 substantial	KB	
	7.13 plentiful	KB	

## Oenanthe pimpinelloides L. Corky-fruited Water-dropwort Apiaceae – Carrot family



#### **Habitat and National Distribution**

A native perennial found in hay meadows and pastures, especially those that are horse-grazed, and on roadsides. It grows in both damp and dry grassland, often by ditches or ponds, and is the only *Oenothera* species to grow in dry habitats in Britain. Local in England S from Worcestershire and E Suffolk and in Monmouthshire and Co. Clare, and despite many losses it is still present in very large numbers on some roadsides and in unimproved fields.

#### **Maintenance requirements**

This species requires an open habitat.

#### **Local Distribution and Early Malvern Area Records**

There is a solitary local C19 record from Newland Green, where it was last recorded in 2001. There are also colonies on Castlemorton Common, Hollybed Common, the Old Hills and the Guarlford Road. Worcestershire Status: Rare

## Oenanthe silaifolia M. Bieb. Narrow-leaved Water-dropwort Apiaceae – Carrot family



#### **Habitat and National Distribution**

A native perennial of ditches and dykes, marshes, and damp grassland that receives calcareous floodwater in winter. It normally grows in hay meadows and may occur abundantly in Lammas meadows, but it is eliminated in land subjected to even quite modest agricultural intensification or at best survives only as depauperate individuals. Scattered, but decreasing in C and S England, N to SE Yorkshire.

Red Data Book status: UK Near Threatened 2005; England 2015 Locally Common.

#### **Maintenance requirements**

This species requires undisturbed, damp sites.

#### **Local Distribution and Early Malvern Area Records**

There is a C19 record from 'Commons near Malvern' but no other local record until 1992 when a single plant was found on Castlemorton Common by the side of the road leading to The Gullet. It has now been found on this common in a number of places. Worcestershire Status: Very scarce

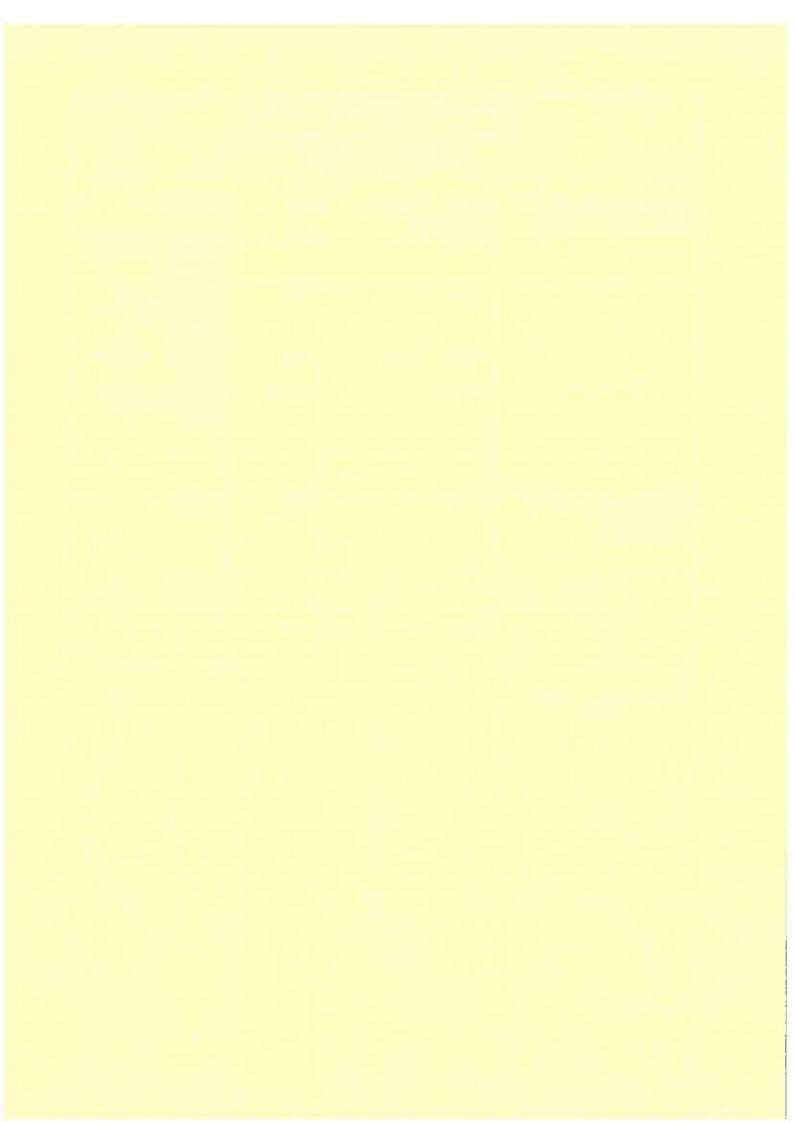
# Oenanthe silaifolia M. Bieb. Narrow-leaved Water-dropwort Apiaceae – Carrot

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, rather dry ditch on S side of road leading to The Gullet, just after it leaves the main road. SO 786389	6.6.92 1	PGG	
	1993 not found	PGG	
	12.6.05 many	KB/AWR	Opposite Plume of Feathers, growing with O. pimpinelloides
	2.8.07 several	RM/KB/PGG	Subject to verification
	5.8.14 1	PGG/RM	Identified by leaves and hollow stem: no seed head
Castlemorton Common, roadside (as above) SO 787390	29.6.93 1	PGG	
Castlemorton Common, rough pasture SO 797394	29.6.93 abundant	PGG	Half the field 50m x 20m overgrown with it. A few seeds forming, but most in full flower. No sign of any other interesting plants. A few plants had strayed into the grassland on the Common.
	2.8.07 abundant	RM/KB/PGG	in field, none on common

# Oenanthe silaifolia M. Bieb. Narrow-leaved Water-dropwort Apiaceae – Carrot

Castlemorton Common, Welland end SO 793395	27.6.08 1 pa square metre	tch, c.1 PGG	Photograph
	15.7.09 4	PGG	First seen on W side of road close to road edge 792243953
	15.7.09 1	PGG	Plant showing late flowering after being grazed or mown 79293955
_	15.7.09 4 or	5 PGG	79283953 fewer than in 2008
	01.09.15	PGG/JP	Dense path 7m square of 30 plants plus 1 nearby.
Castlemorton Common by Hurst Farm pool SO 79603925	14.7.09 1	PGG	In seed

Revised February 2016



### Ophrys apifera Huds. Bee Orchid

Orchidaceae - Orchid family



#### **Habitat and National Distribution**

A native perennial found in calcareous or base-rich, well-drained soils. Habitats include grassland, scrub, railway banks, roadsides, lawns, sand dunes and limestone pavement: also disturbed sites such as quarries, gravel-pits and industrial waste ground. Locally frequent in Britain N to Cumberland and Durham, the Channel Islands and scattered in Ireland, it readily colonises newly available sites.

#### Maintenance requirements

Once established, this species requires an open, undisturbed habitat.

### **Local Distribution and Early Malvern Area Records**

Although often seen on the Silurian eminences, there were no localised records on MHC land until 2000 when two plants were seen by Med Snookes on Castlemorton Common. Worcestershire Status: Scarce

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, short dry grassland beside the minor road leading SSE from B4208 to Welland Stone SO 794394	28.6.00 2 spikes	Med Snookes	20m beyond the house on the right of the road, and 1m in onto the Common
	2004-2011 not seen	KB	
	12.7.2106 not seen	MR	Short marker stake in location described above. No orchid.
Mayfield Road SO 7946 short grass waste area by road (MHC land?)	2007 About 20	KB	

### Oreopteris limbosperma (Bellardi ex All.) Holub Lemon-scented Fern

### Thelypteridaceae - Marsh Fern family



#### **Habitat and National Distribution**

Also known as the Mountain Fern, the pale green leaves of this species have numerous minute glands on the underside, giving off a lemon scent if bruised. It is a native perennial of acidic, peaty or humus-rich soils in open woodland, along drainage ditches and streamsides, and on damp heaths, upland grassland and damp rock ledges. Rather common in W and N Britain, it is absent from most of C, S and E England and scattered in Ireland. Except in the uplands, it is declining largely because of heathland destruction.

#### **Maintenance requirements**

The species requires an undisturbed habitat.

#### **Local Distribution and Early Malvern Area Records**

First recorded locally on the western side of the Worcestershire Beacon, The Gullet and 'Malvern Hill' in the C19, and from Green Valley in 1985, there have been few records from MHC land. It was recorded nearby by PGG from Rowburrow Wood in 1993, but not from Ragged Stone Hill since 1991. Worcestershire Status: Rare

Site/GR	Date and quantity	Recorder	Comments
Ragged Stone Hill, N slope in Winter Coombe SO 760366	1989-1991 3	PGG	
	2002 not found	PGG	
	2003 not found	PGG	
	2004 not found	PGG	
			<u> </u>

## Paris quadrifolia L. Herb Paris Liliaceae – Lily family



#### **Habitat and National Distribution**

A native perennial of moist, calcareous, usually ancient woodland: occasionally in grikes in open limestone pavement. Rather local in Britain, and absent from most of Wales, SW England and N and W Scotland. There has been some decline in SE England since 1930 through destruction and coniferization of woodland. It may spread to secondary woods which are adjacent to primary woodland. Flowers and fruits most freely in the open stages of the coppice cycle, but persists in deep shade and is well adapted to such conditions in managed woodland.

### Maintenance requirements

This species requires moist, open woodland conditions.

### Local Distribution and Early Malvern Area Records

Amphlett & Rae (1909) described this as 'plentiful in the Malvern district', which is certainly not true today. The only locality given was Malvern Wells, perhaps Hornyold Wood near the golf course where it can still be found in its typical habitat. There is only one known site on MHC land. Worcestershire Status: Scarce

### Paris quadrifolia L. Herb Paris

### Liliaceae – Lily family

#### Post-1987 Records

Site/GR	Date and	d quantity	Recorder	Comments
Park Wood, NW SO 763 444	1.5.97 sma	ll patch c.20	PGG	Under hazel with garlic and bluebell ground cover
	2009			Seen by coppicing worker
	2009		HW	2 groups at 762443 and 1 group at 763444?
	15.07.15	7 plants	JP	SO 76211 44346
	04.08.2015 4	10 plants	NQ	
	10.08.2016	4 plants	MR /PGG	P4 - Centre of western boundary of coupe 8, nr to epipactis pupurata SO 76215 44351
	14.9.2016	12 plants	MR/HW	P2 SO 76264 44375 north side of main NE / SW track

07 December 2016

### Persicaria minor (Huds.) Opiz Small Water-pepper

Polygonaceae - Knotweed family



#### **Habitat and National Distribution**

A native annual of wet marshy places, winter-flooded ground beside ponds, lakes and ditches, and damp pastures trampled by stock. On a wide range of soils, from nutrient-rich muds in pastures to sandy and gravelly lake shores. It is very scattered and rather rare over most of Britain and Ireland except N Scotland.

Red Data Book status: UK 2005 Vulnerable; England 2014 Locally Common.

#### **Maintenance requirements**

This species requires wet bare or disturbed ground.

### Local Distribution and Early Malvern Area Records

The first Worcestershire record is from a gravel pit on Malvern Chace (1787), with C19 records from Barnard's Green and Malvern and Welland Commons. Its only extant local site is Castlemorton Common. Worcestershire Status: Very rare

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, 'winter pool' on N edge of common opposite drive to Boulter's Farm. SO 786395	23.8.91 healthy population	PGG	
	13.8.01 quantity unknown	PGG	
	27.8.02 several	KB	
	2.7.03 a few	PGG	
	15.7.05 several	KB	
	25.8.05 no sign	PGG	
	31.7.06 no sign	PGG	
	29.8.09 several	KB	
	22.7.14 not found	PGG	
	01.09.15 not found	PGG/JP	
	19.7.2016 not found	MR	Persicaria maculosa, which it resembles, found.
Castlemorton Common, 'Apium inundatum' pool SO 792396	25.8.91 1 or 2	PGG	
	15.7.09 not found	PGG	

Revised July 2016

### Polygala serpyllifolia Hose Heath Milkwort

Polygalaceae - Milkwort family



#### **Habitat and National Distribution**

A native perennial of acid grassland, moors, heaths and mires which, although frequent throughout the British Isles is declining in S England.

#### Maintenance requirements

This species requires a short sward.

#### **Local Distribution and Early Malvern Area Records**

First recorded locally from Castlemorton Common by Matthews and Towndrow in 1884, it was next noticed by JJD in 1981. It was not seen again until 2005 when it was seen in two places on the Common. Worcestershire Status: Very scarce

Red Data Book 2014 England Near Threatened. LC - UK 2005

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common short grassland on E side SO 793393	04.05.05 quantity unknown	RM	
Castlemorton Common grassland SO 767384	16.06.05 large colony	KB/AWR	Deep-blue flowered

Revised March 2016

## Potentilla argentea L. Hoary Cinquefoil

Rosaceae - Rose family



#### **Habitat and National Distribution**

A native perennial of grassy swards on pastures and commons, banks, tracks and waste ground. Local and decreasing in the Channel Islands and Britain N to Scotland, it is common only in E England: in Worcestershire it is nearly confined to the light sandy district of the N, often associated with *Arabis glabra*, *Spergularia rubra*, *Senecio sylvaticus* and *Ornithopus perpusillus*.

#### **Maintenance requirements**

This species requires open, dry, free-draining sandy or gravelly soil.

#### **Local Distribution and Early Malvern Area Records**

The first Worcestershire record was from Holt Castle in 1787, and there were a number of C18 and early C19 records from Chase End Hill, North Hill and Raggedstone Hill. It was not noticed again locally until 2008 when it was found on a roadside verge at Hollybush. Worcestershire Status: Rare

Red Data Book UK 2005 NT; England 2014 NT.

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Hollybush, verge of A 438 SO 756367	20.5.08 masses	PGG	Carpeting c.30 m of verge, VC 36
	2.6.09 masses	PGG	
	Masses	PGG	Carpeting the verge, VC 36
	13.6.12 masses	PGG	Ditto
	18.6.13 many	PGG	But not flowering yet
	2.6.14 abundant	PGG/MJ	
			NOT MHC LAND

Revised February 2016

## Potentilla tabernaemontani Asch. neumanniana Spring Cinquefoil

Rosaceae - Rose family



#### **Habitat and National Distribution**

A native perennial of undisturbed, dry, basic, open habitats including coastal limestone rocks; inland rocks, crags and screes on limestone and other basic rocks; and dry chalk grassland. It is very local in Britain and has been lost from many sites in S England, particularly those on chalk and sand.

Red data Book status: UK 2005 and England 2014 Locally Common but declining.

#### **Maintenance requirements**

This species requires open undisturbed ground.

### **Local Distribution and Early Malvern Area Records**

The first local record is from limestone rocks on the western side of the hills (1825) since when it has been seen regularly in that vicinity as well as on Hangman's Hill and Hollybush. Worcestershire Status: Very rare

## Potentilla tabernaemontani Asch. neumanniana Spring Cinquefoil

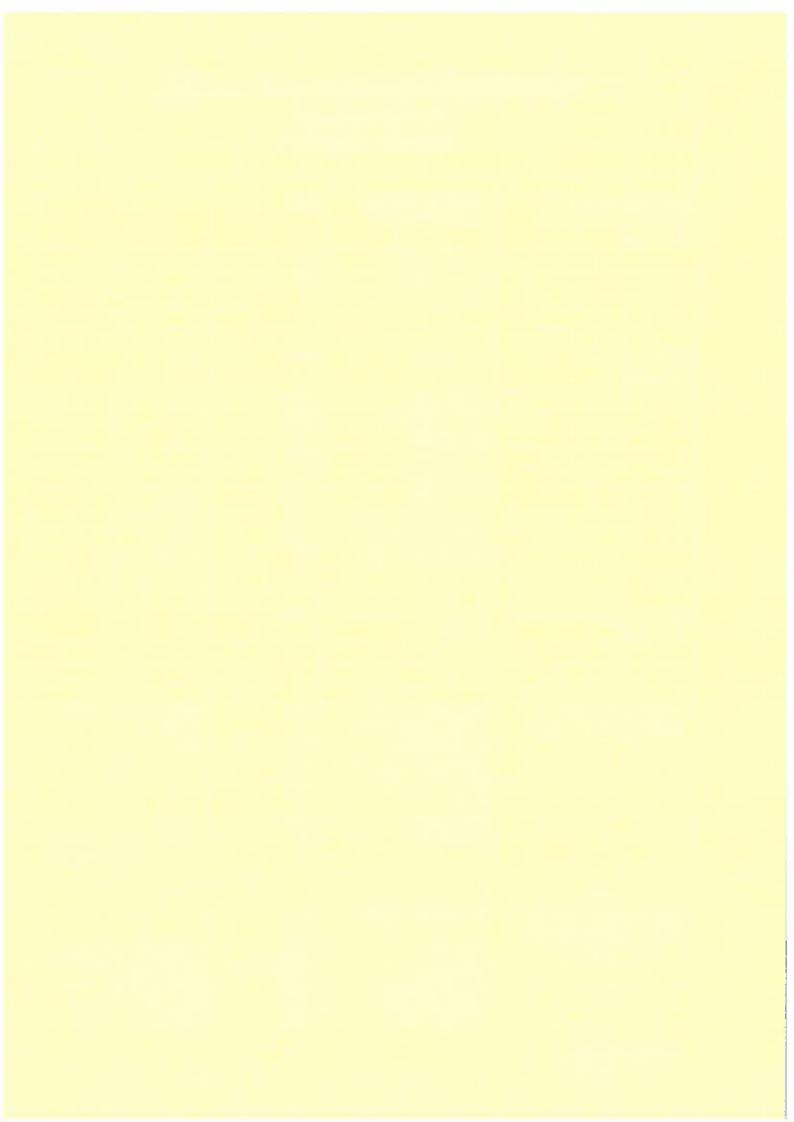
Rosaceae – Rose family

Site/GR	Date and quantity	Recorder	Comments
Hangman's Hill, herb-rich turf on well-drained SE-facing slopes SO 765387, 766388	9.5.87 densely matted patches, several square metres	PGG	
	15.5.98 very good	PGG	
	28.3.99 very good	PGG	
	6.5.00 quantity unknown	PGG	
	17.2.01 good	PGG	
	16.3.02 good	PGG	
	Mar/Apr 2003	KS	
	10.5.05 locally abundant	KB/RM	765387
	16.6.05 plenty	PGG	
	1.4.06 plenty	PGG	
	29.6.09 locally abundant	PGG	
	12.4.11 locally abundant	PGG	Finest ever seen by PGG
	30.3.12 good colony	PGG & JG	
	17.5.13 good colony	PGG & Katie Stephen	
	2015 good colony		
	10.05.2016 abundant	PGG/MR	
Hangman's Hill, hanging in tufts/clumps from rocks (Black Rocks) at top of hill SO 764390, 765387, 762392	4.5.90 30-40	PGG	Some large clumps, some very small
	1998 quantity unknown	PGG	
	28.3.99 very good	PGG	
	6.5.00 very good	PGG	
	17.2.01 very good	PGG	
	11.8.01 large patch	BSBI Field/Mtg.	
	16.3.02 very good	PGG	
	Mar/Apr 2003	KS	
	24.4.05 good	PGG	
	1.4.06 good	PGG	
	15.4.09 100+	PGG	
	12.4.11 good colony	PGG	
	30.3.12 very good colony	PGG & JG	
	10.5.13 ditto	PGG	Some bramble invasion
	2013 a few scattered	PGG	762392 VC36
	2013 good	PGG	766388

## Potentilla tabernaemontani Asch. neumanniana Spring Cinquefoil

Rosaceae - Rose family

<u></u>			
Eight Oaks, at top of calcareous bank facing SW SO 777383	11.4.95 very few very small plants/patches	PGG	
	24.4.06 not found	KB	<u> </u>
	10.5.13 not found	PGG	
	20.04.14 not found	JP	
Clutter's Cave, turf	11.4.97 good	PGG	VC 36
SO 762393	14.3.98 good	PGG	
	10.5.00 abundant	PGG	
	Mar/Apr 2003	KS	
	24.4.05 good	PGG	
	20.4.09 good	PGG	
	10.5.13 good	PGG	VC 36
	16.3.14 several patches	PGG	SO 7624 3935
	19.10.15 c.20 in flower	PGG	VC36
	20.04.15 29 clumps	JP	SO 76261 39274
British Camp Rsvr, dam wall SO 766398	11.8.99 1 or 2 small patches	PGG	
Hollybush, S slopes of Midsummer Hill SO 758370	20.5.08 good sized patch, several square metres	PGG	VC36 very short rabbit- grazed turf
<u></u>	8.4.09 as above	PGG	Ditto
	18.11.10 several in flower	PGG	
	29.12.11 still a few in flower	PGG	
	4.13 many	PGG	
	2014/15 many	JP	At least 9 square metres in v short rabbit grazed area.
Broad Down, short turf dotted around hill top SO 765394	9.5.87 2 or 3 patches	PGG	
around fill top 30 700094	1998 10-50	PGG	Varies from year to year
	15.4.09 a few	PGG	Small plants
	12.4.11 plentiful	PGG	VC 36 & VC 37
	10.5.13 plentiful	PGG	Ditto



## Ranunculus auricomis Goldilocks Buttercup Ranunculaceae



#### **Habitat and National Distribution**

A perennial, characteristic of deciduous woodland on chalk, limestone and other basic soils. It also grows in scrub, on roadsides and in churchyards, and rarely on open moorland sheltered by boulders and on montane ledges. Frequent to locally common.

#### **Maintenance requirements**

### **Local Distribution and Early Malvern Area Records**

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Park Wood SO 763442	2015 quantity unknown	HW	"Growing on the edge of the wood adjacent to the Purlieu (not in a coupe). There is quite a lot around here in scattered localities" (2016 note)
Castlemorton Common No detail	2005 quantity unknown	КВ	1

1 http://www.wbrc.org.uk/WORCRECD/Issue%2019/castlemorton\_common\_flora\_octobe.htm

Revised September 2016

# Ranunculus parviflorus L. Small-flowered buttercup Ranunculaceae – Buttercup family



#### **Habitat and National Distribution**

A native annual of dry disturbed habitats on a range of neutral and calcareous soils, typical sites including broken turf on cliff edges, open, droughted slopes and banks, rabbit scrapes, anthills, tracks, poached gateways, building sites and gardens. Formerly much more common, it is now most frequent near the coast in SW England, S Wales and the Channel Islands, a southwestward retreat in Britain having already taken place by 1930. It is local elsewhere N to Yorkshire and SE Ireland, and rare and declining in Ireland.

#### **Maintenance requirements**

This species requires dry open ground. Seeds appear to be long-lived, and populations may reappear after disturbance or persist for many years. Lowland.

### Local Distribution and Early Malvern Area Records

The first county record was from 'Malvern Hill' in 1787, and there are C19 records from 'dry banks, Malvern Hills' and 'about Barnards Green', and also from Newland Common in 1909. It has recently been found growing in a garden lawn in Barnards Green, but currently the only known sites on MHC land are Castlemorton Common and the Old Hills. Worcestershire Status: Scarce

# Ranunculus parviflorus L. Small-flowered buttercup Ranunculaceae – Buttercup family

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, anthills SO 789396	17.3.05 several	KB	
Old Hills, trackside SO 828482	30.5.00 1	KB	
	21.4.05 2	KB/A W Reid	
Hollybed Common/Golden Valley	21.05.06 locally abundant	Worcs Recorders Field Mtg JJD et al	
Hollybush Quarry SO 760370 NOT MHC LAND	20.05.08 quite dense clumps in quite small area.	PGG	VC36 (Vice County 36 – Herefordshire) photograph

07 December 2016

# Ranunculus peltatus Shrank Pond Water-crowfoot

Ranunculaceae – Buttercup family



#### **Habitat and National Distribution**

A native perennial, sometimes annual, which grows in slow-flowing streams and rivers, canals, coastal lagoons, shallow lakes, ditches, ponds and dune-slacks. It is frequent throughout most of the British Isles.

#### **Maintenance requirements**

This species requires unpolluted still or slow-flowing water.

#### Local Distribution and Early Malvern Area Records

The first local record dates from 1884, when it was noted as growing in ponds in the area between Newland and Castlemorton. In 1978 it was noted from damp hollows on Castlemorton Common (P. Day and F. Fincher) and in 1981 by JJD. Since then, it has been found again on Castlemorton Common and also in two places at Barnards Green. Worcestershire Status: Rare

# Ranunculus peltatus Shrank Pond Water-crowfoot

## Ranunculaceae – Buttercup family

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, pool at Hurst Farm SO 795392	8.5.90 quantity unknown	PGG	Conf. RM/WAT
	23.5.12 plentiful	KB	796394
Castlemorton Common, small pool in NE corner beside Welland Road SO 793395	21.4.91 quantity unknown	PGG	'Apium inundatum pool' on W side of road
	9.5.91 quantity unknown	PGG	3 other pools on E side of road
	27.4.06 several	KB/AWR	
Castlemorton Common, pool to W of Hurst Farm SO 791392	14.6.02 scattered	KB	
	2.7.03	RM	Scattered across pool
Castlemorton Common, stream SO 784391	25.6.02 small patch	RM	
Castlemorton Common, pool to E of road leading to Welland Stone SO 797395	10.5.05 frequent	KB/RM	
	2.8.07 several	KB/RM/PGG	
Barnards Green, dried-up pool/ditch beside Guarlford Road SO 802454	10.6.04 small patch	KB	
	2005 locally frequent	КВ	
Barnards Green, The Flodder, small pond at Hall Green SO 799454	6.6.04 locally frequent	КВ	Conf. WAT
	2006 not seen	KB	
	2011 not seen	КВ	Pool dredged by MHC in summer, 2011.
	7.13 Plentiful	KB	Also seen by RM
	6.14 Plentiful	КВ	
	O. F.		

# Ranunculus trichophyllus Chaix Thread-leaved Water-crowfoot Ranunculaceae – Buttercup family



#### **Habitat and National Distribution**

A native annual or perennial which grows in shallow, still or very slowly flowing water, mostly mesotrophic or eutrophic. Most often found in ponds, dune-slacks, canals and drainage ditches, it is also found in larger sites if they are sheltered. It is scattered but often common throughout the British Isles.

#### **Maintenance requirements**

This species requires unpolluted shallow still or slowly flowing water.

#### **Local Distribution and Early Malvern Area Records**

Noted as growing on Castlemorton Common and at Welland in 1909, it was not subsequently recorded until 1991, since when it has been noted from Castlemorton Common and Berrow Downs. Worcestershire Status: Rare

# Ranunculus trichophyllus Chaix Thread-leaved Water-crowfoot Ranunculaceae – Buttercup family

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, small stream opposite Hunter's Hall Farm SO 783390, 785391	29.5.91 several	PGG	Stream dredged and dug out
	3.5.93 quantity unknown	PGG	
	10.5.05 plentiful	KB/RM	785391
Berrow Downs, 'newt' pond SO 767382	29.4.93 quantity unknown	PGG	Conf. JJD
Berrow Downs, dried-up hollow SO 767384	2.7.91 quite a large patch	PGG	Conf. RM/WAT. Quite heavily grazed
110110W SO 767364			neavily grazed
Eight Oaks, pool SO777383	8.7.14 many	PGG	3 in flower

Revised March 2016

# Rosa agrestis Savi Small-leaved Sweet-briar Rosaceae – Rose family





#### **Habitat and National Distribution**

A native perennial found in open scrub on dry, calcareous grassland overlaying chalk or limestone, populations often consisting of only a few individuals. It is very scattered and mostly rare in Britain and Ireland, N to S Scotland, but is frequent mainly in parts of C Ireland. The species has been lost from some sites due to ploughing and from others through a reduction in grazing leading to over-shading, but it is not clear if overall it is stable or declining, as its distribution is not yet fully documented.

Red Data Book status: UK 2005 & England 2014 Nationally Scarce, Near Threatened.

#### Maintenance requirements

This species requires scrub clearance to keep an open habitat.

#### Local Distribution and Early Malvern Area Records

There are a number of references to C19 records in the Malvern district, but the only modern one is for a single bush from Malvern Common in 1989, which is still there. There is only one other site in Worcestershire, also a single bush, discovered in 1998. Worcestershire Status: Very rare

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Malvern Common, scrubby grassland SO 7796 4416	5.9.89 1	PGG	det. A L Primavesi & G G Graham
Between track off Peachfield Road and railway line. SW up path from bend in road, on crest of bank adjacent to railway approx. 5m from fence	1990 1	PGG	
	1991 1	PGG	
	8.04 1	PGG	Needs scrub clearance
	6.05 1 in flower	КВ	Possibly another small bush or bushes nearby
	8.05 1	PGG/RM	Needs scrub clearance
	8.06 2	PGG	A new seedling seen
	8.07 2	PGG	New seedling still present
	6.09 2(?)	PGG	I possible seedling present
	5.8.14 2 (?)	PGG/RM/JB/ BB	Swamped by surrounding scrub, bracken and bramble
			Clearance work carried out as advised by RM Oct. 2014
	10.08.2016 2	MR/PGG	1 mature, sprawling and woody shrub plus one young plant immediately south. Marked both with plastic strips.

Revised March 2016

# Rumex pulcher ssp. pulcher L. Fiddle Dock

Polygonaceae - Knotweed family



#### **Habitat and National Distribution**

A native or naturalised biennial or short-lived perennial of dry coastal pasture and slightly disturbed grassland on commons, village greens, churchyards, old pastures and roadsides, mainly on lighter soils and often where the habitat is grazed or trampled. Locally frequent in Britain N to N Lincolnshire and Anglesey, Co. Carlow and W Cork, and native in S and E England, but a long-naturalised but rare introduction in the N.

#### **Maintenance requirements**

This species requires short grazed or trampled turf.

#### **Local Distribution and Early Malvern Area Records**

There are local C19 records from Little Malvern and Malvern Wells and also from Castlemorton churchyard where it is still to be found. It also grows on Castlemorton Common and Hollybed Common. Worcestershire Status: Rare

# Rumex pulcher ssp. pulcher L. Fiddle Dock

# Polygonaceae – Knotweed family

Post-1987 Records					
Site/GR	Date and quantity	Recorder	Comments		
Castlemorton Common, 'The Captain's' near the lane by Hurst Farm. Rough pasture used by horses SO 795391	1.7.87 7	PGG	All near the footpath		
Castlemorton Common, beside Hurst Farm pool SO 794392	23.8.91 4 or 5	PGG			
	14.7.09 not found	PGG			
<b>Eight Oaks</b> , short turf at the road junction SO 775380, 777383	19.7.92 c.20	PGG			
	9.6.05 several	KB	775380		
	14.7.09 4	PGG			
	6.9.11 5	PGG			
	22.7.14 not found	PGG/BB			
		-			
Castlemorton Common, N edge of W end of common SO 776394, 777395	16.8.94 c.10	PGG			
	11.8.01 c.50	BSBI Field/Mtg. RM et al.			
	14.7.09 24	PGG	7764539516 closely clustered under hedgerow ash tree		
<del>-</del>		1.			

# Rumex pulcher ssp. pulcher L. Fiddle Dock

# Polygonaceae - Knotweed family

Hollybed Street, in E corner behind pond, dry grassland SO 779373/4	12.10.96 small concentrated patch	PGG	
	15.7.01 2	PGG	
	28.7.02 quantity unknown	WFP Field Mtg.	
	7.9.03 quantity unknown	PGG	
	29.7.05 small patch	KB	
	11.6.06 several	KB	
	5.7.09 50+	PGG	
	6.9.11 c.30	PGG	
	6.2013 1	RSK	
	22.7.14 c.30	PGG/BB	
	10.8.2016 1	MR/PGG	
Hollybed Common, W bank of marl pit SO 777377	8.02 quantity unknown	PGG	
	26.7.06 1	KB	
	5.7.09 8	PGG	
	6.9.11 6	PGG	
	01.09.15 3 or 4	PGG/JP	
Castlemorton Common, grassland SO 793396	6.9.05 1	KB	

Revised August 2016

### Sagina nodosa (L.) Fenzi Knotted Pearlwort Caryophyllaceae – Pink family



#### **Habitat and National Distribution**

A native perennial of damp, rather open habitats, principally in mires and springs irrigated with base-rich water, but also in calcareous, sandy habitats, especially dunes and dune slacks and sometimes calcareous grassland. It is found throughout the British Isles, but is only locally common and has suffered a widespread decline in S England through loss of open calcareous habitat.

#### **Maintenance requirements**

This species requires and open habitat.

#### **Local Distribution and Early Malvern Area Records**

The first Worcestershire record is from Hanley, near Malvern, in 1817. There are a number of C19 records from the Malvern district, including the western side of the Worcestershire Beacon; The Wych, Welland Common; and a rill between Worcestershire Beacon and Sugarloaf Hill. Although recorded from Castlemorton Common and Hollybush Common in 1991 by J Jones, recent searches have proved unsuccessful. Worcestershire Status: Very rare.

Red Data Book - UK 2005 LC; England 2014 VU.

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common Damp grassland near water. SO 788394, 787395, 779390	18.08.91, 20.08.91 quantity unknown.	Janet Jones	
Hollybed Common Grazed grassland SO 776377, 778377, 776375, 778375	11.09.91 quantity unknown	Janet Jones	
	2006 and later, not found	KB	
	_		

Revised March 2016

# Salix cinerea ssp. cinerea L. Grey Willow

Salicaceae - Willow family



#### **Habitat and National Distribution**

A native shrub or small tree found in base-rich marshes and fens at low altitudes, and the predominant ssp. in East Anglia and Lincolnshire, but also very scattered elsewhere in Britain and Ireland. On the W edge of its range it becomes more difficult to distinguish from ssp. *oleifolia* (the most common *Salix* throughout lowland Britain), but it is not clear if this is because of clinal variation or hybridisation.

#### Maintenance requirements

This species requires a permanently wet site.

#### **Local Distribution and Early Malvern Area Records**

The first local record was, vaguely, from 'between the (Malvern) Hills and the Severn' in 1842. No further sighting was recorded until 2002 when, during a Worcestershire Flora Project field meeting, several trees were discovered beside a stream on Castlemorton Common. Worcestershire Status: Very rare

Site/GR	Date and quantity	Recorder	Comments  Det. WAT conf. R D Meikle	
Castlemorton Common side of wooded stream S0 769386, 767386	28.7.02 several small trees	WFP Field Mtg.		
	08.08.05 ditto	КВ		

# Samolus valerandi L. Brookweed

Primulaceae - Primrose family



## **Habitat National Distribution**

A native perennial usually growing in very open mesic, often calcareous or somewhat saline soils in small colonies by permanently wet and often seasonally flooded springs, flushed sea cliffs, ditches, lagoons and lake shores. Found on the coasts of the British Isles, except NE Scotland, it is frequent in E England but is otherwise rare inland. Populations are often impermanent, colonizing the small and transient specialised habitats that change as spring lines and water levels shift. Brookweed may take several years to flower. Declining inland, perhaps due to drainage.

## Maintenance requirements

This species requires a wet, open habitat.

# **Local Distribution and Early Malvern Area Records**

The first local record, dating from the C19, is from 'East of the hills'. Recently it was known only from alder carr on National Trust land at Hollybush Roughs, but now seems to have been shaded out there. However, in 2011 it was found on MHC land beside a pond at Hollybed Street. Worcestershire Status: Rare

# Samolus valerandi L. Brookweed

## **Primulaceae** – Primrose family

## Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Hollybush Roughs, alder carr at the junction of the lane leading S from The Gullet and A438 (Ledbury-Tewkesbury) SO 763369	11.8.91 c.12	PGG	
	30.5.00 probably c.20+	PGG	Plants very tall and leggy: are being shaded out after the alder wood was felled in 1998. Now intense competition from other plants and new growth from tree stumps
	2005 not seen	KB	Shaded out
Hollybed Street, beside pond, SO 778377	2.8.11 3 or 4	KB	77853774. Western bank, seen also by PGG
	14.8.12 2	PGG	
	22.7.14 not found	PGG/BB	
	27.8.14 not found	PGG	
	01.09.15 not found	PGG/JP	

Revised March 2016

# Scieranthus annuus L. Annual Knawel

Caryophyllaceae - Pink family



#### **Habitat and National Distribution**

A native annual or biennial found in soil pockets on summer-droughted rocks, and on disturbed sandy soil on heaths, commons, waste places, arable fields and, rarely, river or marine shingle. It is scattered over most of the British Isles, but rare in Ireland and N Scotland, it has declined significantly throughout its range with most losses having occurred since 1950.

Red Data Book status: UK 2005 & England 2014 – Endangered. NERC / UK BAP listed 2010.

#### **Maintenance requirements**

This species requires dry, open ground.

### **Local Distribution and Early Malvern Area Records**

The first local record dates from 1774, when it was noted as growing near the Gold Mine. In C19 it was recorded only from between North Hill and the Worcestershire Beacon, and is now present in a few places on the Malvern Hills, including quarries. Its only extant Herefordshire site is that on the Hills .Worcestershire Status: Very scarce.

# Scleranthus annuus L. Annual Knawel Caryophyllaceae – Pink family

Site/GR	Date and quantity	Recorder	Comments
Hangman's Hill, SE-facing slopes, short well-drained herbrich turf SO 766388	9.5.87 a few	PGG	
	29.6.09 a few	PGG	On the barest patches of ground
	30.3.12 a few	PGG & JG	
	17.5.13 a few	PGG	
	10.05.2016 a few	PGG / MR	
Swinyard Hill, ridge SO 761383	10.8.93 1 or 2	PGG	
701303	8.6.09 c.12	PGG	Herefordshire VC36
The Wych, just N in short turf on and by rocky tracks SO 769439	11.6.89 quantity unknown	PGG	VC36
Beacon Road Short turf path side SO 769 442	10.05.2016 a few	PGG / MR	
Ivy Scar Rock, beside the path on dry bare ground SO 773464	20.5.90 quantity unknown	PGG	
on ary bare ground do 110404			
Earnslaw Quarry, beside path leading from B4218 to the quarry SO 772446	31.5.90 quantity unknown	PGG	

# Scleranthus annuus L. Annual Knawel

Caryophyllaceae - Pink family

	aryopriynaocae i iiik		
Lower Dingle, rocky ground beside the path SO 764455	1.6.90 quantity unknown	PGG	
-	6.04 quantity unknown	PGG	
	4.7.09 not found	PGG	
Pinnacle Hill	7.6.90 quantity unknown	PGG	
SO 76794204 and 76784199- 76814164			
	6.04 quantity unknown	PGG	
	17.5.09 c.5	PGG	76794204, tiny plants spread along 400m of the hill crest
	17.5.09 c.7	PGG	Ditto, 76784199 - 76814164
	10.5.13 a few	PGG	
	06.2013 100+	RSK	Along ridge path
Gold Mine, very short grass on rocky outcrops SO 769441	1.5.91 quite a lot	PGG	
	2.6.99 lots	PGG	
	22.5.14 a few	PGG	
Further up Beacon Road SO 770452	22.5.14 2 or 3 patches	PGG	
	21.5.14	PGG/NQ/ BB	
Berrington's Quarry, slag heap by entrance to quarry SO 769412	13.4.93 quantity unknown	PGG	
	2.7.09 not found	PGG	
Dingle Quarry, above small 'cliff' in quarry SO 765456	27.5.96 plentiful	PGG	

	Scleranthus a		
	Caryophyllaceae –		
Jubilee Hill SO 76884250	6.6.06 plenty	PGG	
	17.5.09 c.30	PGG	1 or 2 in Herefordshire VC36, on very crest of hill

Revised March 2016

# Solidago virgaurea L. Goldenrod

Asteraceae - Daisy family



#### **Habitat and National Distribution**

A native perennial of free-draining and usually acidic (occasionally basic) substrates in a wide range of habitats. In the lowlands these include open woods, hedge banks, heaths and coastal cliff tops: in the uplands, cliff ledges, rocks by waterfalls, rocky streamsides, tall-herb communities in gullies, montane grass-heath and fell-field. A very variable species with many different ecotypes, it is frequent over most of Britain except in parts of C England, C Ireland and the Channel Islands. It has declined since 1950, populations in England disappearing due to habitat loss. Worcestershire Status: Very scarce

#### **Maintenance requirements**

This species requires open, free-draining sites.

#### **Local Distribution and Early Malvern Area Records**

There are C19 records from North Hill and Ivy Scar Rock, from which the species was last seen in 1993. It may no longer be present locally.

Red Data Book status;

England 2014 - Near Threatened, UK 2005 - Locally Common

# Solidago virgaurea L. Goldenrod

Asteraceae – Daisy family

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
North Hill, Ivy Scar Rock rocky ledges as the lower E slopes of the hill bend round into Happy Valley SO 772460, 772461	27.8.89 100+	PGG	
	1993 c.20	PGG	
	1/8/2016 c 20 4 large clumps plus scattered individuals	MR	SO 7732 4637
North Malvern Quarry, SO 771468	11.8.91 2	PGG	In danger of being disturbed by excavations
Walmspout Coppice	23.8.05 1	PGG/RM	
Dry S facing acidic bank SO 761467			

08 December 2016

## Sphagnum subnitens



#### **Habitat and National Distribution**

Mosses reproduce by spores, like ferns, but whilst they have stems and leaves they lack roots. They have instead modified stems forming root-like structures known as rhizoids. They form a group *Musci* within the order *Bryophyta*.

#### **Maintenance requirements**

Occurs on wet, more or less acidic, mainly peaty substrates, mostly in open or lightly shaded places, where it typically forms low, pure hummocks. Most records are from wet heaths or mires (where usually associated with flushes and mainly absent from flat areas of open oligotrophic mire).

#### **Local Distribution and Early Malvern Area Records**

No Sphagnum records from the area were given in Amphlett & Rea (1909). Worcestershire Status: (?)

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Swinyard Hill, flush SO 764381	Unknown	PGG	Endangered by willow scrub encroachment
	15.7.09 several mounds	PGG	Certainly no less
	5.7.14 several mounds	PGG	Getting overgrown
	5/10/16 several mounds	Wildlife Panel Outdoor meeting	Some willow clearance has occurred and more planned.

Revised October 2016

# Spiranthes spiralis (L.) Chevall Autumn Lady's-tresses Orchidaceae – Orchid family



#### **Habitat and National Distribution**

A native perennial found in unimproved, well-grazed permanent grassland on dry calcareous soils, especially on chalk and limestone, and on cliff-tops and sand dunes; also on lawns and, rarely, on less acidic heathland. Locally frequent in the British Isles N to NE Yorkshire, the Isle of Man and Co. Sligo. Extinct in many inland sites, this species is declining because of agricultural intensification and under-grazing. It can exist for many years without flowering, appearing in 100's when grazing or mowing ceases.

Red Data Book Status; UK 2005 and England 2014 Near Threatened

#### **Maintenance requirements**

This species requires an undisturbed habitat with regular grazing or mowing.

## **Local Distribution and Early Malvern Area Records**

There are a number of C19 records from the Malvern area, including one from Link Common in 1886. It was feared to be lost until found on Castlemorton and Hollybed Commons in 1995, since when it has been recorded there in varying numbers every year except 1997 (when it may not have been checked).

Worcestershire Status: Very rare

# Spiranthes spiralis

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, beside road leading from B4208 to Welland Stone and stretching into the common, short dry grassland SO 794394, 792394,792395,793393,793394	3.8.95 c.200 spikes	КВ	Some had finished flowering, others in perfect condition
	2.9.96 135 spikes	PGG	
	6.9.98 plenty	PGG	
	14.8.99 100+	PGG	
	29.8.00 quantity unknown	PGG	More widespread, now also present beside B4208 main road at SO 792394
	11.8.01 c.25, scattered	BSBI Field Mtg. RM et al.	
	25.8.02 very many	KB	
	27.8.03 c.35	KB	
	8.8.04 c.200	PGG	
	19.8.04 c.80	КВ	
	18.8.05 7	KB	79383939
	23.8.05 80+	PGG/RM	Has spread across to main road
	30.8.06 c.35	KB	793394-794394
	30.8.06 10	KB	79383939
	18.8.07 c.30	KB	79393940/79403941
	21.8.07 plentiful	PGG	
	20.8.08 11	KB	
	8.08 several	PGG	
	18.8.09 70+	КВ	Both sides of road to Welland Stone
	24.8.09 c.80	PGG	
	23.8.10 c.60	КВ	Both sides of road to Welland Stone
	16.8.11 40	PGG	All but one on W side of road.
	18.8.12 22	KB	
	20.8.13 none seen	KB	
	1.9.13 4	КВ	7934739514 3 7947439422 1
	6.9.13 124	JB	
	14.9.13 c.25	Carter Ecological	Both sides of road
	27.8.14 abundant	MHC Wildlife Panel	Spreading across to main road in considerable number

# Spiranthes spiralis

SO 791391	5.9.14 c.20	JB	Further S on the E side of the B4208 near Bakers Farm
SO 79293 39545	01.09.15 c.10	PGG/JP	Found only at areas of short turf beside vehicle track off road. Grass coarser and longer than in previous years due to reduction in cattle grazing. MHC's belted Galloway cattle graziers has since carried out targeted grazing at this site (autumn 2015). 2014 was a peak year following the grass cutting.
	17.08.2016	P.I.G.	3 flower spikes were found about 200 yards east of the B4208 and about 30 yards south of the common boundary with Welland. None were seen closer to the road. SO 794396 area.*
Hollybed Common, central area of common, short dried-up turf. Car parked by Hollybed St. fishing pool; plants either side of track leading straight to Hills, for about 30m. SO 777375, 778376, 777378,778375	9.9.95 c.16 spikes, some just coming out	PGG	
	15.9.96 2 spikes	PGG	S of 9.9.95 patch above, well spaced out
	29.8.00 c.20 spikes	PGG	
	17.8.01 7 spikes	BSBI Field Mtg. RM et al.	
	7.9.04 10	PGG	
	4.9.05 none found	PGG	
	31.7.06 not found	PGG	
	20.8.06 not found	PGG	
	8.07plentiful	Dr A Hughes	
	21.8.07 not found	PGG	
	8.9.07 not found	KB	
	2008 not found	PGG	
	15.8.09 10	AWR	77803754, 77743780, 77733778
	17.8.09 87	KB	777375 (67), 777376 (20)

# Spiranthes spiralis

24.8.09 c.50	PGG	More widespread than ever before – E towards pond	
6.9.11 1	PGG	After careful search	
21.8.13 11	PGG	Still in bud	
23.8.13 none seen	PGG/JB		
27.8.14 3	MHC Wildlife Panel		
01.09.15	PGG/JP		
30.08.2016 4 spikes	MR/PGG	4 diminutive plants. 1 in bud, I finished flowering, 2 in full flower.*	

2015 Comment. NQ did 2 line transects across the Lady's-tresses site comprising of 40 measurements .Av. 8.4cm, max 20cm. min 1 cm. Tall rushes were omitted as they were not being grazed in comparison with grasses. Tall rushes 50-60cm.

MG grazed (electric fenced enclosure) early Nov. – fortnight-ish)

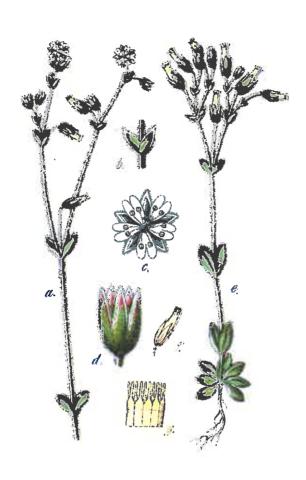
#### \*2016

Very poor season. Hollybed had perfect sward height conditions but Castlemorton was mixed, however neither produced good results. The few plants were very small / stunted. Winter had been mild with a wintery, cold early spring resulting in a late start to the growing season. Mixed summer with both wet periods and hot, dry, sunny spells.

Revised August 2016

## Stellaria pallida (Dumort.) Crép. Lesser Chickweed

Caryophyllaceae - Pink family



#### **Habitat and National Distribution**

A native short-lived annual of open conditions on light, well drained soils which near the coast is found in sand dunes, shingle and in other sandy or stony places. Elsewhere, it occurs in waste and cultivated ground and gravel- and sand-pits: also on tracks in conifer plantations, and sometimes in lawns and on walls. It is locally frequent in England, Wales and the Channel Islands, scattered in Scotland and Ireland.

#### **Maintenance requirements**

This species requires well-drained, open conditions.

### Local Distribution and Early Malvern Area Records

This plant was not identified in the county until as late as 1974, and was first recorded from the Malvern Hills in 1993. It has since been found to be locally frequent in suitable sites both on the Hills and Castlemorton Common. Worcestershire Status: Scarce

# Stellaria pallida (Dumort.) Crép. Lesser Chickweed

# Caryophyllaceae – Pink family

Site/GR	Date and quantity	Recorder	Comments
Chase End Hill, loose soil on S slopes SO 759351, 760354	18.2.93 many small patches	PGG	Conf. RM
	2005 quantity unknown	Carter Ecological	7613 3540 east side of trig point. With Blinks
Ragged Stone Hill, top of hill on old anthills or rabbit scrapes SO 759 365, 760365,	13.3.93 quantity unknown	PGG	Conf. WAT
SO 7593 3633	2006 quantity unknown	Carter Ecological	Along path / county / site boundary with Blinks
Swinyard Hill SO 762 386	2005	Carter Ecological	3 spots along ridge SO 7617 3867 SO 7617 3835 SO 7618 3830
Hangman's Hill, SE slopes SO 765388	13.3.93 plentiful	PGG	Conf. RM/WAT
Hangman's Hill, top of hill below rock with <i>Potentilla</i> neumanniana on it SO 763390	13.3.93	PGG	
Eight Oaks, Castlemorton Common, triangle of short turf by road junction SO 777383	11.4.95 quantity unknown	PGG	
Castlemorton Common, E	21.4.95 good sized patch	PGG	
corner in turf by the pool nr. The Captain's SO 797393			

# Stellaria pallida (Dumort.) Crép. Lesser Chickweed

# Caryophyllaceae - Pink family

Castlemorton Common, on 2 ant hills close to NE of the vehicle bridge in centre of Common SO 788396	14.4.96 quantity unknown	PGG	
British Camp / Broad Down SO 760 400	2005	Carter Ecological	7 spots on the ramparts, 4 on Shire Ditch (see map)
	5.2013 a few	RSK	'A few plants of this annual were found on the stone steps on the ascent between the British Camp Car Park and the hill top in May.'
	2005	Carter	2 locations, one immed.
Pinnacle Hill SO 7624 4100	2005	Ecological	north of other.
SO 7637 4043	2005	Carter Ecological	
Berrington's Quarry, Little Malvern slag heap on N side of entrance to quarry SO 769412	13.4.93 a few patches	PGG	Conf. WAT
Perseverance Hill	2005 unknown quantity	Carter	Northern slope by Shire
SO 7695 4343	2003 unknown quantity	Ecological	Ditch
Upper Beacon Road SO 7690 4445	2005 unknown quantity	Carter Ecological	Between path and Shire Ditch

# Taraxacum palustre (Lyons) Symons Marsh Dandelion

Asteraceae - Daisy family





#### **Habitat and National Distribution**

A native annual of wet, usually base-rich, meadows and fen grassland. Local and scattered in the British Isles.

#### Maintenance requirements

This species requires short turf on damp, unimproved soil.

# Local Distribution and Early Malvern Area Records

There are C19 records from Midsummer Hill, Wynds Point and Malvern Common, but its only local site is now Castlemorton Common. Worcestershire Status: Very rare

Red Data Book Status; UK (2005) - LC, England (2014) - VU

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, wet grassland, concentrated in one small area SO 786394	22.4.91 no more than 20	PGG	det. A J Richards & A A Dudman
	1998 ditto	PGG	
	1999 ditto	PGG	
	2000 ditto	PGG	
	2002 ditto	PGG	Would be damaged if root crop put down for cattle were put in this area: it was very close on one occasion
	24.04.06 not found	KB/AWR	

# Teesdalia nudicaulis (L.) W. T. Aiton Shepherd's Cress

Brassicaceae - Cabbage family



#### **Habitat and National Distribution**

A native winter annual of acidic, well-drained soils which is found on open heathland, sand dunes, shingle and gravels, by railways and on coal and cinder tips. It is scattered very locally throughout Britain, the Channel Islands and NE Ireland. A declining species, it has a very short-lived seed bank and this may have contributed to losses arising from scrub invasion and afforestation, as well as from urbanization. Most losses pre-date 1930, but the decline continues in E and NE England.

Red Data Book status: UK (2005) & England (2014) Near Threatened

#### **Maintenance requirements**

This species prefers bare or disturbed ground.

#### **Local Distribution and Early Malvern Area Records**

There are C19 records from the vicinity of The Wyche and in the mid-1970's from the Wyche Cutting (O. Wilson). Now known only from the Worcestershire Beacon. Worcestershire Status: Rare

# Teesdalia nudicaulis (L.) W. T. Aiton Shepherd's Cress

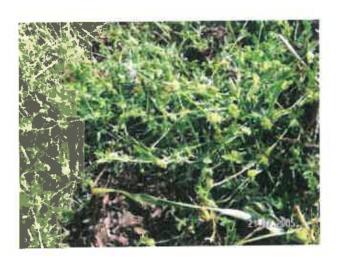
Brassicaceae - Cabbage family

#### Post-1987 Records

Site/GR	Date and quantity	Recorder	Comments
Worcestershire Beacon, Beacon Rd., opposite covered reservoir. Dry stony banks beside paths. SO 769443.	1987 quantity unknown	Trevor Warwick	'Base of the café' 768453
	1987 quantity unknown	John Bingham	769452
	2.5.93 very locally plentiful	KB	Just coming out
	29.5.97 extremely prolific	PGG	Even on W of track
	2.6.99 quantity unknown	PGG	
	2003 quantity unknown	PGG	
	2004 quantity unknown	PGG	
	30.4.07 locally frequent	KB	
	5.12 ditto	PGG	
	28.5.13 many	PGG	Many extending further up the road towards the Beacon, but extremely diminutive. Only 2 plants found with seed heads formed. Growing with Cerastium semidecandrum, C. fontana, Rumex acetosella, Ornithopus perpusillus (a few, photo) and Erophila glabrescens (pressed voucher)
	5.2013	RSK	50+ in short sward near top of Beacon 769 442
	22.7.14 many	PGG	Extending further up Beacon Road
	28.05.15 100s	JP/PGG	Good sized population at SO 769 244(?)
	10.05.16 100s	MR/PG	Good sized population at SO 769 442

Revised May 2016

# Torilis nodosa (L.) Gaertn. Knotted Hedge-parsley Apiaceae – Carrot family



#### **Habitat and National Distribution**

A native annual found on a wide range of dry, sparsely vegetated habitats, especially near the sea, including open grassland, sunny banks, sea walls, cliff-tops, arable fields, tracks and waste ground. It occasionally grows in disused sand- and gravel-pits, and on rubbish heaps. Rather scattered in the British Isles N to NE Scotland, and mostly in E England, it is declining inland although it can be locally very abundant.

#### **Maintenance requirements**

This species requires bare, disturbed ground.

### **Local Distribution and Early Malvern Area Records**

There is only one local C19 record from Malvern Common, and Lees regarded it as 'not very plentiful' in the district. It is now found on Castlemorton and Hollybed Commons. Worcestershire Status: Very scarce

# Torilis nodosa (L.) Gaertn. Knotted Hedge-parsley Apiaceae – Carrot family

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, S- facing grassy slope just E of Mill Farm SO 784373	15.5.91 quantity unknown	PGG	
Hollybed Common, on E- facing bank of old marl pit SO 776377	1990, many tiny plants	PGG	
	5.6.98 abundant	PGG	
	29.5.99 quantity unknown	PGG	
	28.7.02 c.10	WFP Field Mtg.	
	26.8.04 quantity unknown	PGG	Seed heads
Hollybed Common, around gateways and garden hedges SO 778378	8.6.91 quantity unknown	PGG	
	5.2013 small popn.	RSK	'Hollybed North between road and hedge on dry, open sandy bank'.
Castlemorton Common, S- facing bank below tall hedge beside lane from Eight Oaks to Robin Hood pub. At Eight Oaks end SO 779382	18.9.91 dense patch	PGG	
	17.6.95 quantity unknown	PGG	
Hollybush, dry grassy banks beside track leading down to Golden Valley SO 768368	27.7.92 quantity unknown	PGG	
	12.9.93 lots	PGG	
			<u> </u>

# Trifolium ornithopodiodes L. Bird's-foot Clover Fabaceae – Pea family



#### **Habitat and National Distribution**

A native winter annual of acidic sands, gravels and compacted shingle, this species occurs on bare ground in disturbed, often much-trampled, places like car parks, tracks and paths; occasionally in lawns and on heavily grazed commons. It is mainly scattered round the coasts of the British Isles N to Norfolk and S Lancashire, and also Co. Dublin, the Isle of Man and Midlothian. Although also found inland it may be declining there due to lack of management or building developments.

#### **Maintenance requirements**

This species prefers heavily grazed sites that are moist in winter and parched in summer.

### **Local Distribution and Early Malvern Area Records**

There are some local C19 records from Link Common (where Towndrow described it as abundant), Barnard's Green and near The Wych. It was seen by JJD in 1983 on Link Common and at the British Camp, and can still be found in short turf on the Hills and Hollybed Common. The only Herefordshire (VC36) record is from the Malvern Hills. Worcestershire Status: Very rare

## Trifolium ornithopodiodes L. Bird's-foot Clover

Fabaceae – Pea family

Site/GR	Date and quantity	Recorder	Comments
Chandler's Cross, in short turf by road junction SO 777383	4.6.89 locally common	PGG	
	2005 not found	КВ	
Hollybed Common, in the bed of the large marl pit SO 777377	19.5.93 quantity unknown	PGG	
	25.6.06 not found	Worcs Recorders Field Mtg. JJD et al.	
Hollybed Common, on track at E entrance to common SO 778374	23.5.98 small patch	PGG	
Hollybed Common small depression (winter pool) SO 772378	25.6.06 several	Worcs Recorders Field Mtg. JJD et al.	
British Camp Reservoir, short turf at bottom of road by gate into reservoir, semi-vegetated ground SO 764399/764400	1988 small population	PGG/ Trevor Warwick	
	11.8.99 quantity unknown	JJD	
	14.6.03 quantity unknown	PGG	

## Trifolium ornithopodiodes L. Bird's-foot Clover

Fabaceae - Pea family

Earnslaw Quarry, short grassland in front of quarry	1987 quantity unknown	Trevor Warwick	
SO 771445	11.7.98 good numbers	PGG	
	30.6.06 a few	KB	
	30.6.06 a lew	ND .	
Clutters Cave SO 76213945	27.6.08 several small patches	Carter Ecological/PGG	New VC36 record, photograph
SO 76213945	20.4.09 quantity unknown	PGG	Patches here have increased in size. Beside path immediately N of Clutters Cave
	15.5.14 small dense patch	PGG and Alison Woods	By footpath
Pinnacle Hill SO 76814164	21.5.09 3 or 4 good size clumps	PGG	All Herefordshire VC36
00 70017107	10.5.13 1 showing flower	PGG	
	11.5.14 not found	PGG	

Revised March 2016



## Trifolium scabrum L. Rough Clover

Fabaceae - Pea family



#### **Habitat and National Distribution**

A native winter annual of infertile and drought-prone soils in grassland and open spaces on sandy ground, and also on limestone and gravel. It often grows with *Trifolium striatum* (Knotted Clover). Especially growing near the sea, it is also sometimes found inland on road verges.

#### Maintenance requirements

This species requires a dry, infertile site.

#### Local Distribution and Early Malvern Area Records

The last Worcestershire record is from Fenny Rough in 1916, and it is now believed to be extinct in VC37 as it has not been since. However, in 2011 one plant was found on stony ground beside the A438 at Hollybush in Herefordshire (VC36), just over the county boundary. Worcestershire Status: Extinct

Site/GR	Date and quantity	Recorder	Comments
Hollybush, beside A438 SO 7564836303, 75643679 Check grid ref as this is up a public footpath or up the bank, not on roadside.	28.5.11, 31.5.11 1	PGG, MJ & Jo Hackman (County ecologist)	First Herefordshire record, Mark Jannick (28.5.11)
	13.6.12 1	PGG	
	18.6.13 not found	PGG	
	2.6.14 5	PGG/MJ	



# Triglochin palustre L. Marsh Arrowgrass Juncaginaceae – Arrowgrass family



#### **Habitat and National Distribution**

A native perennial which grows in open damp, grassy or marshy places, often on calcareous substrates. Its habitats include wet meadows and rush-pastures, heaths, fens, springs and flushes, saltmarsh fringes flushed with fresh water, and river shingle in upland areas. Found throughout the British Isles, it is most common in the N and has declined in S England since 1950 owing to its loss of habitat through drainage, agricultural intensification and a lack of grazing.

#### **Maintenance requirements**

This species requires an open damp or wet habitat.

### Local Distribution and Early Malvern Area Records

There are a number of C19 records from boggy places in the Malvern area, including Malvern Common and Newland. It was first specifically recorded from Castlemorton Common in 1965 (F Fincher) and has occasionally been seen since both there and from Hollybed Common. Worcestershire Status: Rare

Red Data Book Status; UK (2005) LC, England (2014) Near Threatened

## Triglochin palustre ∟. Marsh Arrowgrass

### Juncaginaceae – Arrowgrass family

Site/GR	Date and quantity	Recorder	Comments
Swinyard Hill, flush SO 764381	1.6.95 1 in flower, probably more	PGG	
	29.06.09 c.12	PGG	'Cotton grass flush' photograph
	27.07.11 no change	PGG	
		_	
Castlemorton Common, wet marshy ground, several places SO 784394	1987 quantity unknown	PGG	One place is beside the stream N of main track
Castlemorton Common, grassland/marsh SO 783391	25.6.02 a few	RM	
Castlemorton Common marshy grassland SO 772385	19.07.05 2	КВ	
Hollybed Common, grassland below The Poplars SO 773385	28.7.02 sizeable patch	WFP Field Mtg.	
Hollybed Common, flush at Huntsbridge, NW corner of common SO 772378	18.11.90 quantity unknown	PGG	Conf. JJD
	28.7.02 a few	WFP Field Mtg.	
	04.09.05 not found	PGG	Overgrown
	25.06.06 not found	Worcs Recorders Field Meeting	
		JJD et al	
	26.07.06 not found	КВ	
Hollybed Common, grassland	28.7.02 sizeable patch	WFP Field Mtg.	
below The Poplars SO 769386			

## Valeriana dioica L. Marsh Valerian

Valerianaceae - Valerian family



#### **Habitat and National Distribution**

A native perennial of calcareous mires, marshy grassland, water meadows, flushes, *Salix* fen carr and *Alnus* woods. Frequent in Britain N to S Scotland, but rarer in the S and there often in shade. Declining through degradation or loss of its wetland habitats.

#### **Maintenance requirements**

This species requires wet conditions.

#### Local Distribution and Early Malvern Area Records

There are some local C19 records from boggy places on the Hills, including Walm's Well. Now only known from Swinyard Hill. Worcestershire Status: Very scarce

Red Data Book Status; UK (2005) LC, England (2014) Near Threatened

Site/GR	Date and quantity	Recorder	Comments
Swinyard Hill, flush	1.6.95 c.20	PGG	
SO 764381			
	16.6.05 not found	PGG	
	6.05 not found	KB	
	17.6.06 c.5	KB	Almost gone over
	15.7.09 very few	PGG	Leaves only, very confined

# Viola canina L. Heath Dog-violet Violaceae – Violet family



#### **Habitat and National Distribution**

A native perennial found in a variety of acid habitats, dry or wet, including heaths, fens, coastal dunes, stony riversides and lake shores. It can also occur on thin, heavily leached substrates overlying chalk. Local throughout the British Isles, it has suffered a severe decline since 1950, mainly due to habitat loss, drainage and agricultural improvement but also because of over- and under-grazing and possible hybridisation with other *Viola* species.

#### **Maintenance requirements**

This species cannot tolerate either tall-herb competition or excessive grazing.

#### **Local Distribution and Early Malvern Area Records**

There are many C19 records from the Malvern Hills and nearby commons including Link Common and Malvern Common. It was last recorded on the Malvern Hills by Owen Wilson in 1974 (Hangman's Hill) and from Malvern Common by him in 1975. It was last seen on the Old Hills in 1909. It has previously been recorded on MHC land from Castlemorton Common, Hollybed Common and the British Camp Reservoir.

Worcestershire Status: Rare

Red Data Book Status; UK (2005) Near Threatened, England (2014) Vulnerable

## Viola canina L. Heath Dog-violet

### Violaceae - Violet family

Site/GR	Date and quantity	Recorder	Comments
Castlemorton Common, grassland SO 781392	24.5.90 a few	JJD	
	24.5.96 frequent	PGG (?)	'Central C.M.C.'
	12.05.2016 – None seen	MR	Patchy scrub / grassland. Plenty of Viola riviviana clumps. One Early dog- violet V. reichenbachiana.
Castlemorton Common, anthill SO 777393	24.5.90 1	JJD	
	12.05.2016 – None seen	MR <sub>.</sub>	Scrub clearance on wet area 2015, anthill area untouched. Plenty of Viola riviviana clumps.
0-4	40.05.05 a a a # a a a a	L/D	CO707200 (Na2)
Castlemorton Common, Junction of B4208 and 'C' road across Common SW to Berrow Downs. SO 787390 area.	19.05.05 scattered	КВ	SO787389 (No3)
	30.04.05 4	KB/RM	SO 786390 (No 4) & 787390
	23.05.06 a few scattered	KB/RM	
	24.5.16 - None seen	MR	Only 1 Viola riviviana. (Plethora of lousewort!)
Castlemorton Common, E of main road SO 793395	9.5.91 small patch, c.20	PGG	
	12.05.2016 - None seen	MR	Wet area with marsh.
		200	Conf. JJD SO777377
Hollybed Common, turf SO 777377 SO 776373	14.5.89 c.50	PGG	Com. JJD 80777377
	13.4.05 c.6	KB	Short turf SO 776373
	23.05.06 locally frequent	Worcs.	
		Recorder	
		Field Mtg.	
<u> </u>	24.5.16 - None seen	JDD et al	Neither grid ref had many
	24.J. 10 - None seen	IVIEX	viola at all.
British Camp Reservoir	14.6.03 quantity unknown	JJD	Grid ref for metal dam