

Beckford Nature Reserve

Habitats, Habitat Management and the Wildlife

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Beckford Nature Reserve – habitats, habitat management and the wildlife

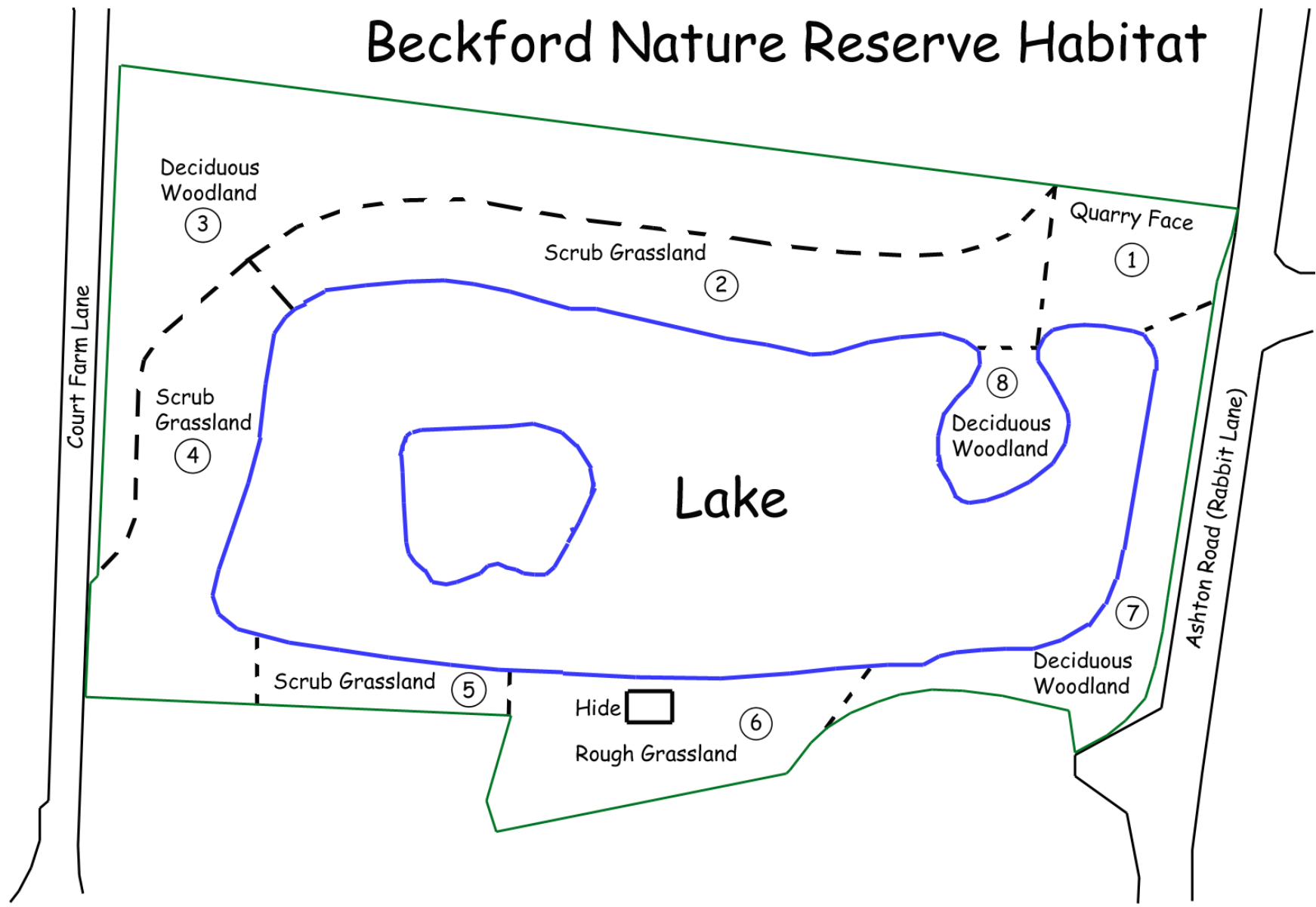
Beckford Nature Reserve is a former sands and gravels quarry – last worked in 1987. In 2008 it was purchased from the quarry company (Huntsmans Quarries Ltd) as a community nature reserve. The reserve contains a number of wildlife habitats that have evolved partly through natural progression but also through work carried out by a group of local villagers.

In 1994 the quarry owners commissioned a Management Plan from Worcestershire Wildlife Consultancy. This document seeks to establish a more formal management by dividing the reserve up into discreet habitat areas, by continuing the programme of identifying the more important wildlife found there and by formulating a sustainable management plan based on resources available to the new owners.

The document comprises three sections – the first contains a Habitat Map and a series of Wildlife Habitat Sheets, in which details of the various sub-sites or ‘Areas’ are identified together with wildlife species of note and recommended habitat management. These are designed to be updated or modified as the project progresses.

The second section identifies more general management principles – such as cutting dates, public access, path maintenance etc. The third contains species lists and relevant information.

Beckford Nature Reserve Habitat



Wildlife Habitat Area Sheet – Area 1 (Quarry Face)

Date Compiled	Date Modified	Description	Main Habitat Type	Other Habitats Present	Species of Note	Management Notes
March 2008		Remnant of former quarry face – retained as an SSSI for its geological value. Colonised by Sand Martins and by Mining Bees and other aculeates and insects requiring bare ground habitat	Bare soil and vertical face	Rough grassland Water's edge	Bombylius discolor The Netted Bee Fly	Initially, clear spoil from foot of face to prevent access by ground predators to Sand Martin nest sites and to maintain vertical face. Perhaps use spoil to improve paths. Prevent encroachment of vegetation below and above the face. Consider extending length of face by felling a few trees and clearing spoil as required. Avoid damaging vertical face. Roughly mow rough grass area and clear cuttings annually.

Wildlife Habitat Area Sheet – Area 2 (Scrub Grassland)

Date Compiled	Date Modified	Description	Main Habitat Type	Other Habitats Present	Species of Note	Management Notes
March 2008		A basic area of rough grassland that is readily colonised by scrub.	Scrub Grassland	Water's edge		<ul style="list-style-type: none"> • Cut back invading scrub annually on rotational basis. • Cut and carry grass area biennially on rotational basis

Wildlife Habitat Area Sheet – Area 3 (Mixed deciduous woodland)

Date Compiled	Date Modified	Description	Main Habitat Type	Other Habitats Present	Species of Note	Management Notes
March 2008		Young woodland and scrub, in many places dominated by alien Poplar species, with small open glades	Mixed deciduous woodland	Woodland edge	Song Thrush (singing March 2008) Bulfinch (pair March 2008)	<ul style="list-style-type: none"> • Cut back invading scrub annually on rotational basis. • Cut and carry grass area annually. • Cut and clear Poplar suckers and stems. Treat roots to prevent re-growth with, for example 'SBK'. • Remove alien plant species.

Wildlife Habitat Area Sheet – Area 4 (Scrub Grassland)

Date Compiled	Date Modified	Description	Main Habitat Type	Other Habitats Present	Species of Note	Management Notes
March 2008		Short-grazed grassland colonised by scrub	Scrub grassland	Water's edge		<ul style="list-style-type: none"> • Cut back invading scrub annually on rotational basis. • Cut and carry grass area annually. • Remove alien species of plant, shrub and tree.

Wildlife Habitat Area Sheet – Area 5 (Scrub Grassland)

Date Compiled	Date Modified	Description	Main Habitat Type	Other Habitats Present	Species of Note	Management Notes
March 2008		Rough grassland with trees and shrubs	Scrub grassland	Water's edge		<ul style="list-style-type: none"> • Coppice invading scrub on rotation. • Roughly cut and carry grass area on rotation. • Remove alien species of plant, shrub and tree. • Avoid destruction of anthills.

Wildlife Habitat Area Sheet – Area 6 (Rough Grassland)

Date Compiled	Date Modified	Description	Main Habitat Type	Other Habitats Present	Species of Note	Management Notes
March 2008		Rough grassland with invading trees and shrubs Site of viewing hide.	Rough grassland	Water's edge	Song Thrush (singing March 2008)	<ul style="list-style-type: none"> • Coppice invading scrub on rotation to keep viewing area clear. • Roughly cut and carry grass area on rotation. • Avoid destruction of anthills. • Coppice scrub on water's edge.

Wildlife Habitat Area Sheet – Area 7 (Mixed deciduous woodland)

Date Compiled	Date Modified	Description	Main Habitat Type	Other Habitats Present	Species of Note	Management Notes
March 2008		Woodland with some ground flora	Mixed deciduous woodland	Water's edge		<ul style="list-style-type: none"> • Retain dead wood wherever possible. • Thin as and when necessary.

Wildlife Habitat Area Sheet – Area 8 (Mixed woodland)

Date Compiled	Date Modified	Description	Main Habitat Type	Other Habitats Present	Species of Note	Management Notes
March 2008		Woodland - now shading out ground flora	Mixed woodland	Water's edge		<ul style="list-style-type: none"> • Consider some thinning of trees. Where thinning takes place consider ring-barking some trees to leave as standing dead timber. • Use cuttings from here and perhaps other areas to build 'Beetle Wigwams' (standing dead timber) and 'Beetle Lodges' (log piles). • Coppice trees on water's edge to prevent over-shading.

Wildlife Habitat Area Sheet – Area 9 (Island)

Date Compiled	Date Modified	Description	Main Habitat Type	Other Habitats Present	Species of Note	Management Notes
March 2008		Island dominated by woodland - now shading out ground flora	Island	Water's edge		<ul style="list-style-type: none"> • Consider some thinning and/or coppicing of trees. • Coppice some trees on water's edge to prevent over-shading. • Encourage growth of rough vegetation and scrub layer for nesting birds.

Management Notes

Habitats

- Cut grassland after end July to mid-August (as late as possible) to allow plants to set seed.
- Cut grassland on rotation to provide over-wintering habitat for insects, eggs and larvae.
- Suspend other physical management between March and September to avoid disturbing breeding birds and insects.
- Retain anthills in rough grassland – important habitat for ants, small plants and woodpeckers.
- Reduce shading out by overhanging trees of water's edge plants (important habitat).
- Identify and adhere to discreet 'sacrifice sites' for fires as fire enriches soil and reduces plant diversity.
- Remove non-native plant species. In general, native species support a wider diversity of wildlife.
- Encourage diversity of native plant species – especially if planting or encouraging shrubs – eg Hawthorn, Elder, Hazel.
- Use same sites each year for stacking cut grass – for grass snakes, amphibians etc. (breeding and/or over-wintering).
- Use some chipped brushwood to improve paths (see also next item).
- Use suitable cut timber to build 'Beetle Lodges' (2m lengths) and 'Beetle Wigwams' (3m-4m lengths). Stack some brushwood and spread chippings in woodland.
- Monitor spread of Typha (Bulrush) in lake and cut/control if necessary.
- Consider putting up bird nest-boxes and bat roosting boxes.

Monitoring

- Monitor habitats by general observations and by compiling species lists (annotated with dates and if necessary by area).
- Try putting a diary or 'log' in the hide.
- Invite specialists to carry out surveys.

List of Birds

Species	First Recorded		Last Recorded		Notes
	Recorder	Date	Recorder	Date	
Blackbird	S.Barker	1994	J.Clarke	19-Mar-08	
Blackcap	S.Barker	1994			
Blue Tit	S.Barker	1994			
Bullfinch			J.Clarke	19-Mar-08	BAP† NRS*
Canada Goose	S.Barker	1994	J.Clarke	19-Mar-08	
Chaffinch	S.Barker	1994	J&P Clarke	25-Mar-08	
Chiffchaff	S.Barker	1994	J&P Clarke	25-Mar-08	
Collared Dove	S.Barker	1994			
Coot	S.Barker	1994	J.Clarke	19-Mar-08	
Cormorant	S.Barker	1994			
Dunnock	S.Barker	1994			BAP† NRS
Fieldfare	J&P Clarke	25-Mar-08	J&P Clarke	25-Mar-08	
Great Spotted Woodpecker	J&P Clarke	25-Mar-08	J&P Clarke	25-Mar-08	
Great Tit	S.Barker	1994	J&P Clarke	25-Mar-08	
Green Woodpecker	S.Barker	1994			
Greenfinch			J.Clarke	19-Mar-08	
Grey Heron	S.Barker	1994			
Greylag Goose	J&P Clarke	25-Mar-08	J&P Clarke	25-Mar-08	
House Martin	S.Barker	1994			
Kestrel	S.Barker	1994			NRS*
Little Grebe	S.Barker	1994	J.Clarke	19-Mar-08	
Long-tailed Tit	S.Barker	1994	J&P Clarke	25-Mar-08	

Species	First Recorded		Last Recorded		Notes
	Recorder	Date	Recorder	Date	
Mallard	S.Barker	1994	J&P Clarke	25-Mar-08	
Moorhen	S.Barker	1994	J&P Clarke	25-Mar-08	NRS*
Pochard	S.Barker	1994			
Reed Bunting	S.Barker	1994			BAP† NRS*
Ring-necked Duck	via Rob Prudden	03-Apr-02			
Robin	S.Barker	1994	J.Clarke	19-Mar-08	
Sand Martin	Devos	4/4/2008			About 12 investigating hole in quarry face
Song Thrush	S.Barker	1994	J.Clarke	19-Mar-08	BAP† 2 singing
Spotted Flycatcher					BAP† NRS
Starling	S.Barker	1994			NRS*
Tufted Duck	S.Barker	1994	J.Clarke	19-Mar-08	
Turtle Dove	S.Barker	1994			BAP†
Whitethroat	S.Barker	1994			
Wigeon	S.Barker	1994			
Willow Warbler	S.Barker	1994			
Wood Pigeon	S.Barker	1994	J&P Clarke	25-Mar-08	
Wren	S.Barker	1994			

* Nest Record Scheme 'Concern List'

† Biodiversity Action Plan species

List of Insects

Species		First Recorded		Last Recorded		Notes
Scientific Name	Common Name	Recorder	Date	Recorder	Date	
<i>Aeshna cyanea</i>	Dragonfly (common)*	S.Barker	1994			
<i>Aeshna mixta</i>	Dragonfly*	S.Barker	1994			
<i>Aglais urtica</i>	Small Tortoiseshell Butterfly	S.Barker	1994			
<i>Anax imperator</i>	Emperor Dragonfly	S.Barker	1994			
<i>Autographa gamma</i>	Silver Y Moth	S.Barker	1994			
<i>Bomblyous discolor</i>	Beefly*	H.Green	2007			BAP†
<i>Chorthippus brunneus</i>	Common field Grasshopper	S.Barker	1994			
<i>Chorthippus parallelus</i>	Meadow Grasshopper	S.Barker	1994			
<i>Chilocorus renipustulatus</i>	Kidney Spot Ladybird	Devos	4/4/2008			
<i>Coenagrion puella</i>	Damselfly*	S.Barker	1994			
<i>Enallagma cyathigerum</i>	Common Blue Damselfly	S.Barker	1994			
<i>Inachis io</i>	Peacock Butterfly	Devos	4/4/2008			
<i>Ischnura elegans</i>	Blue-tailed Damselfly	S.Barker	1994			
<i>Pararge aegeria</i>	Speckled Wood Butterfly	S.Barker	1994			
<i>Phlogophora meticulosa</i>	Angle Shades Moth	S.Barker	1994			
<i>Pieris napi</i>	Small White Butterfly	S.Barker	1994			
<i>Pieris rapae</i>	Green-veined White Butterfly	S.Barker	1994			
<i>Platycnemis pennipes</i>	White-legged Damselfly	S.Barker	1994			
<i>Polymattus icarus</i>	Common Blue Butterfly	S.Barker	1994			
<i>Sympetrum sanguineum</i>	Dragonfly (black legs, red abdomen)*	S.Barker	1994			
<i>Sympetrum Striolatum</i>	Dragonfly (common, orange)*	S.Barker	1994			
<i>Vanessa atalanta</i>	Red Admiral Butterfly	S.Barker	1994			

* No common name

† Biodiversity Action Plan species

List of Flowering Plants

Species		First Recorded		Last Recorded		Notes
Scientific Name	Common Name	Recorder	Date	Recorder	Date	
<i>Acer pseudoplatanus</i>	Sycamore	S.Barker	1994			
? <i>Allium vineale</i>	? Wild Onion	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	Needs confirming (near hide)
<i>Achillea millefolium</i>	Yarrow	S.Barker	1994	J&P Clarke	24-Mar-08	
<i>Alnus glutinosa</i>	Alder	S.Barker	1994			
<i>Angelica sylvestris</i>	Wild Angelica	J.Clarke	19-Mar-08	J.Clarke	19-Mar-08	
<i>Anthoxanthum glutinosa</i>	Sweet Vernal Grass	S.Barker	1994			
<i>Anthriscus sylvestris</i>	Cow Parsley	S.Barker	1994	J&P Clarke	24-Mar-08	
<i>Arrhenatherum elatius</i>	False Oat-grass	S.Barker	1994			
<i>Artemisia vulgaria</i>	Mugwort	S.Barker	1994			
<i>Arum maculatum</i>	Lords-and-Ladies	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Bellis perennis</i>	Daisy	S.Barker	1994			
<i>Betula pendula</i>	Silver Birch	S.Barker	1994			
<i>Brachypodium</i> sp	? Tor Grass	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Calystegia sepium</i>	Hedge Bindweed	S.Barker	1994			
<i>Cardamine flexuosa</i>	Wavy Bittercress	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Carex</i> sp	A sedge	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	needs identifying - anthill area 5
<i>Cerastium holosteoides</i>	Common Mouse-ear	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Chamerion angustifolium</i>	Rosebay Willowherb	S.Barker	1994			
<i>Cirsium arvense</i>	Creeping Thistle	S.Barker	1994	J&P Clarke	24-Mar-08	
<i>Cirsium vulgare</i>	Spear Thistle	S.Barker	1994	J&P Clarke	24-Mar-08	
<i>Clematis vitalba</i>	Traveller's Joy	S.Barker	1994			
<i>Conium maculatum</i>	Hemlock	S.Barker	1994			

Species		First Recorded		Last Recorded		Notes
Scientific Name	Common Name	Recorder	Date	Recorder	Date	
<i>Convolvulus arvensis</i>	Field Bindweed	S.Barker	1994			
<i>Cotoneaster horizontalis</i>	Wall Cotoneaster	S.Barker	1994			Alien
<i>Crataegus monogyna</i>	Hawthorn	S.Barker	1994			
<i>Crepis capillaris</i>	Smooth Hawk's-beard	S.Barker	1994			
<i>Cytisus scoparius</i>	Broom	S.Barker	1994	J.Clarke	19-Mar-08	
<i>Dactylis glomerata</i>	Cock's-foot	S.Barker	1994			
<i>Daucus carota</i>	Wild Carrot	S.Barker	1994			
<i>Dipsacus fullonum</i>	Teasel	S.Barker	1994			
<i>Epilobium hirsutum</i>	Great Willowherb	S.Barker	1994			
<i>Equisetum arvense</i>	Field Horsetail	S.Barker	1994			
<i>Eupatorium cannabinum</i>	Hemp-agrimony	S.Barker	1994			
<i>Festuca rubra</i>	Red Fescue	S.Barker	1994			
<i>Fraxinus excelsior</i>	Ash	S.Barker	1994			
<i>Galanthus nivalis</i>	Snowdrop	S.Barker	1994	J&P Clarke	24-Mar-08	by road hedge
<i>Galium aparinum</i>	Cleavers	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Geranium molle</i>	Dove's-foot Cranes-bill	S.Barker	1994	J&P Clarke	24-Mar-08	
<i>Geranium robertianum</i>	Herb-Robert	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Glechoma hederacea</i>	Ground Ivy	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Hedera helix</i>	Ivy	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Helleborus foetidus</i>	Stinking Helleborine	S.Barker	1994	J.Clarke	19-Mar-08	Worcestershire rarity
<i>Heraclium sphondylium</i>	Hogweed	S.Barker	1994	J&P Clarke	24-Mar-08	
<i>Holcus lanatus</i>	Yorkshire Fog	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Hypericum perforatum</i>	Perforate St.John's-wort	S.Barker	1994	J&P Clarke	24-Mar-08	
<i>Iris foetidissima</i>	Stinking Iris	S.Barker	1994	J&P Clarke	24-Mar-08	

Species		First Recorded		Last Recorded		Notes
Scientific Name	Common Name	Recorder	Date	Recorder	Date	
<i>Iris pseudacorus</i>	Yellow Iris	S.Barker	1994			
<i>Juncus inflexus</i>	Hard rush	S.Barker	1994			
<i>Laburnum anagyroides</i>	Laburnum	S.Barker	1994			Alien
<i>Lamium album</i>	White Dead-nettle	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Lamium purpureum</i>	Red Dead-nettle	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Lathyrus nissola</i>	Grass Vetchling	S.Barker	1994			Uncommon
<i>Lavatera arborea</i>	Tree Mallow	S.Barker	1994			Alien
<i>Leontodon autumnalis</i>	Autumn Hawkbit	S.Barker	1994			
<i>Leucanthemum vulgare</i>	Oxeye Daisy	S.Barker	1994			
<i>Ligustrum vulgare</i>	Wild Privet	S.Barker	1994	J&P Clarke	24-Mar-08	
<i>Lolium perenne</i>	Perennial Rye-grass	S.Barker	1994			
<i>Lupinus</i> sp	Lupi sp	J.Clarke	19-Mar-08	J.Clarke	19-Mar-08	Alien
<i>Lycopus europaeus</i>	Gypsywort	S.Barker	1994			
<i>Lythrum salicaria</i>	Purple-loosestrife	S.Barker	1994			
<i>Medicago arabica</i>	Spotted Medick	Devos	4/4/2008			
<i>Medicago lupulina</i>	Black Medick	S.Barker	1994			
<i>Melilotus officinalis</i>	Ribbed Melilot	S.Barker	1994			
<i>Mentha suaveolens</i>	Round-leaved Mint	S.Barker	1994			Worcestershire rarity
<i>Mentha</i> sp	a Mint species	24-Mar-08	24-Mar-08	J&P Clarke	24-Mar-08	needs identifying - near bare ground area 1
<i>Mercurialis perennis</i>	Dog's Mercury	24-Mar-08	24-Mar-08	J&P Clarke	24-Mar-08	
<i>Odontites verna</i>	Red Bartsia	S.Barker	1994			
<i>Oenanthera</i> sp	Evening Primrose	S.Barker	1994			Alien
<i>Orchis morio</i>	Green-winged Orchid					
<i>Phleum pratense</i>	Timothy	S.Barker	1994			

Species		First Recorded		Last Recorded		Notes
Scientific Name	Common Name	Recorder	Date	Recorder	Date	
Picris echioides	Bristly Oxtongue	S.Barker	1994	J&P Clarke	24-Mar-08	
Plantago lanceolata	Ribwort Plantain	S.Barker	1994	J&P Clarke	24-Mar-08	
Plantago major	Greater Plantain	S.Barker	1994	J&P Clarke	24-Mar-08	
Plantago media	Hoary Plantain	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
Poa annua	Annual Meadow-grass	S.Barker	1994			
Populus x canescens	Grey Poplar	S.Barker	1994			Alien
Potentilla reptans	Creeping Cinquefoil	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
Primula vulgaris	Primrose	J.Clarke	19-Mar-08	J.Clarke	19-Mar-08	
Prunella vulgaris	Selfheal	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
Prunus avium	Wild Cherry	S.Barker	1994			
Prunus domestica	Wild Plum	S.Barker	1994			
Quercus robur	Pedunculate Oak	S.Barker	1994			
Ranunculus ficaria	Celandine	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	
Ranunculus repens	Creeping Buttercup	S.Barker	1994			
Rosa canina agg	Dog Rose	S.Barker	1994	J&P Clarke	24-Mar-08	
Rubus fruticosus agg	Bramble	S.Barker	1994			
Salix caprea	Goat Willow	S.Barker	1994			
Salix cinerea	Grey Willow	S.Barker	1994			
Salix viminalis	Osier	S.Barker	1994			
Senecio jacobaea	Common Ragwort	S.Barker	1994	J&P Clarke	24-Mar-08	
Silene alba	White Champion	S.Barker	1994			
Sison amonum	Sone Parsley	S.Barker	1994			
Solanum dulcamara	Bittersweet	S.Barker	1994			
Stachys silvatica	Hedge Woundwort	S.Barker	1994			
Symphoricarpos	Snowberry	J&P Clarke	24-Mar-08	J&P Clarke	24-Mar-08	Alien

Species		First Recorded		Last Recorded		Notes
Scientific Name	Common Name	Recorder	Date	Recorder	Date	
rivularis						
Symphytum officinale	Common Comfrey	S.Barker	1994			
Tanacetum vulgare	Tansy	S.Barker	1994			
Taraxacum officinale agg	Dandelion	S.Barker	1994			
Tilia x vulgaris	Lime	S.Barker	1994			
Trifolium pratense	Red Clover	S.Barker	1994			
Tripleurospermum inodorum	Scentsless Mayweed	S.Barker	1994			
Tussilago farfara	Coltsfoot	S.Barker	1994	J.Clarke	19-Mar-08	
Typha latifolia	Bulrush	S.Barker	1994			
Ulmus procera	English Elm	S.Barker	1994			
Urtica dioica	Common Nettle	S.Barker	1994	J&P Clarke	24-Mar-08	
Verbascum thapsus	Great Mullein	S.Barker	1994	J&P Clarke	24-Mar-08	
Veronica beccabunga	Brooklime	S.Barker	1994			
Viola reichenbachiana	Early Dog-violet	J.Clarke	19-Mar-08	J.Clarke	19-Mar-08	

List of Miscellaneous Sightings

English Name	First Recorded		Last Recorded		Notes
	Recorder	Date	Recorder	Date	
Badger	S Barker	1994	J&P Clarke	25-Mar-08	Sett
Rabbit	J&P Clarke	25-Mar-08	J&P Clarke	25-Mar-08	
Brown-lipped Snail	J&P Clarke	25-Mar-08	J&P Clarke	25-Mar-08	
White-lipped Snail	J&P Clarke	25-Mar-08	J&P Clarke	25-Mar-08	
Common Snail	J&P Clarke	25-Mar-08	J&P Clarke	25-Mar-08	