

PLANTS of the former Mereway Allotments, the Rifle Range, and the Duke of Northumberland's River northwards to the A316.

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Introduction

All three areas include a mosaic of differing vegetation types at various stages of successional maturity, ranging from unimproved grassland through Bramble + Dewberry scrub to nascent woodland. They also include aquatic and paludal vegetation within parts of the River Crane and the Duke of Northumberland's River.

The following observations are based on five visits during the past year, during which 123 species have been identified. The list is likely to increase from additional visits in the future

Observations

1. Rare species

There is a small number of nationally rare species, the occurrence of which particularly within an otherwise urbanised area is of botanical significance. Most notably they are Thorn-Apple (*Datura stramonium*) at the Mereway allotments, the uncommon Common Calamint (*Calamintha ascendens*) in the Rifle Range, and Jewel-Weed (*Impatiens capensis*) in the Duke of Northumberland's River.

2. Diversity of plant communities

Such a rich tapestry of plant communities within an otherwise urbanised area is unusual, and includes both developing and relictual woodland/hedgerow communities incorporating species with a rural ambience such as Hedge Garlic (*Alliaria petiolata*) and native Bluebell (*Hyacinthoides non-scripta*). [Spanish Bluebell also occurs in the Mereway Allotments].

Much of the grassland at the Rifle Range, formerly Marsh Farm, would appear to be unimproved, the only occurrence of Rye Grass, for example, being in the parking area. The occurrence of Dewberry at the Mereway Allotments as an entirely natural component of parts of the Bramble scrub is of interest, and there are small developing areas of native woodland floor vegetation including, for example, Lords and Ladies (*Arum maculatum*).

3. Support for other wildlife

All of the environments, including but not limited to the dense Bramble + Dewberry scrub communities, provide support for a rich variety of other wildlife - ranging from spiders such as the Common Crab Spider through butterflies and moths to birds, reptiles (including Slow-Worm) and mammals. This is, again, of particular note within an otherwise urbanised area.

4. Green corridor

These environments form part of the green corridor provided over several miles by the River Crane and its surrounding environments, highly significantly at arguably its otherwise most urbanised end. The occurrences of plants such as Hedge Garlic, Lords and Ladies and Jewel-Weed provide tangible evidence of sustained botanical links with their occurrences further upstream - Jewel-Weed, for example, also occurring at the Powder Mill nature reserve. The railway line also undoubtedly provides an important local link between the Mereway Allotments and the Rifle Range, as also does Horse Chestnut Avenue - the pathway to the South of the Council Depot.

5. Protected species

Consideration should be given with regard to those species which are nationally protected.

In addition there are some plants in my opinion which should be considered for protection whatever the eventual fate of these areas. They include the mature Walnut tree, Whitebeam trees, Blackthorn, and Thorn-Apple plants at the Mereway Allotments. Furthermore, at community level, every one of the varied patchwork of communities at that site is of special significance both botanically within the surrounding area and as support for other wildlife, i.e. the Bramble + Dewberry scrub, the Bottle Dig area, the strip alongside the Duke of Northumberland's River and the areas of unimproved grassland, both open and shaded. The strip alongside and the river itself of the Duke of Northumberland's River northwards from the railway to the A316 is also of special botanical interest, an interest which frankly it is unlikely would be enhanced by interfering other than very locally with its sides.

At the Rifle Range site the sunken shooting range, the site of Common Calamint next to the clubhouse, the area of trees and shrubs outside the main gate, the area of undisturbed grassland, the Bramble scrub and even the banks of the shooting walls themselves are all of local interest either botanically or as supports for other wildlife.

6. Significance to Borough residents

Surrounding areas are very largely urbanised, including those parts of Crane Park which are mown regularly and hence much impoverished as well as the built up areas. Aside from the value to those residents, for example, who collect Bramble and other fruits from the former Mereway Allotments, the area provides in my opinion a rich resource not only of intrinsic interest for those interested in Natural History but also for educational purposes at all levels. Such value could be enhanced by sensitive, skilled management.

Many of the plants, for instance, are of educational interest:- as ancient plants such as Common Horsetail, as sources of food or relatives of food plants, such as Walnut, Horse-Radish, Blackthorn, Bargeman's Cabbage, and Watercress. Many are wonderfully aromatic, such as Common Calamint and Pineapple Weed. Some provide examples of animal dispersal, such as Goosegrass and Burdock, whilst others provide for mimicry by animals such as the Common Crab Spider. Some are intensely poisonous, e.g. Thorn-Apple, and some are simply striking or else beautiful to look at, such as Thorn-Apple and Jewel-Weed.

Ecologically, the wider importance of green corridors within impoverished surrounding landscapes, whether rural or urban, the interactions of plants and animals, the significance of former human activity, and the natural succession through time from grassland to nascent climax Oak woodland can rarely be so well demonstrated within such a small area.

SPECIES LIST

Key to symbols

MA	Former Mereway Allotments
MABD	Bottle Dig area
MADONR	Area alongside Duke of Northumberland's River
MACR - R	In or immediately alongside the River Crane
DONR	Area alongside the Duke of Northumberland's River from footway under the railway line to the A316.
DONR - R	Within or immediately alongside the river itself.
HCA	Horse Chestnut Avenue
RR	Rifle Range area
1	Very rare, one or two plants only
2	Rare or very localised
3	Locally common
4	Common at least in patches over much of the whole area
5	Abundant and/or locally dominant

EQUISETACEAE

Common Horsetail *Equisetum arvense* L. MA3,MADONR3,RR2

POLYPODIACEAE

Male Fern *Dryopteris filix-mas* (L.) Schott RR1

TAXACEAE

Yew *Taxus baccata* L.RR1

RANUNCULACEAE

Creeping Buttercup *Ranunculus repens* L. MA2

Celery Leaved Buttercup *R. scleratus* L.MACR-R1,DONR-R1

PAPAVERACEAE

Corn Poppy *Papaver rhoeas* L.MABD2

Long-headed Poppy *P. dubium* L.MABD2

Opium Poppy *P. somniferum* L.MABD2

Greater Celandine *Chelidonium majus* L.DONR1

FUMARIACEAE

Yellow Corydalis *Corydalis lutea* (L.) DC.RR2

CRUCIFERAE

Bargeman's Cabbage *Brassica campestris* L.MADONR2

Hoary Cress *Cardaria draba* (L.) Desvaux RR2

Horseradish *Armoracia rusticana* Gaertner, Meyer & Scherbius MA3, MADONR3,RR2

Watercress *Rorippa nasturtium-aquaticum* (L.) Hayek DONR-R2,MACR-R2

Garlic Mustard/ Hedge Garlic *Alliaria petiolata* (Bieberstein) Cavara & Grande MADONR3

Hedge Mustard *Sisymbrium officinale* (L.) Scopoli MA4, MADONR2

Tumbling Mustard *S. altissimum* L.MABD2

HYPERICACEAE

Rose of Sharon/ Tutsan *Hypericum* sp., to be confirmed DONR1

CARYOPHYLLACEAE

Common Mouse Ear *Cerastium holosteoides* Fries RR2

Common Chickweed *Stellaria media* (L.) Villars DONR1

Mossy Pearlwort *Sagina procumbens* L.RR2

CHENOPODIACEAE

Fat Hen *Chenopodium album* L.MA3

Halberd-leaved Orache *Atriplex hastata* L.MA2, RR2

MALVACEAE

Common Mallow *Malva sylvestris* L.MA3, RR3

BALSAMINACEAE

Jewel-Weed *Impatiens capensis* Meerburgh DONR-R1

Himalayan Balsam *I. glandulifera* Royle DONR-R1

ACERACEAE

Sycamore *Acer pseudoplatanus* L.MA2

HIPPOCASTANACEAE

Horse Chestnut *Aesculus hippocastanum* L.MA2, HCA4

PAPILIONACEAE

Black Medick *Medicago lupulina* L.DONR2

White Clover *Trifolium repens* L.MA2,DONR2,RR2

Meadow Pea *Lathyrus pratensis* L.DONR2

Garden Everlasting Pea *L. latifolius* L.RR1

ROSACEAE

Bramble *Rubus fruticosus* L.MA5,MADONR4,RR5

Dewberry *R. caesius* L.MA3

Creeping Cinquefoil *Potentilla reptans* L.MADONR2,RR2

Herb Bennet *Geum urbanum* L. MADONR2

Wild rose *Rosa* sp. indet. RR1

Blackthorn *Prunus spinosa* L.MADONR3,RR2

Cultivated Cherry *Prunus avium* MA1

Hawthorn *Crataegus monogyna* Jacquin MA2,RR2

Whitebeam *Sorbus intermedia* (Ehrhart) Persoon,
ssp. MA2

ONAGRACEAE

Great Willowherb	<i>Epilobium hirsutum</i> L.MA2,DONR2,RR2
Pale Willowherb	<i>E. roseum</i> Schreber RR2
Rose-Bay	<i>Chamaenerion angustifolium</i> (L.) Scopoli RR3
Large Evening Primrose	<i>Oenothera erythrosepala</i> Borbas DONR2

ARALIACEAE

Ivy	<i>Hedera helix</i> L. MA2
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UMBELLIFERAE

Cow Parsley	<i>Anthriscus sylvestris</i> (L.) Bernhardi MA2, MADONR3,RR2
Hogweed	<i>Heracleum sphondylium</i> L. MA2, MADONR2,RR3,DONR3

EUPHORBIACEAE

Annual Mercury	<i>Mercurialis annua</i> L. MA2, DONR2
Petty Spurge	<i>Euphorbia peplus</i> L.MA2

POLYGONACEAE

Knotgrass	<i>Polygonum aviculare</i> L.MA3,RR3
Redleg	<i>P. persicaria</i> L.MACR-R1,DONR-R1
?Pale Persicaria	<i>P. lapathifolium</i> L.MA2
Water Pepper	<i>P. hydropiper</i> L.MACR-R1,DONR-R2

Black bindweed	<i>P. convolvulus</i> L.MABD2
Japanese Knotweed	<i>P. cuspidatum</i> Siebold & Zuccarini MA2
Broad Dock	<i>Rumex obtusifolius</i> L.MA2,MADONR2,RR2
Clustered Dock	<i>R. conglomeratus</i> Murray MADONR3

URTICACEAE

Stinging Nettle	<i>Urtica dioica</i> L.MA4,MADONR3,RR4
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CANNABINACEAE

Hop	<i>Humulus lupulus</i> L.MA2,RR1
Hemp	<i>Cannabis sativa</i> L.RR1

ULMACEAE

Common Elm	<i>Ulmus procera</i> Salisbury RR2
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BETULACEAE

Downy Birch	<i>Betula pubescens</i> Ehrhart MA1
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CORYLACEAE

Hazel	<i>Corylus avellana</i> L. MA2
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FAGACEAE

Oak	<i>Quercus robur</i> L.MA3, MADONR2,RR1
Holm Oak	<i>Q. ilex</i> Desvaux RR1

SALICACEAE

White Poplar *Populus alba* L.DONR2

PRIMULACEAE

Scarlet Pimpernel *Anagallis arvensis* L.RR1

LOGANIACEAE

Buddleia *Buddleja davidi* Franchet MA1,RR1

OLEACEAE

Ash *Fraxinus excelsior* L. MA1

Walnut *Juglans regia* L.MA1

Privet *Ligustrum vulgare* L.MA2

BORAGINACEAE

Green Alkanet *Pentaglottis sempervirens* (L.) Tausch
MABD2

CONVOLVULACEAE

Field Bindweed *Convolvulus arvensis* L.MA3,RR3

Great Bindweed *C. sepium* (L.) Brown MA3

SOLANACEAE

Bittersweet *Solanum dulcamara* L.DONR1, RR1

Black Nightshade *S. nigrum* L.MABD2

Thorn-Apple *Datura stramonium* L.MABD2

SCROPHULARIACEAE

Common Mullein *Verbascum thapsus* L.MABD1

LABIATAE

Common Calamint *Calamintha ascendens* Jordan RR1

Black Horehound *Ballota nigra* L.MA2,RR3

Red Dead-Nettle *Lamium purpureum* L.RR2

White Dead-Nettle *L. album* L.MA2,MADONR2,RR2

PLANTAGINACEAE

Ratstail Plantain *Plantago major* L.MA3,RR3

Ribwort Plantain *P. lanceolata* L.MA2,MADONR2,RR2

RUBIACEAE

Lady's Bedstraw *Galium verum* L.RR2

Goosegrass *G. aparine* L.MA3,MADONR3

CAPRIFOLIACEAE

Elder *Sambucus nigra* L.MA3,MADONR3,RR2

COMPOSITAE

Trifid Bur-Marigold *Bidens tripartita* L.DONR-R2

Gallant Soldier *Galinsoga parviflora* Cavanilles DONR2,RR2

Common Ragwort *Senecio jacobaea* L.MA1,RR1

Oxford Ragwort	<i>S. squalidus</i> L.DONR1
Heath Groundsel	<i>S. sylvaticus</i> L.RR2
Garden Goldenrod	<i>Solidago altissima</i> L.MA3
Pineapple Weed	<i>Matricaria matricarioides</i> (Lessing) Porter MA3,RR3
Yarrow	<i>Achillea millefolium</i> L.DONR2,RR2
Tansy	<i>Chrysanthemum vulgare</i> (L.) Bernhardi RR3
Mugwort	<i>Artemisia vulgaris</i> L.MA3,MADONR2,RR2
Chinese Mugwort	<i>A. verlotorum</i> LamotteMA3,MADONR2.RR2
Burdock	<i>Arctium minus</i> (Hill) Bernhardi MA2,MADONR2
Creeping Thistle	<i>Cirsium arvense</i> (L.) ScopoliMA4,RR3
Nipplewort	<i>Lapsana communis</i> L.MA2,MADONR2
Common Catsear	<i>Hypochoeris radicata</i> L.RR3
Autumn Hawkbit	<i>Leontodon autumnalis</i> L.RR3
Goatsbeard	<i>Tragopogon pratensis</i> L.RR2
Prickly Lettuce	<i>Lactuca serriola</i> L.HCA3
Corn Sow-Thistle	<i>Sonchus arvensis</i> L.RR2
Smooth Sow-Thistle	<i>S. oleraceus</i> L.MA2,RR2
Dandelion	<i>Taraxacum officinale</i> Weber MA2,DONR2,RR2

ALISMATACEAE

Arrowhead	<i>Sagittaria sagittifolia</i> L. DONR-R3
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LILIACEAE

Asparagus *Asparagus officinalis* L.MA2

Bluebell *Hyacinthoides non-scripta* (L.)
Rothmaler MACP2

ARACEAE

Lords and Ladies *Arum maculatum* L. MA2,DONR2

SPARGANIACEAE

?Small Bur-Reed *Sparganium simplex* Withering DONR-R3

GRAMINEAE

Perennial Rye-Grass *Lolium perenne* L.RR2

Annual Meadow-Grass *Poa annua* L. MA3,DONR2,RR2

Cocksfoot *Dactylis glomerata* L.MA2,MADONR3,RR3

Hairy Brome *Bromus ramosus* Hudson MA2,MADONR3

Common Couch *Agropyron repens*(L.) Beauvois MA3,RR2

Wall Barley *Hordeum murinum* L.MA2,DONR2,RR2

False Oat *Arrhenatherum elatius* (L.) Presl MA5,RR5

White Bent *Agrostis stolonifera* L.MA2

Fine Bent *A. tenuis* Sibthorp RR2

