

**A Botanical Survey of St  
Michael on Greenhill  
Church, Lichfield.**



**Arvensis**  
ECOLOGY

# A Botanical Survey of St Michael on Greenhill Church.

An ecological survey of St Michael on Greenhill Church, Lichfield including an annotated checklist of the vascular plants, based on fieldwork conducted by volunteers alongside *Arvensis Ecology* in 2018 and 2019.

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with contributions from volunteers

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**ACCESS:** St Michael on Greenhill Church is an active parish church; the grounds are open to the general public. Further details can be found at [www.stmichaelmaryjohn.org.uk/st-michaels.html](http://www.stmichaelmaryjohn.org.uk/st-michaels.html) for any events/access issues.

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**Cover photograph:** Ox-eye Daisy *Leucanthemum vulgare* in front of St Michael's on Greenhill Church

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# Introduction

St Michael's on Greenhill (C of E) Church, through Ray Allen commissioned *Arvensis Ecology* to lead several events with volunteers to record the flora present within the churchyard. Sessions on biological recording, botanical identification, as well as practical surveying days took place between August 2018 and July 2019.

## Location of St Michael's on Greenhill

St Michael's on Greenhill is situated in the centre of Lichfield to the southeast of Lichfield Cathedral, sitting within a single Monad (1km<sup>2</sup> grid squares SK1208) (Figures 1 and 2). The site is within the botanical vice-county of Staffordshire (v.c. 39) and the political area of Lichfield District Council. The churchyard is approximately 3.8 hectares (9.4 acres) and, the church sits at 103m in elevation.

The southern boundary of the churchyard follows an area of land used for car parking and a club, both bordering the main railway line, with a public footpath entering the site in the bottom southwest corner. To the east it borders Hawthorn Close, a small housing estate, from here is another pedestrian entrance. On the northern boundary of the site are the roads, Church Street (becoming Trent Valley Road) and Burton Old Road West, and several pedestrian access points are available along this side. The boundaries to the north comprise a tall stone wall elevating the churchyard above the surrounding roads. In the northwest corner is the only vehicular access, leading to the church entrance and parking area. To the west are various buildings including an old school. All other boundaries comprise a mix of hedges and fencing (Figures 2 and 3).

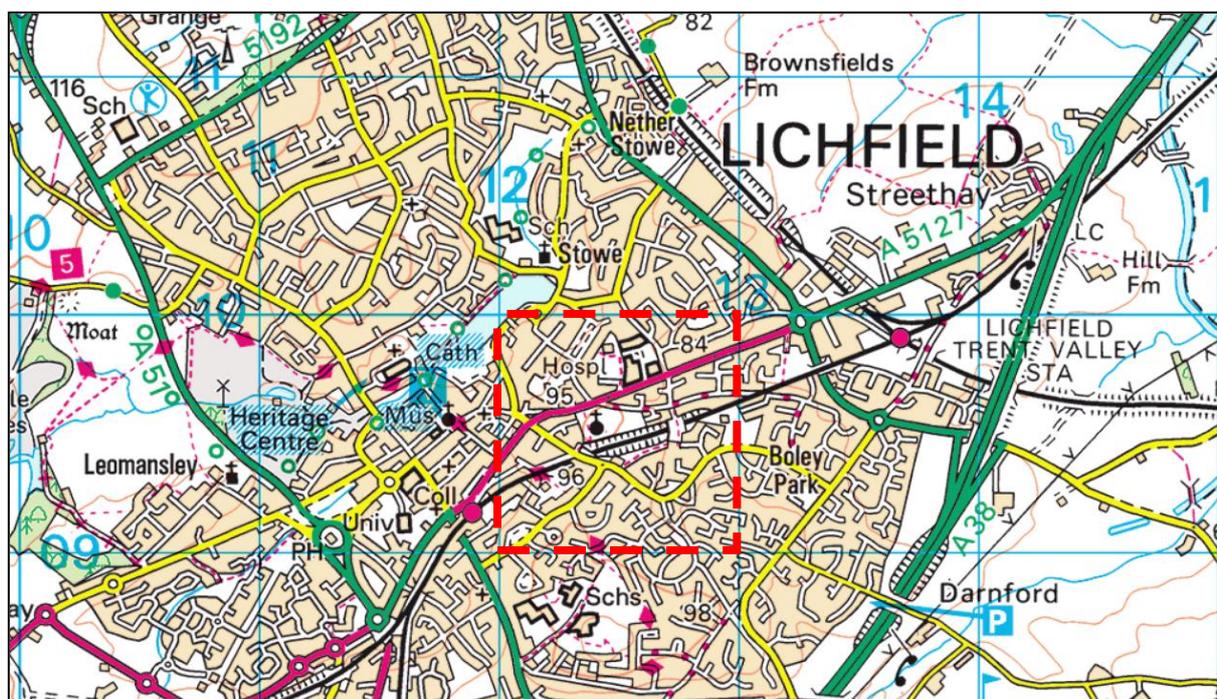


Figure 1: Location of St Michael on Greenhill in relation to Lichfield (located within the single 1km<sup>2</sup> grid squares shown outlined in red dashes).

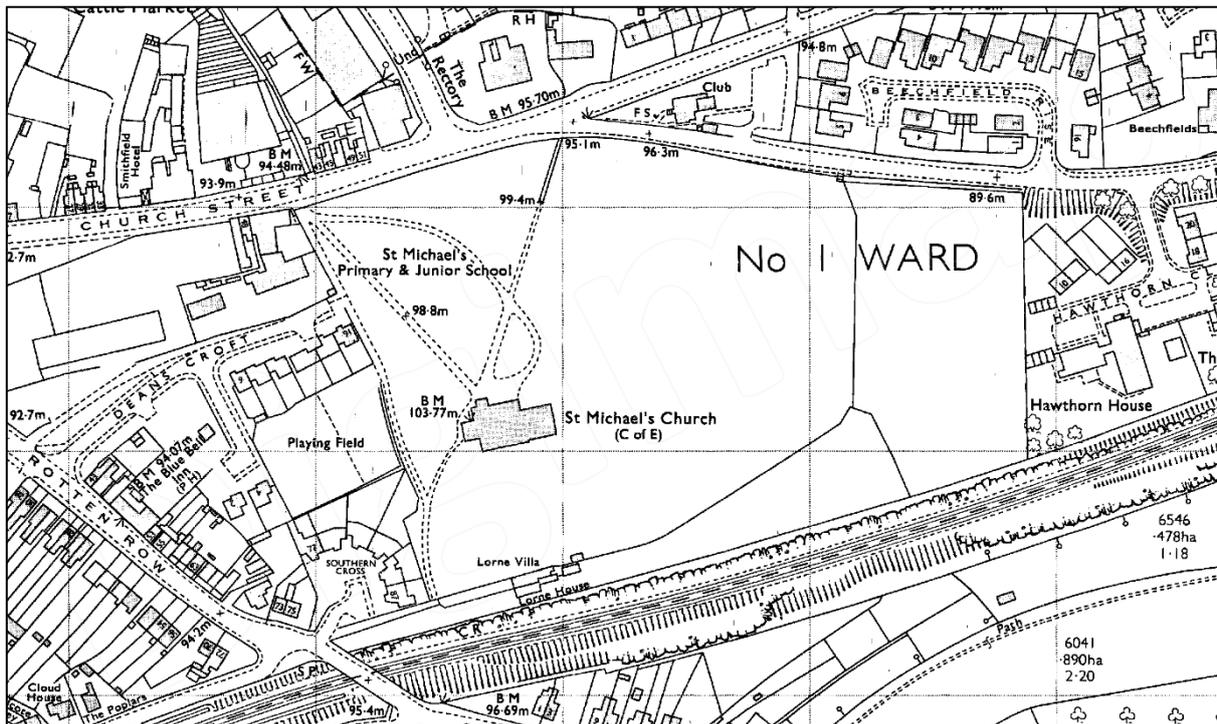


Figure 2: Map of photograph of St Michael's on Greenhill, showing urban setting (circa 1970).

Source: Ordnance Survey

OS Licence No. 100054589 (Arvensis Ecology).

## Historical Records

A check was made for historical records from the Botanical Society of Britain and Ireland database (accessed August 2018 and November 2018), and the National Biodiversity Network (accessed August 2018). Only one previous record had been made for the churchyard for Snowdrop *Galanthus nivalis* recorded by David Wall on the 24<sup>th</sup> of March 2003, at SK12450955 (current survey compartment D), although many records occurring for the monad SK1208 could have included the churchyard. David Wall said several of his other historical records were from the churchyard but not localised at this level (pers. comms).

## The current survey

A group of volunteers from the Church and the local Flora Group members attended a series of events run from August 2018 through to July 2019 with the intention of recording as much of the flora within the churchyard as possible. Regular visits over the seasons allowed us to capture the early spring flowers, as well as later season species.

Starting with an introduction to 'Biological Recording' and the plan for the survey, the volunteers recorded alongside Mark Duffell of *Arvensis Ecology*, noting any plant found, as well as its location within a recording compartment on site .

The primary focus of recording was the native flora, with some additional non-native species being recorded. Whilst flower beds and other horticultural areas were botanised, no attempt was made to fully record every planted species apart from obviously self-seeded or naturalised species (e.g. some half-hardy annuals such as Busy-lizzies *Impatiens walleriana* Cv. and Begonia *Begonia* Cv. had been planted, removed and new plants replanted in the border near the church entrance).

No critical taxa were to be recorded beyond aggregate level e.g. Bramble *Rubus fruticosus agg.* or *Sorbus aria agg.*

A list was made of all the vascular plants seen within each compartment using standard botanical recording techniques (Hill, Fasham *et al.* 2005). Identifications were made using Bean (1970), Hubbard (1992), Poland (2009), Rich and Jermy (1998) and Stace (1999, 2019).

Any rarities or species of interest were recorded at the 10m level using a GPS (Garmin Etrex 10, accuracy 5m or better). All botanical records will be submitted to the Vice-county recorder, John Hawksford and Ian Hopkins. Incidental records of other taxa including birds, some inverts and mammals will be submitted to the relevant recording schemes.

The interior of the churchyard buildings was excluded from this survey; the walls and roofs were visually searched from the ground level but with no access to the upper storeys, thus there are occasional records of plants growing epiphytically (upon the walls) on the buildings which have been included in this report.

The survey of St Michael's was undertaken jointly by *Arvensis Ecology* and volunteers on the following days: 22<sup>nd</sup> and 29<sup>th</sup> August 2018, 11<sup>th</sup> April and 3<sup>rd</sup> of July 2019. Volunteer recorders also visited the site without the support of *Arvensis Ecology* including on the 21<sup>st</sup> February 2019. These days comprised short recce visits, survey days with volunteers and training of volunteers in biological recording and botanical identification. All the events were led by Mark Duffell of *Arvensis Ecology* with assistance from Ray Allen, botanist and member of the church.

Volunteers who were involved are listed alphabetically:

|                 |                  |               |
|-----------------|------------------|---------------|
| Lesley Allen    | Lynn Edge        | Pete Norbury  |
| Ray Allen       | Alan Eley        | Jean Norris   |
| Jennifer Bundy  | Brenda Eley      | Kathy Simmons |
| Lorna Bushell   | June Frayn       | Kath Thompson |
| Margaret Buxton | Margaret Freat   | Tony Thompson |
| Jackie Campbell | Celia LePla      | Sally Vaughan |
| David Easton    | Sue Marsh        | David Wall    |
| Ann Eden        | Barbara Naughton | Anne Whatson  |
| David Edge      | Linda Norbury    |               |

Apologies to any volunteers and recorders omitted from this list.

The site was divided up into compartments with the coarsest records being made at the 1km<sup>2</sup> level; a compartment list was made of all species seen. Any rarities or species of interest were recorded at the 10m level using a GPS (Garmin Etrex 10, accuracy 5m or better). All botanical records are to be submitted to the Vice-county recorder, John Hawksford and Ian Hopkins; incidental non-botanical records will be submitted to Staffordshire Ecological Record.

A total of eight recording compartments were created within Y Dolydd (Figure 3). The compartments are described elsewhere in the report. Compartments are generally separated by footpaths, the only compartment with a 'poor' demarcation is between D and E, in this case an assumed line was drawn between the eastern ends of the church buildings and the club house to the south.

- A – land to the left of the main entrance with avenue of trees.
- B – wooded area within old graveyard.
- C – active graveyard
- D – large wooded area within old graveyard
- E – area of grassland behind church.
- F – grassland bordered by path and school.
- G - land to the right of the entrance road, with a 'traffic island' at the top.
- H – Immediate area around the church building, including car park to north and steps to boiler house.

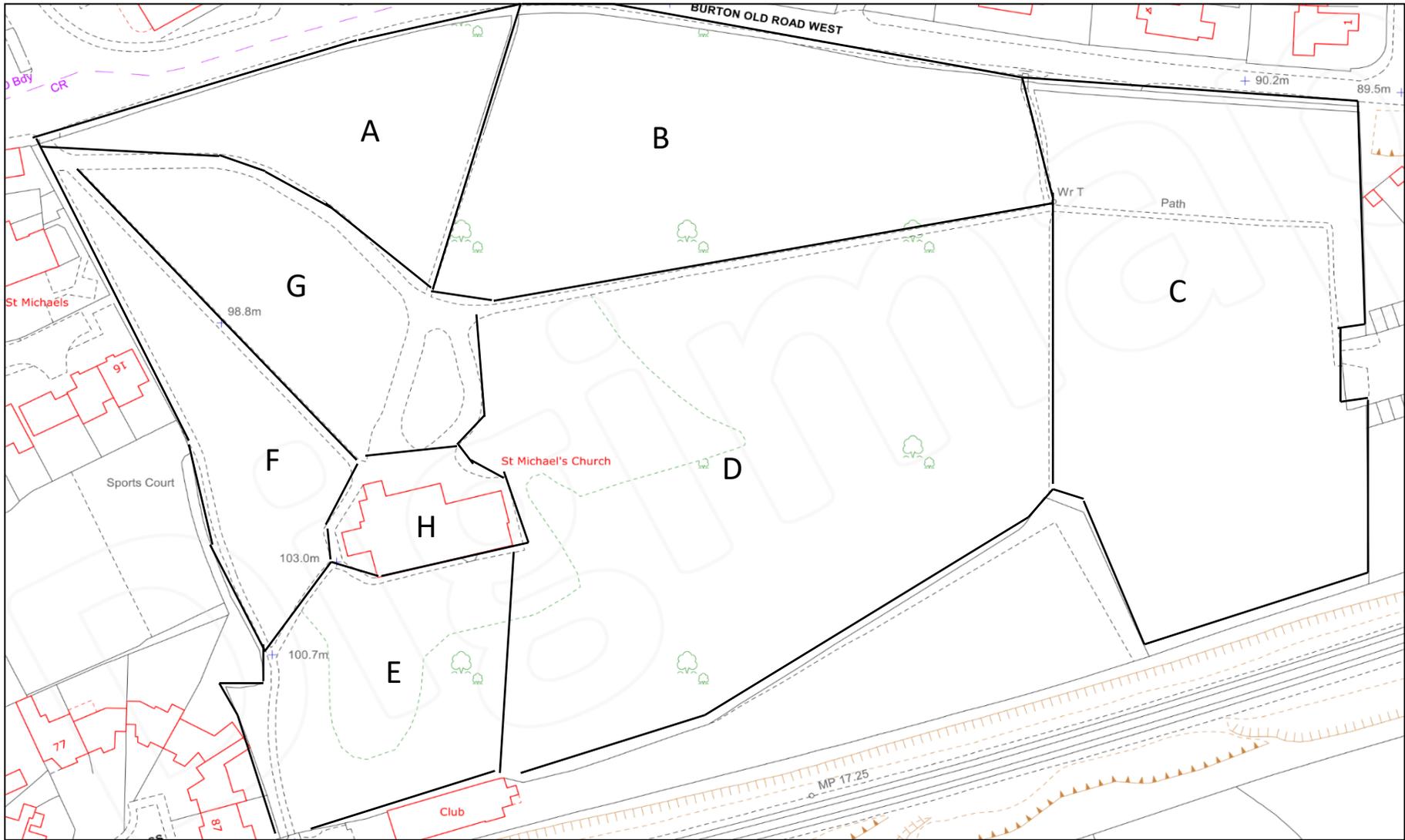


Figure 3: Compartment Map for St Michael's on Greenhill, Lichfield.

Source: Edina Digimap. OS Licence No. 100054589 (Arvensis Ecology).

# Results of Botanical Survey

A total of 1897 botanical records were collected comprising 303 different species, subspecies and hybrids, belonging to 62 families (*Appendix 1*); of these twelve were Staffordshire Axiophytes. One Schedule 8 and three Schedule 9 Species were recorded at St Michael's (see below for more details); as you would expect for an urban churchyard and 'parkland' situation there were also many non-native or introduced species and these are indicated in the annotated species list (*Appendix 1*).

Of the 1897 botanical records, 617 were made independently by volunteers. Some duplication does occur within the records, due to Mark Duffell recording the whole site after each volunteer day.

No sensible analysis could be undertaken of any gains or losses on the site given the lack of any historical botanical records.

## *Axiophytes*

Axiophytes are useful indicators of a site's importance for conservation; they comprise species which are neither particularly common nor rare but only occur on sites of conservation importance (BSBI 2015). As no historical botanical data was available for St Michael's no comparison could be made for Axiophytes.

A list of Axiophytes for Staffordshire (BSBI 2015) was compared with the current survey and St Michael's was found to have a total of 12 Axiophyte species:

- Wood Anemone *Anemone nemorosa* ①
- Wild Strawberry *Fragaria vesca* ①
- Sweet Woodruff *Galium odoratum* ①
- Corn Marigold *Glebionis segetum* (*Chrysanthemum segetum*) ②
- Rough Hawkbit *Leontodon hispidus* ②
- Cowslip *Primula veris* ①
- Hybrid Oxlip *Primula x polyantha* ①
- Wild Cherry *Prunus padus* ①
- Lesser Trefoil *Trifolium micranthum*
- Ivy-leaved Speedwell *Veronica hederifolia* ssp. *hederifolia*
- Grey Speedwell *Veronica polita*
- Early Dog-violet *Viola reichenbachiana*

Many of these are not truly native here but have naturalised from historical plantings (indicated by ① above), or more recent plantings e.g. the wildflower meadow area (indicated by ②). The other species are 'genuine' Axiophytes that do not appear to have been deliberately introduced.

# Schedule 8 and 9 Species

(Protected and Non-native Invasive species).

The Wildlife and Countryside Act of 1981, and its amendments in the Countryside and Rights of Way (CROW) Act 2000 created a list of animal and plant species which are either protected (Schedule 5, 6 and Schedule 8) or non-native species that are considered harmful to the environment (Schedule 9).

For species listed on Schedule 8 it is an offence to “deliberately pick, collect, cut, uproot or destroy these wild plants”.

The only Schedule 8 species recorded in this survey was the Bluebell. Despite its inclusion on Schedule 8, this will have little effect on the overall management of this site as in this case it is only an offence if any part of the plant is sold and not if plants are damaged (intentionally or otherwise) (NE 2014).

| Schedule 8                                |
|---|
| Bluebell <i>Hyacinthoides non-scripta</i> |

With Schedule 9 species it is an offence to release or allow to release animals or plants into the wild (NE 2011). Fortunately St Michael’s has few species listed on Schedule 9.

| Schedule 9                                  |
|---|
| Cotoneaster <i>Cotoneaster horizontalis</i> |
| Montbretia <i>Crocasmia x crocosmiflora</i> |
| Japanese Rose <i>Rosa rugosa</i>            |

## What does this mean for St Michael’s?

The only Schedule 8 species present, Bluebell *Hyacinthoides non-scripta* has undoubtedly been planted at St Michael’s. The species is protected from un-licensed selling of plants or parts of plants but as this is unlikely at St Michael’s then this is no concern.

Fortunately the presence of any Schedule 9 species at St Michael’s is not that obvious, with no widespread invading hordes of foreign plants.

A single plant of Cotoneaster *Cotoneaster horizontalis* grows at the western end of the church in the flowerbed where it is being contained, an unidentified species of *Cotoneaster* is present in the compartment B. Both plants have been introduced as ornamentals for their garden potential. Montbretia *Crocasmia x crocosmiflora* is present as a small clump inside a ‘walled’ grave by the side of a path in compartment D. Japanese Rose *Rosa rugosa* is present occasionally in the eastern hedgerow (SK12580959) in compartment C.

In an urban-gardened area these species are extremely common for they make great garden plants with lots of wildlife potential. Whilst *Cotoneaster* sp. can and do spread into the wild

causing damage to natural habitats, they are less of a problem in such a 'cultivated' and managed site as St Michael's.

### *Weeds?*

Despite widespread hysteria in the media, Ragwort *Senecio jacobaea* is not a 'notifiable weed'<sup>1</sup>. You do not need to declare it to the council etc., nor do you need to control it on your land. In fact Ragwort is a useful host to several species of Moths (Ragwort Facts 2011). At St Michael's, Ragwort is uncommon and never dominates any areas growing in disturbed areas; at the moment it does not appear to be a problem. As St Michael's does not harvest hay, no problems of livestock eating it should occur. Attempts to remove this species should be carefully monitored and the plants correctly identified as there are several other similar looking 'yellow daisies' on the site that are of botanical and ecological value.

Likewise attempts to 'tidy' the paths using herbicides should be only undertaken by qualified and licenced individuals; in many cases the weeds being targeted are annuals and can be managed more effectively by pulling.

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<sup>1</sup> In UK Law there is no such thing!

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# Acknowledgments

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To all the volunteers, staff and parishioners of St Michael's Church.

Thanks to all the volunteers for willingly turning out during a mixture of weathers and forecasts, as well as undertaking 'out of hours' surveying.

To the Botanical Society of Britain and Ireland for providing access to historical data.

We would like to thank the following people for their support, advice and encouragement of the Tree and Wildflower Survey:

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The Venerable Simon Baker, Rector of St. Michael's Church.

## Appendix 1: Annotated Botanical species list

This is a list of botanical species recorded at St Michael's, with brief descriptions of their abundance and distribution on the site. Taxonomy (and taxonomic order) follows Stace (2019). Nomenclature for cultivars follows RHS (2019). All plants native unless indicated otherwise (Hill, Preston and Roy, 2004). The abundance of species is given using the DAFOR scale (Dominant, Abundant, Frequent, Occasional or Rare; as well as the use of the prefix local e.g. Locally abundant), this denoted the abundance/rarity on the site not nationally or regionally. ! indicates a species or subspecies that is a Staffordshire Axiophyte BSBI (2015).

Native status is defined as either:

|                     |   |
|---------------------|---|
| <i>Native</i>       | Present in study area, without intervention by man, whether intentional or unintentional, having come from an area in which it is native; or (having) arisen de novo in the study area. |
| <i>Archaeophyte</i> | A plant which was brought to Britain by man, intentionally or unintentionally, and became naturalized there between the start of the Neolithic period (c. 4000 bc) and ad 1500.         |
| <i>Neophyte</i>     | A plant introduced to the UK after 1500 (reproducing effectively by seed or vegetative means)   |

After Macpherson *et al.* 1996; Preston *et al.* 2004

### ***Equisetaceae***

*Equisetum arvense* Field Horsetail. Scattered in C. Native. Rare.

### ***Aspleniaceae***

*Asplenium ruta-muraria* Wall Rue. Growing in H, on south side walls of church, a small colony of three plants by steps down to boiler house at SK12380950. Native. Rare.

*Asplenium scolopendrium* Hart's-tongue. H. A couple of plants growing on church walls. Native. Rare.

### ***Dryopteridaceae***

*Dryopteris dilatata* Broad Buckler-fern. One or two plants growing out of tomb wall in compartment G. Native. Rare.

*Dryopteris filix-mas* ss. Male-fern. Found in F, G growing in tomb cracks and H where it is forming a colony under bench and display board near entrance to church. Native. Rare.

### ***Pinaceae***

*Pinus nigra* ssp. *laricio* Corsican Pine. Often only recorded to species. Prominent features of A, B and D. Neophyte. Occasional.

*Pinus sylvestris* Scot's Pine. Similar areas to above, A, B and E (in western corner). Native. Rare.

### ***Cupressaceae***

*Cupressus lawsoniana* Cv. Lawson's Cypress. (Synonym *Chamaecyparis lawsoniana*). Planted in C and D. In C it is a common feature as a small bush, occasionally a tree (SK12570951) planted upon a grave. Several cultivars are present. Neophyte. Rare.

*Cupressus pisifera* Cv. Sawara Cypress. (Synonym *Chamaecyparis lawsoniana*). Planted in D at SK12460954. Neophyte. Rare.

## **Taxaceae**

*Taxus baccata* Yew. In all compartments except E. Mature trees, as well as the occasional sapling and seedling. Made into a hedge at western end of church. Native. Frequent.

*Taxus baccata* 'Fastigiata' Hibernian Yew. Several mature trees of this form. Native. Occasional.

## **Lauraceae**

*Laurus nobilis* Bay. A single large tree in B at SK12430958. Neophyte. Rare.

## **Papaveraceae** (incl. *Fumariaceae*).

*Eschscholzia californica* Californian Poppy. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Neophyte. Rare.

*Fumaria officinalis* Common Fumitory. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Probably arriving naturally. Native. Rare.

*Papaver dubium* Long-headed Poppy. Found in an area of grassland to which a 'native' seed-mix has been added, near the end of the church (F). Archaeophyte. Rare.

*Papaver rhoeas* Common Poppy. With *Papaver dubium* above.

*Papaver somniferum* Opium Poppy. A few plants found in ornamental bed found by display board at B (SK123095). Either deliberately or accidentally introduced in ornamental seed mix. Neophyte. Rare.

## **Ranunculaceae**

! *Anemone nemorosa* Wood Anemone. Two locations in compartment D (SK12460957 by side of path and SK12410951 on a grave site). Presumably planted here, but native. Rare.

*Ficaria verna* Lesser Celandine. (Synonym *Ranunculus ficaria*). The subspecies *fertilis* (Syn. ssp. *ficaria*) was present in compartments A, B, E and G. Also present was the tuber bearing subspecies *verna* (Syn. ssp. *bulbifer*) which was dominating parts of A, B, D, E and F. This ssp. can become a problematic species in garden situations re-growing from fragments of tubers that it produces in copious quantities. It is also less floriferous than ssp. *fertilis*. On the 'Island', to the southeast of G is a dark leaved form, similar to, if not *F.* 'Brazen Hussy'. Native. Abundant.

*Nigella damascena* Love-in-a-mist. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Neophyte. Rare.

*Ranunculus repens* Creeping Buttercup. Widespread throughout in grassland and woods (A to H). Frequent to abundant. Native.

## **Grossulariaceae**

*Ribes sanguineum* Flowering Currant. Single bush at SK12350946.

## **Crassulaceae**

*Sedum album* White Stonecrop. Planted on a grave in C (SK12530952) and F (SK12310957) with *Oxalis corniculata* and *Veronica filiformis*. Archaeophyte. Rare.

*Petrosedum forsterianum* Rock Stonecrop (Synonym *Sedum forsterianum*). Naturalised on several graves in C (including SK12540952). Native. Rare.

*Phedimus spurius* Caucasian-stonecrop (Synonym *Sedum spurium*). Planted on several graves in C (including SK12530952). Native. Rare.

## **Fabaceae**

*Ervilia hirsuta* Hairy Tare. (Synonym *Vicia hirsuta*). Occasional in A, B, C, D and E. Native.

*Lotus corniculatus* Bird's-foot Trefoil. Only found in native state in grassland in F by path side with G. Otherwise all plants are the non-native variety var. *sativus*, which has been introduced (via seed mixes) into D and F. Native and Neophyte (var. *sativus*). Rare.

*Medicago lupulina* Black Medick. Occasional in grassland (D, E and H).

*Robinia pseudoacacia* False-acacia. A single tree in A producing prodigious suckers (which are now forming sturdy growth), also present in B, probably as a result of suckering under path. Neophyte. Rare.

*Trifolium dubium* Lesser Trefoil. Widespread (A, D, E, G and H), in grassland and paths. Native. Rare.

*Trifolium medium* Zigzag Clover. Found in an area of grassland to which a 'native' seed-mix has been added, near the end of the church (F). Native. Rare.

! *Trifolium micranthum* Slender Trefoil. Only present in short grassland in the north-western end of A and throughout G. Native. Rare.

*Trifolium pratense* Red Clover. Rare in C, D, F and H. Most common in newly sown 'meadow' area in D (presumably part of seed mix). Native. Rare.

*Trifolium repens* White Clover. Common in grassland (A, C, D, F and G), as well as in paving (H). Native. Frequent.

*Vicia sativa* ssp. *sativa* Common Vetch. In C and G. Archaeophyte. Rare.

*Vicia sepium* Bush Vetch. Rare in C. Native. Rare.

## **Rosaceae**

*Amelanchier lamarckii* Juneberry. Single tree planted in current churchyard (C) at SK12520958. Neophyte. Rare.

*Cotoneaster* sp. A Cotoneaster. An unidentified cotoneaster was found in B, it sadly did not flower and vegetative id was fruitless. Neophyte (potentially Schedule 9). Rare.

*Cotoneaster horizontalis* Cotoneaster. A single plant grows at the western end of the church in the flowerbed where it is being contained. Neophyte (Schedule 9). Rare.

*Crataegus monogyna* Hawthorn. Present in every compartment, usually as a tree or shrub. Native. Occasional.

! *Fragaria vesca* Wild Strawberry. Occasionally forming large stands in parts of the woodland in B, particularly along path between A and B. Large stand under remains of old felled tree in G (SK12350955). Native. Occasional to frequent.

*Geum urbanum* Wood Avens. Common, in all compartments. Native.

*Malus domestica* Apple. (Synonym *M. pumilia*). Many mature apple trees planted in an avenue between F and G. Archaeophyte. Occasional.

*Malus x purpurea* Purple Crab. Present in avenue of trees between F and G. Some recently planted replacement trees are of the hybrid 'Wisley Crab'. Neophyte. Rare.

*Malus sylvestris* Crab Apple. Many mature apple trees planted in an avenue between F and G. A few mature trees present in D. Native. Rare.

*Photinia x fraseri*. Single shrub present in C (SK12520959) and also planted in flower bed in H at end of church. Neophyte. Rare.

*Potentilla reptans* Creeping Cinquefoil. Rare only present in grassland in C. Native. Rare.

*Poterium sanguisorba ssp. balearicum* Fodder Burnet (Synonym *Sanguisorba minor*). Found in an area of grassland to which a 'native' seed-mix has been added, near the end of the church (F). Also present as a few solitary plants in A near road. Neophyte. Rare.

*Prunus avium* Wild Cherry. Mostly as suckers but occasionally as mature trees (A, B and H). Native. Occasional.

*Prunus cerasifera* Cherry Plum. Only found in B near the roadside (SK12420962). Archaeophyte. Rare.

*Prunus laurocerasus* Cherry Laurel. Occasional stands or forming hedges in B, C and E. Neophyte. Occasional.

! *Prunus padus* Bird Cherry. A single tree found by Tony Thompson in E at SK12330945. Native, Rare.

*Prunus serrulata* Japanese Cherry. A single tree planted in centre of modern graves in C. Neophyte. Rare.

*Prunus spinosa* Blackthorn. Present in hedgerows of C and occasional in B. Native. Rare.

*Pyrus pyraster* Wild Pear. A single semi-mature tree growing in B at SK12460958. Native. Rare.

*Rosa canina* agg. Dog Rose. Scattered in A, C, E and F. Native. Rare.

*Rosa rugosa* Japanese Rose. Present occasionally in the eastern hedgerow

(SK12580959) in compartment C. (Schedule 9). Introduced. Rare.

*Rubus fruticosus* agg. Bramble. Widespread, occasionally dominating the understorey of the woodlands in B and D, although signs of recent clearance. All compartments. Native. Dominant to Occasional.

*Rubus idaeus* Raspberry. A few small stands in A, D and E. Native. Rare.

*Sorbus aria* agg. A Whitebeam. A large tree in B, planted at SK12490959. Also present in C in hedgerow. Native. Rare.

*Sorbus aucuparia* Rowan. Planted and spreading as saplings, in A, B, C, D and G. Native. Rare.

### ***Ulmaceae***

*Ulmus glabra* Wych Elm. The commonest Elm on site, some large trees particularly in B and D. Present also in C and F (hedgerows). Native. Frequent.

*Ulmus procera* English Elm. Large stand of suckering plants at SK12500960 in B, especially near roadside wall. Native. Rare.

### ***Urticaceae***

*Urtica dioica* Common Nettle. Present in every compartment. Native. Abundant to rare.

### ***Fagaceae***

*Castanea sativa* Sweet Chestnut. Only recorded by Ray Allen and colleagues. Several old trees had been felled recently (c. spring 2017), one of which was in A. Neophyte. Rare.

*Fagus sylvatica* Beech. Planted and forming tall trees in A, B and D. Native. Frequent.

*Fagus sylvatica* 'Purpurea' Purple Beech. Similar to the species, only found in A and B. Native. Rare.

*Quercus cerris* Turkey Oak. Present as mature trees in D and E. Neophyte. Occasional.

*Quercus robur* Pedunculate (English) Oak. Widespread throughout churchyard, in every compartment except modern graveyard (C). Present as mature trees, saplings and seedlings in grassland. Native. Frequent.

### **Juglandaceae**

*Juglans regia* Common Walnut. Single tree planted in B (SK12450959). Neophyte. Rare.

### **Betulaceae**

*Alnus glutinosa* Alder. Planted in B by the side of the track with D. Native. Rare.

*Betula pendula* Silver Birch. Widespread as a planted tree and also self-set, in A, B, D, E, F and H. A sapling (likely of this species) was spotted growing in the roof/gutter at the eastern end of the church. Native. Occasional.

*Betula pubescens* Downy Birch. Similar distribution to Silver Birch but less widespread, found in A, B, D, E, F and H. Occasionally growing as saplings on tomb cracks. Native. Occasional.

*Betula sp.* A Birch. A single cultivated birch probably *B. utilis* ssp. *jacquemontii*. By side of track between B and D. Neophyte. Rare.

*Carpinus betulus* Hornbeam. A couple of trees planted in F and H. Native. Rare.

*Corylus avellana* Hazel. Common in woodland areas as an understorey shrub, in B, C, E and F. Native. Occasional.

### **Cucurbitaceae**

*Bryonia dioica* White Bryony.

An occasional species at most, often to be found growing in dense shade under Yew, then springing out at the top of the plant in flower and fruit. Found in B, D, E, F, and H. Occasional as a weed in ornamental flower borders. Native. Rare.

### **Celastraceae**

*Euonymus fortune* Cv. A Euonymus. Planted in ornamental bed to left of main entrance to church. The leaves are heavily browsed by Vine Weevil. Neophyte. Rare.

### **Oxalidaceae**

*Oxalis corniculata* Procumbent Yellow-sorrel. On grave in F, with *Sedum album* and *Veronica filiformis* at SK12310957. The purple leaved variety *O. corniculata* var. *atropurpurea* was present nearby. Neophyte. Rare.

*Oxalis exilis* Least Yellow-sorrel. This diminutive plant was spotted by David Wall and ID confirmed by M. Duffell. Growing in A at SK12310960, thriving in the shortly scalped grass. Neophyte. Rare.

### **Hypericaceae (Clusiaceae)**

*Hypericum androsaenum* Tutsan.

In hedgerow to north of new graveyard (C) at SK12530960. Native. Rare.

### **Violaceae**

*Viola odorata* Sweet Violet. A large patch by the steps in B (northeast end) at SK12510961; also dominating nearby ground flora at SK12500959. A large clump is present near graves at SK12390953 in D. Probably introduced in the past. Native. Frequent to Rare.

! *Viola reichenbachiana* Early Dog-violet. A small patch on the island in G. Presumably introduced in the past? Native. Rare.

*Viola riviniana* Common Dog-violet. The commonest and most widespread species of violet, found in B, C, F and G. Native. Occasional.

### **Salicaceae**

*Populus tremula* Aspen. A single tree in B, by the side of the track next to D. Planted with other ornamental species e.g. Whitebeam and Contorted Willow. Native. Rare.

*Salix babylonica* var. *pekinensis* 'Tortuosa' Contorted Willow. A single plant in C, planted alongside other ornamental species including Amur Cork Tree. Another specimen is found in B by side of track with D. Neophyte. Rare.

*Salix caprea* Goat Willow. Present as a small understorey tree, shrub or sapling, in A, B and C. Native. Native. Occasional.

### **Euphorbiaceae**

*Euphorbia amygdaloides* ssp. *amygdaloides* Wood Spurge. Planted in A, round the base of a tree (SK12370959). Planted by Ray Allen et al. circa 2018. Native. Rare.

*Euphorbia peplus* Petty Spurge. A species of disturbed ground present in flowerbeds and between cracks in pavements. In A, C, E, F and H. Archaeophyte. Occasional.

*Mercurialis perennis* Dog's Mercury. Only present in scattered stands in D (SK12500957) especially under trees (and cleared scrub) bordering E. Native. Rare.

### **Linaceae**

*Linum usitatissimum* Flax. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Archaeophyte. Rare.

### **Geraniaceae**

*Geranium lucidum* Shining Crane's-bill. Found in B and C, usually on the free-draining gravel found as grave dressings. Native. Occasional.

*Geranium macrorhizum* 'Ingwersens Variety' Rock Crane's-bill. Planted alongside two other ornamental Geranium behind graves in C (bordering D) at SK12520957. Neophyte. Rare.

*Geranium molle* Dove's-foot Crane's-bill. Occasional in grassland in B and E. Native. Rare.

*Geranium pusillum* Small-flowered Crane's-bill. Rare, in grassland D and H. Native.

*Geranium pyrenaicum* Hedge Crane's-bill. Occasional in hedges and grassland, A, E, F and H. Introduced. Rare.

*Geranium robertianum* Herb-Robert. In woodland and on graves, A, C, D, and H. White flowered form also present. Native. Occasional to rare.

*Geranium x oxonianum* Druce's Crane's-bill. Two separate varieties of this hybrid were found close to each other 'Claridge Druce' and 'Thurstonianum', in C alongside hedge/bank between C and D at SK12520957. Neophyte. Rare.

*Geranium x versicolor* Pencilled Crane's-bill. With the above hybrids growing along hedge/bank between C and D. Neophyte. Rare.

### **Onagraceae**

*Chamerion angustifolium* Rosebay Willowherb. Occasional stands in A, B, C and E. Native. Rare.

*Epilobium ciliatum* American Willowherb. Recorded in A, D and E. Introduced. Rare.

*Epilobium hirsutum* Great Willowherb. In A, B, C, D and F. Native. Rare.

*Epilobium montanum* Broad-leaved Willowherb. By far the commonest species and widespread throughout the site in suitable habitats. Native. Occasional.

*Epilobium roseum* Pale Willowherb. Only found in compartment A under a felled tree at SK12340961. Large colony spreading slowly. Native. Rare.

*Epilobium tetragonum* Square-stalked Willowherb. Only seen once when a few plants were found in ornamental bed by display board at B (SK123095). Native. Rare.

*Oenothera* sp. An Evening-primrose. An individual plant was found in D at SK12510952 during the survey it remained as a rosette and didn't flower making identification impractical. Neophyte. Rare.

### ***Sapindaceae*** (incl. *Aceraceae*).

*Acer campestre* Field Maple. Present as single trees and in hedgerows in B, D, F and H. Native. Occasional.

*Acer macrophyllum* Oregon Maple. A single mature tree in D, fruiting well (SK124095). Neophyte. Rare

*Acer platanoides* Norway Maple. Either as mature trees, in the hedgerow or occasionally as seedlings (A) in A, B, D, E, F. Neophyte. Occasional.

*Acer pseudoplatanus* Sycamore. Present as mature trees, in hedgerows and occasionally forming patches of seedlings. A, B, C, D, E and G. Neophyte. Occasional.

*Aesculus hippocastanum* Horse Chestnut. Present in all compartments except G, as a mature tree, saplings or seedlings. An old tree had been felled recently (c. spring 2017),

one in a prominent position on the traffic island in G. Neophyte. Rare.

### ***Rutaceae***

*Phellodendron amurense* Amur Cork tree. A highly unusual species, planted in northern corner of C, bordering with B (SK12520958). Neophyte. Rare.

### ***Malvaceae*** (incl. *Tiliaceae*)

*Malva moschata* Musk Mallow. Only found in one location, where it had been planted into newly made meadow in D (pers. comms. Ray Allen). Native. Rare.

*Malva sylvestris* Common Mallow. Occasional in rougher grassland, by sides of paths and tracksides (C, E, F and H). Archaeophyte. Occasional to rare.

*Tilia platyphyllos* Large-leaved Lime. Two trees of this species found in B and G. Native. Rare.

*Tilia x europaea* Common Lime. The commonest planted lime species in the churchyard. Found as mature trees in all compartments except F and H. Neophyte. Rare.

### ***Brassicaceae***

*Alliaria petiolata* Garlic Mustard. Found in suitable habitats (areas with some disturbance) in A to F (not in G or H). Native. Occasional to rare.

*Arabidopsis thaliana* Thale Cress. An ephemeral weed, liking the cracks in pavements and disturbed areas of borders and path sides (A to F). Native. Rare.

*Aubreita deltoides* Aubretia. Naturalised in hedgerow in C, as well as planted established on graves there. Neophyte. Rare.

*Brassica sp.* A Brassica. An unidentified seedling, in flower but not fruiting was discovered amongst the sown meadow in D. Rare.

*Capsella bursa-pastoris* Shepherd's-purse. Occasional as weed in disturbed areas (A, B, E, F and H). Similar habitats to *Arabidopsis thaliana*. Archaeophyte. Rare.

*Cardamine flexuosa* Wavy Bitter-cress. Only found growing in D, under trees and along path side. Native. Rare.

*Cardamine hirsuta* Hairy Bitter-cress. Less discerning in habitats than *C. flexuosa*, and common throughout A, C, D, E, F and G. A profusion temporarily took over the cleared area near the compost heap in D. Native. Occasional to Rare.

*Lepidium didymus* (*Coronopus didymus*) Lesser Swine-cress. Present in scuffed areas particularly in A and D (present in newly sown meadow). Neophyte. Rare.

*Lobularia maritima* Sweet Alison. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Neophyte. Rare.

*Sinapis alba ssp. alba*. White Mustard. In two separate but similar locations. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Most common in newly sown 'meadow' area in D. Possibly introduced in seed mix as a contaminant or arising naturally. Archaeophyte. Rare.

*Sisymbrium officinale* Hedge Mustard. Occasional in B, D, E, F and H. Archaeophyte Occasional to rare.

### **Polygonaceae**

*Persicaria maculosa* Redshank. Scattered in A, F and H. It is most prominent along the

footpath bordering the old school in H. Native. Rare.

*Fagopyrum esculentum* Buckwheat. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Neophyte. Rare.

*Polygonum aviculare* ss. Knotgrass. Recorded in A, B, C, D, F, G and H. (Potentially overlooked in E). Native. Occasional.

*Polygonum depressum* Equal-leaved Knotgrass (Syn. *P. arenastrum*). A small quantity found in H in paving. Archaeophyte. Rare.

*Rumex acetosa* Common Sorrel. Sporadically occurring in grassland in A, B, C and G. Native. Rare.

*Rumex acetosella* Sheep's Sorrel. In short turf and bare edges of graves in C and G, particularly prominent by edge of main path in G. Native. Rare.

*Rumex obtusifolius* Broad-leaved Dock. Widespread, present in all compartments. Only at low frequencies. Native. Occasional.

*Rumex sanguineus* Wood Dock. Less common than Broad-leaved Dock, generally restricted to more shady areas in A, B, D and E. Native. Rare.

### **Caryophyllaceae**

*Agrostemma githago* Corncockle. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Archaeophyte. Rare.

*Cerastium fontanum* Common Mouse-ear. Frequent throughout (not recorded in compartment B). Native. Occasional to rare.

*Sagina apetala* Annual Pearlwort. In the usual places along path sides and gaps in

paving stone in F, G and H. Native. Occasional.

*Sagina procumbens* ss. Procumbent Pearlwort. More widespread than *S. apetala* but in similar habitats. Found in A, E, G and H. Native. Occasional.

*Silene coeli-rosa* Rose-of-heaven. One plant in newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Neophyte. Rare.

*Silene dioica* Red Champion. Recorded in A, B and D, occurring alongside introduced seed mix in new meadow in D. Native. Occasional.

*Silene vulgaris* Bladder Champion. Only found in one location, where it had been planted into newly made meadow in D (pers. comms. Ray Allen). Native. Rare.

*Stellaria graminea* Lesser Stitchwort. Found only twice, in profusion by graves in C (SK12560952) and by Allen et al. in D. Native. Rare.

*Stellaria media* Common Chickweed. Widespread throughout site (not recorded in C), occasionally common in flowerbeds or newly disturbed areas. Native. Occasional to Rare.

### **Hydrangeaceae**

*Philadelphus coronarius* Cv. Mock-orange. A cultivated form of *Philadelphus* planted in hedgerow in E. Neophyte. Rare.

### **Cornaceae**

*Cornus sanguineus* ssp. *australis* A Dogwood. The Mediterranean subspecies of our native Dogwood, planted in C at (SK12580959), far hedgerow bordering Hawthorn Close. Neophyte. Rare.

### **Primulaceae**

*Cyclamen hederifolium* Sowbread. Present in C and E. Neophyte. Rare.

*Lysimachia nummularia* Creeping Jenny. Naturalised in grass in C (SK12540950). The golden form was planted and naturalised near and on graves also in C (SK125290952). Native. Rare.

! *Primula veris* Cowslip. Planted and naturalised in B, C and D. Coloured forms also present. Native. Rare.

*Primula vulgaris* Primrose. A mixture of planted and naturalised plants scattered throughout mainly in B, C, D, F and G. Some obvious cultivated forms present. Native. Frequent to rare.

! *Primula x polyantha* Hybrid Oxlip. A large natural colony is present by the paths between B and D, another stand in E (SK12390946). Native hybrids also present in G. Introduced garden forms present in D and G. Native. Rare.

*Primula* sp. A Primrose. A large stand of an ornamental species was found in B (SK12410961), flowers were not present during survey. Neophyte (?) Rare.

### **Ericaceae**

*Calluna vulgaris* Cv. A heather. An ornamental form of native heather planted on a grave in A. Native. Rare.

*Rhododendron* Cv. A Rhododendron. A large flowered ornamental species planted on a grave in C (SK12530951). Another similar plant (different cultivar) was found in hedgerow to south in C. Neophyte. Rare.

### **Garryaceae**

*Aucuba japonica* Spotted-laurel. A variegated form planted in flower bed at west end of church (H). Neophyte. Rare.

## **Rubiaceae**

*Galium aparine* Cleavers. Common throughout (except H). Native. Occasional.

! *Galium odoratum* Sweet Woodruff. A long established plant in D (bordering onto C) at SK12510954. Native. Rare.

*Galium verum* Lady's-bedstraw. Planted in B (sown wildflower mix by end of church) and in D (newly sown meadow). Allen et al. also recorded it in A. Native. Rare.

## **Apocynaceae**

*Vinca major* Greater Periwinkle. Ground cover in E. Neophyte. Occasional.

*Vinca minor* Lesser Periwinkle. In D (SK12500956). Archaeophyte. Rare.

## **Hydrophyllaceae**

*Nemophila menziesii* Baby-blue-eyes. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Neophyte. Rare.

*Phacelia tanacetifolia* Phacelia. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Neophyte. Rare.

## **Boraginaceae**

*Borago officinalis* Borage. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Neophyte. Rare.

*Myosotis arvensis* Field Forget-me-not. Present in D as a 'weed' in newly sown meadow. Archaeophyte. Rare.

*Myosotis sylvatica* Wood Forget-me-not. The commonest Forget-me-not species found, present in A, B, C, D and G. Native. Occasional to rare.

*Pentaglottis sempervirens* Green Alkanet. Present in northern and southern hedgerows in C; rarely present on graves. Neophyte. Rare.

*Pulmonaria officinalis* Lungwort. In hedgerow (C) with *Viola riviniana*, *Hypericum androsaenum* and *Pentaglottis sempervirens* at SK12530960. Neophyte. Rare.

*Symphytum x hidcotense* (Syn. *S. 'Hidcote Blue'*). Hidcote Comfrey. A large established colony on raised bank between C and D (SK12510953). Neophyte. Occasional.

*Symphytum sp.* A Comfrey. Planted and naturalised at end of Church in H (west end). Never in flower to identify accurately to species. Rare.

## **Convolvulaceae**

*Convolvulus arvensis* Field Bindweed. Only found in C, where it grew in profusion on a couple of graves (SK12570952). Native. Rare.

## **Solanaceae**

*Solanum nigrum* ss. Black Nightshade. In newly sown garden bed including ornamental annuals from seed mix; by display board at B (SK123095). Native. Rare.

*Solanum tuberosum* Potato. An accidental occurrence in flowerbed to right of church door (H), presumably introduced in compost or with other plant material. Neophyte. Rare.

## **Oleaceae**

*Fraxinus excelsior* Ash. Widespread throughout churchyard, as mature trees, saplings and seedlings. Ash Dieback is unfortunately present in several places. Native. Frequent.

*Ligustrum ovalifolium* Garden Privet. Planted in hedgerows in E and H. Neophyte. Occasional.

*Syringa vulgaris* Lilac. In hedgerow of F. Neophyte. Occasional.

### **Veronicaceae**

*Digitalis purpurea* Foxglove. Present in the recently disturbed soils of the garden bed in B, by display board (SK123095). Native. Rare.

*Linaria purpurea* Purple Toadflax. Present in a pot on a grave and naturalised nearby (C). Neophyte. Rare.

*Veronica arvensis* Wall Speedwell. In suitable habitats throughout (apparently absent in C and D). Native. Rare.

*Veronica chamaedrys* Germander Speedwell. In grassland, woodland and disturbed ground throughout. Native. Occasional to rare.

*Veronica filiformis* Slender Speedwell. In amongst turf (B and D) and occasionally on graves (F). Neophyte. Rare.

*Veronica hederifolia* Ivy-leaved Speedwell. Found throughout. ! ssp. *hederifolia* was found in compartments B to F; ssp. *lucorum* found in all compartments except F and H. Native. Occasional to rare.

*Veronica persica* Common Field-Speedwell. Scattered (A, B and D), but often in disturbed newly turned soil such as flower beds. Neophyte. Rare.

! *Veronica polita* Grey Speedwell. Never very common, in C, E, F and G; cultivated ground and cracks in paving. Native. Rare.

*Veronica serpyllifolia* Thyme-leaved Speedwell. Common in grasslands throughout. Our plant was ssp. *serpyllifolia*. Native. Occasional to rare.

### **Plantaginaceae**

*Plantago lanceolata* Ribwort Plantain. Common and widespread, all compartments. Native. Occasional.

*Plantago major* Greater Plantain. As *Plantago lanceolata*. Native. Occasional.

### **Lamiaceae**

*Lamium album* White Deadnettle. Surprising restricted to only one area, one large stand in D by the lower entrance to the new churchyard (C). Archaeophyte. Rare.

*Lamium purpureum* Red Deadnettle. Present in B and D, in the disturbed flower beds and 'meadows'. Archaeophyte. Occasional to Rare.

*Prunella vulgaris* Selfheal. Widespread throughout. Native. Rare.

*Salvia pratensis* Meadow Clary. Only found in one location, where it had been planted into newly made meadow in D (pers. comms. Ray Allen). Native. Rare.

### **Aquifoliaceae**

*Ilex aquifolium* Holly. Recorded throughout. Variegated forms also present. Native. Occasional to rare.

### **Asteraceae**

*Achillea millefolium* Yarrow. Present in much of the grassland around the site. Native. Frequent to rare.

*Anthemis austriaca* Austrian Chamomile. In newly sown meadow in D, probably included in seed mix as 'Corn Chamomile' *Anthemis arvensis*. Neophyte. Rare.

*Bellis perennis* Daisy. As Yarrow. Native. Frequent to rare.

*Calendula officinalis* English Marigold. In newly sown garden bed including ornamental

annuals from seed mix; by display board at B (SK123095). Neophyte. Rare.

*Centaurea cyanus* Cornflower. In newly sown meadow in D (pers. comms. Ray Allen). Wide variation in colours (white, pinks to blues). Native. Rare.

*Centaurea nigra* Common Knapweed. With *Centaurea cyanus*. Native. Rare.

*Cirsium arvense* Creeping Thistle. Never very prominent, only found in A, E and F. Native. Rare.

*Cirsium vulgare* Spear Thistle. Slightly more prominent than *C. arvense*, but still fairly restricted (A, B, F and H). Native. Rare.

*Cosmos bipinnatus* Cosmos. Only seen once when a few plants were found in ornamental bed by display board at B (SK123095). Neophyte. Rare.

*Crepis capillaris* Smooth Hawk's-beard. A small colony in the southwest corner of C, apparently absent elsewhere. Native. Rare.

*Erigeron canadensis* Canadian Fleabane (Syn. *Conyza canadensis*). A reasonable population occurred at the southwest end of the church on the paving for a while (H), elsewhere in A, D and E on suitably disturbed soils. Neophyte. Occasional Rare.

! *Glebionis segetum* Corn Marigold (Syn. *Chrysanthemum segetum*). Forming part of introduced seed mix in new meadow in D. Archaeophyte. Rare.

*Hieracium maculatum* Spotted Hawkweed. A single colony on a grave (D) at SK12400951. Neophyte. Rare.

*Hypochaeris radicata* Common Cat's-ear. Widespread in grassland (A, C, E, F and G). Native. Rare.

*Jacobaea vulgaris* Ragwort (Syn. *Senecio jacobaea*). All compartments except F and H. Never very common. Native. Occasional to rare.

*Lapsana communis* ssp. *communis* Nipplewort. Occasional as a casual weed in disturbed ground and woods in B, C, D, E and F. Native. Rare.

! *Leontodon hispidus* Rough Hawkbit. In the newly planted meadow in D, as a deliberate introduction. Native. Rare.

*Leucanthemum vulgare* Ox-eye Daisy. Rare in turf in B, D and G. A large flowering stand is near the noticeboard and seat near the main entrance to the church (G). Native. Rare.

*Matricaria discoidea* Pineapple Weed. In all the usual haunts, bare patches of earth under trees, gateways and scuffed turf; occasional as weed in lawns. Neophyte. Rare.

*Pilosella officinarum* Mouse-ear Hawkweed. In short grassland out of the front of the church particularly in A. Also in C and E. Native. Occasional to rare.

*Scorzoneroides autumnalis* Autumn Hawkbit (Syn. *Leontodon autumnalis*). In grassland and pathways of A, F, G and H. Native. Rare.

*Senecio vulgaris* Groundsel. All compartments except B, in typical scuffed grassland areas, track sides and paving cracks. Native. Rare.

*Sonchus asper* Prickly Sow-thistle. All compartments except B. Native. Rare.

*Sonchus oleraceus* Smooth Sow-thistle. Similar sites to *S. asper*, but apparently absent from C. Native. Occasional to rare.

*Taraxacum officinale* agg. A Dandelion. All records in current survey made at the aggregate level. Widespread in all compartments. Native. Occasional to rare.

*Tussilago farfara* Colt's-foot. A tiny patch in G. Native. Rare.

### **Caprifoliaceae**

*Lonicera japonica* Japanese Honeysuckle. Planted and naturalised at western end of church in flower bed (H). Neophyte. Rare.

*Sambucus nigra* Elder. Widespread, in all compartments. Also to be found growing on Church spire. Native. Occasional to rare.

*Symphoricarpos albus* Snowberry. Only present in hedgerow in C. Neophyte. Rare.

*Viburnum tinus* Laurustinus. Present in hedgerow in C. Neophyte. Rare.

### **Araliaceae**

*Hedera helix* Ivy. Frequent throughout site, growing on graves, ground or on and into trees. Those specimens checked proved to be *Hedera helix* ss. (formerly ssp. *helix*) Native. Frequent to Occasional.

### **Apiaceae**

*Aegopodium podagraria* Ground-elder. Only found in B, D and H (present as weed in flowerbed). Archaeophyte. Rare.

*Aethusa cynapium* Fool's Parsley. Not identified to subspecies (insufficient material). Found by Ray Allen et al. in D, also as a weed in flowerbed to west of Church (H). Native. Rare.

*Anthriscus sylvestris* Cow Parsley. Growing in every compartment. Native. Occasional to rare.

*Chaerophyllum temulum* Rough Chervil. In rough grassland edges in A and round church in H. Native. Rare.

*Conopodium majus* Pignut. Common in grassland in A and B. In D present on left of entrance drive and on main path to C. Rare in E.

*Daucus carota* Carrot. Not identified to subspecies. A few plants found in newly sown meadow in D. Also recorded in A by Ray Allen et al. Native. Rare.

*Heracleum sphondylium* Hogweed. Occasional throughout A-E, apparently absent from F-H. Native. Occasional to rare.

### **Araceae**

*Arum maculatum* Lords and ladies. Widespread in woodland areas and scattered elsewhere (all compartments except G). Native. Occasional.

### **Liliaceae**

*Lilium martagon* Martagon Lily. A single clump was found in D in woodland by Sue Marsh and Barbara Naughton at SK12510954 (conf. M. Duffell). Neophyte. Rare.

*Tulipa* Cv. A Tulip. Many horticultural varieties of tulips present, particularly prominent along raised bank between C and D; naturalised by end of church in F. Neophyte. Rare.

### **Iridaceae**

*Crocasmia x crocosmiflora* Montbretia. A single clump found in walled grave area in D by path side with B (SK124095). Neophyte. Rare.

*Crocus* sp. A Crocus. Various unidentified Crocus were found in the Churchyard (A, B and F). Neophyte. Frequent to Rare.

*Iris foetidissima* Stinking Iris. A couple of plants in B. Native. Rare.

**Amaryllidaceae** (incl. *Alliaceae*).

*Allium subhirsutum* Hairy Garlic. A small clump at base of cross on 'traffic island' in G at SK12380954. Planted but now established. Neophyte. Rare.

*Allium ursinum* Ramsons. Forming large stands by the entrance to the churchyard in A (to left of drive), also widespread under trees in F. A small stand can be found in E. Also present in B, C, E and G. Native. Frequent to rare.

*Galanthus nivalis* Snowdrop. Large clumps could be found dominating in spring, particularly the areas near the entrance to the churchyard and main church door (e.g. 'traffic island' in G); also present elsewhere in B, C and D. The double-flowered form 'Flora Plena' was also recorded. Neophyte. Frequent to rare.

*Leucojum aestivum* Summer Snowflake. Not identified to subspecies. Planted on one grave to eastern end of church (D) at SK12400951. Neophyte. Rare.

*Narcissus* Cv. Daffodil. Widely planted directly on graves and neighbouring areas (B, C, E, F and G). Mostly horticultural forms. Neophyte. Occasional to Rare.

*Narcissus poeticus* Pheasant's-eye Daffodil. A colony is established on the 'traffic island' G. Neophyte. Occasional.

*Narcissus pseudonarcissus* Daffodil including ssp. *pseudonarcissus* Wild Daffodil. The native ssp. was recorded from A, presumably planted. Native. Rare.

**Asparagaceae** (incl. *Hyacinthaceae*).

*Hyacinthoides non-scripta* Bluebell.

Care was taken to distinguish between the various *Hyacinthoides* taxa present on the site. Usually floral characters were used to determine species, but later in season when only vegetative growth could be found then identification relied on leaf dimensions (a cautious approach was always taken hence several *Hyacinthoides* species records). Genuine *H. non-scripta* was found in A (where it was extremely rare, mostly hybrids present, although these are often backcrossed with *H. non-scripta*). Likewise plants in F showed some signs of introgression with surrounding hybrids. White flowered forms found on 'traffic island' in G. Established plantings on a grave in D (SK12440955). Also in B. Native. Rare.

*Hyacinthoides x massartiana* Hybrid Bluebell. Much the commoner 'Bluebell' taxa present, present in A, B and C; often adjacent to native Bluebell. Neophyte. Occasional to rare.

*Hyacinthus orientalis* Hyacinth. Planted and now naturalised on 'traffic island' in G, also occasional on graves in C. Neophyte. Rare.

*Muscaria armeniacum* Garden Grape-hyacinth. Planted on or near graves (A and D) e.g. at SK12400951. Neophyte. Rare.

**Juncaceae**

*Luzula campestris* Field Woodrush. Present in grassland in C, D and G. Native. Occasional to rare.

**Cyperaceae**

*Carex pendula* Pendulous Sedge. A single plant in compartment D. Native. Rare.

## **Poaceae**

*Agrostis capillaris* Common Bent.  
Common throughout grasslands. Native.  
Frequent to occasional.

*Alopecurus pratensis* Meadow Foxtail.  
Throughout grasslands, particularly common  
in D. Native. Frequent to rare.

*Anisantha sterilis* Barren Brome.  
Only recorded in A, by side of school wall.  
Archaeophyte. Rare.

*Anthoxanthum odoratum* Sweet Vernal-grass.  
Quite common in new churchyard (C) and  
also in F. Native. Frequent.

*Arrhenatherum elatius* False Oat-grass.  
Widespread, though not recorded from D  
and G. Native. Occasional.

*Avena sativa* Oat. A casual on a grave in C,  
perhaps the result of feeding birds or just  
accidental. Neophyte. Rare.

*Bromus hordaceus* Soft-brome. In paving by  
side of church (H) also recorded in G. Native.  
Rare.

*Dactylis glomerata* Cock's-foot. Throughout  
the churchyard. Native. Occasional to rare.

*Elytrigia repens* Common Couch. Occasional  
in A, B and C. Native. Rare.

*Festuca rubra* agg. Red Fescue. Widespread  
(apparently absent from B, but likely to be  
under-recorded there e.g. from track sides).  
Native. Rare.

*Holcus lanatus* Yorkshire-fog. Common  
throughout. Native. Abundant to rare.

*Hordeum murinum* Wall Barley. A good  
population occurs in the sown grassland to  
the west end of the church (F), found also in  
E and H. Archaeophyte. Occasional to rare.

*Lolium perenne* Perennial Rye-grass.  
Widespread and the dominant grass in some  
of the grassland (less so in C). Native.  
Abundant to occasional.

*Phleum pratense* ss. Timothy. Occasional in C  
and E. Native. Occasional to rare.

*Poa annua* Annual Meadow-grass.  
Occasional, but fairly ubiquitous throughout  
the churchyard. Native. Rare.

*Poa nemoralis* Wood Meadow-grass. Only  
found in one location (SK12510953) in D.  
Native. Rare.

*Poa trivialis* Rough Meadow-grass. A  
common species present in A, B, C and F.  
Native. Occasional.

Appendix 2: Plants listed on Schedule 9.

|  |                          |
|--|--------------------------|
| <i>Azolla filiculoides</i>   | Water Fern               |
| <i>Cabomba caroliniana</i>   | Fanwort                  |
| <i>Crassula helmsii</i>  | New Zealand Pygmyweed    |
| <i>Eichhornia crassipes</i>  | Water Hyacinth           |
| <i>Elodea callitrichoides</i>  | South American Waterweed |
| <i>Elodea canadensis</i>   | Canadian Pondweed        |
| <i>Elodea nuttallii</i>  | Nuttall's Pondweed       |
| <i>Reynoutria japonica</i> (Syn. <i>Fallopia japonica</i> )  | Japanese Knotweed        |
| <i>Reynoutria</i> <sup>x</sup> <i>bohemica</i><br>( <i>R. japonica</i> x <i>R. sachalinensis</i> ) | Hybrid Knotweed          |
| <i>Reynoutria sachalinensis</i> (Syn. <i>Fallopia sachalinensis</i> )                              | Giant Knotweed           |
| <i>Gunnera tinctoria</i>   | Giant Rhubarb            |
| <i>Hydrocotyle ranunculoides</i>   | Floating Pennywort       |
| <i>Impatiens glandulifera</i>  | Indian/Himalayan Balsam  |
| <i>Lagarosiphon major</i>  | Curly Waterweed          |
| <i>Ludwigia grandiflora</i>  | Water Primrose           |
| <i>Ludwigia peploides</i>  | Floating Water Primrose  |
| <i>Ludwigia uruguayensis</i>   | Water Primrose           |
| <i>Myriophyllum aquaticum</i>  | Parrot's-feather         |
| <i>Pistia stratiotes</i>   | Water Lettuce            |
| <i>Sagittaria latifolia</i>  | Duck Potato              |
| <i>Salvinia molesta</i>  | Giant Salvinia           |





'Lily of the Valley' detail from gravestone in churchyard (M. Duffell)



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