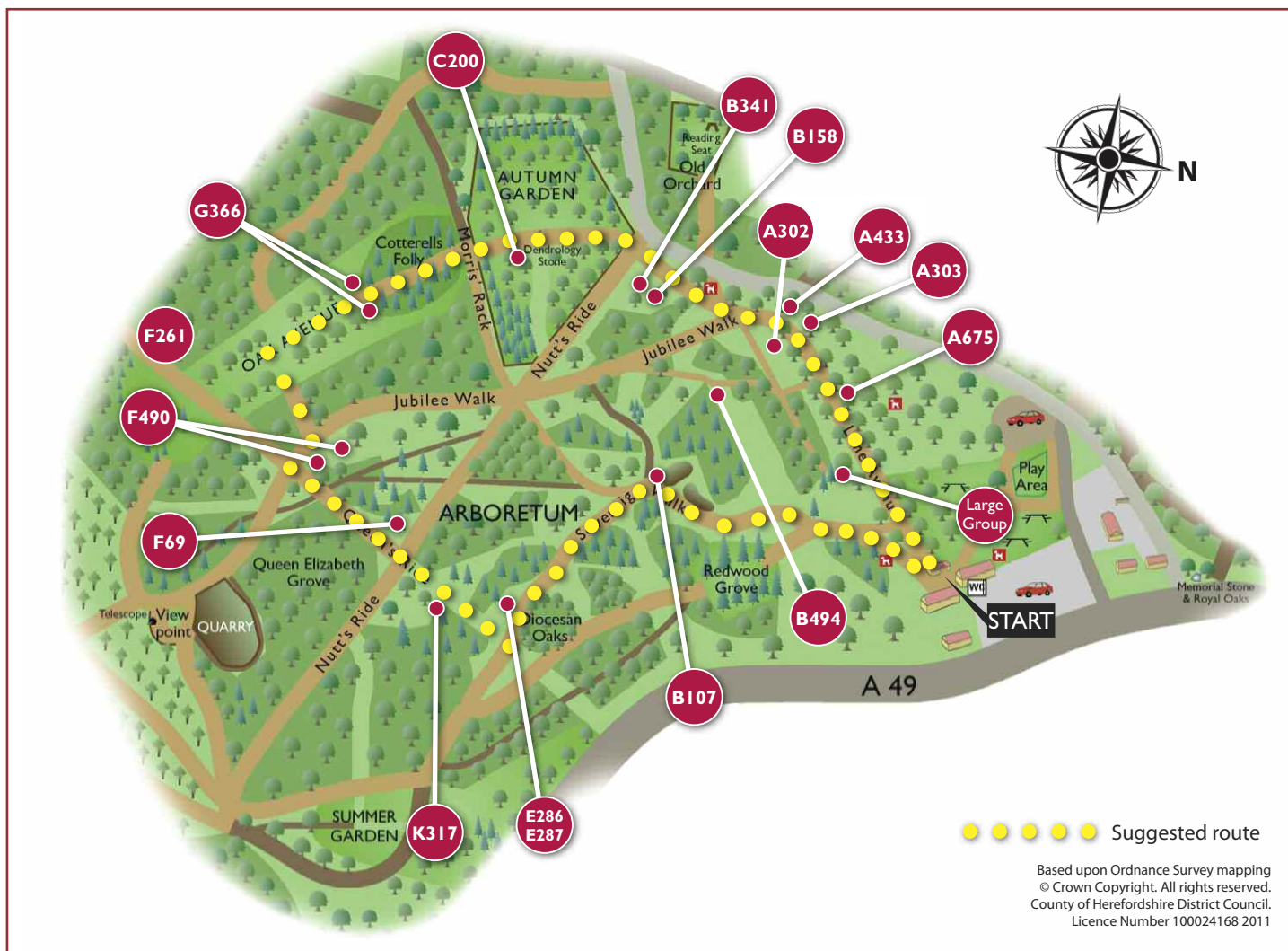


# Early Autumn Tree Trail

The theme of this trail is to lead you through the arboretum and draw you to a number of trees with particularly fine early autumn colour and introduce you to some of the berry bearing trees, so long as the birds haven't got there first.

The trail begins with varieties of young Japanese Maples, then on to a range of berry bearing Rowans, exotic Oaks, American Maples, and finally, Maples from the Caucasus and Asia.

Depending on when you are completing your walk some of the trees may not yet be in good autumn colour, while others may have already passed. This is the nature of the trees and will vary according to species and the season.



## Why do the leaves change colour in autumn?

The green colour of leaves is produced by *chlorophyll*. This pigment is used by plants in the process called *photosynthesis* to create food (in the form of sugar) from water, carbon dioxide and sunlight.

Leaves also contain orange and yellow pigments (*xanthophylls* and *carotenoids*), but these are usually hidden by the large amount of green chlorophyll during spring and summer.

As autumn approaches, and the days get shorter and colder, the tree prepares to lose its leaves, gradually sealing them off. Without a supply of water and minerals, chlorophyll can not be replenished, and so the green colouration starts to fade, revealing the orange and yellow pigments.

If deposits of sugar get left in the leaf when it is sealed off by the plant, as happens to many trees in the Maple family, the leaves

will appear bright red or purple. This is caused by a group of pigments called *anthocyanins*. The sunnier the weather during autumn, the more *anthocyanins* are produced and the more brilliant the resulting display.

The best displays of autumn colour are produced in years when autumn is bright and cool, with chilly but not freezing nights.

# Early Autumn Tree Trail

## Large Group

This cage contains the first of our Japanese Maples. There are hundreds of varieties of Japanese Maples, having been bred and crossed to create dazzling coloured leaves or bark or exotic leaf shapes.

A722, 723, 724

### Coral Bark Maples

*Acer palmatum 'Sango kaku'*

The brilliant coral colour of the bark is the outstanding feature of this maple and gives it its name which means 'coral tower'. Leaves are green with a reddish margin which turn to an overall golden yellow colour in autumn. The younger the tree the brighter the colouration.

A681

### Japanese Maple 'Suminagashi'

*Acer palmatum 'Suminagashi'*

A distinctive bright purple leaved variety turning crimson in the autumn.

A719

### Japanese Maple 'Tamuke yama'

*Acer palmatum 'Tamuke yama'*

Another red leaved Japanese Maple, new leaves changing from deep crimson to very dark purple red and finally bright crimson in autumn. The leaves are also very deeply dissected

A675

### Japanese Maple 'Bloodgood'

*Acer palmatum 'Bloodgood'*

This cage has two red-leaved Japanese Maples of the Bloodgood variety with more Coral Bark Maples nearby.

A302

### Rowan Winter Cheer

*Sorbus Winter Cheer*

Autumn colour is not just about leaves, berries too have a range of rich autumnal hues. Here the first of our berry colours is the orange of the Rowan Winter Cheer which as its name suggests lasts well into winter to brighten the dark days.

A303

### Chinese Rowan

*Sorbus esserteauana*

This Chinese Rowan, also known as Esserteau's Rowan, produces masses of deep red berries.

A433

### Chinese Rowan

*Sorbus esserteauana flava*

This is a clone of the Esserteau's Rowan, which has yellow berries.

B494

### Coral Bark Maple

*Acer palmatum 'Sango kaku'*

Although noted for its coral coloured bark this particular example provides a brilliant flash of bright golden yellow foliage through the trees when viewed from Lime Avenue.

B158

### Downy Japanese Maple

*Acer japonicum 'Vitifolium'*

This mature Japanese maple is an early turner, the large vine leaf like leaves turning from gold to crimson to scarlet in early autumn.

B341

### Mountain Maple

*Acer spicatum*

This maple is not from Japan but Eastern North America, ranging widely across the far north and spreading south along mountain ranges. The tree grows as understory beneath canopy trees in moist woods on rocky hillsides and along streams.

C200

### Japanese Maples

*Acer palmatum*

As you pass through the Autumn Garden you will see many varieties of mature Japanese maples. These maples were planted in the 1960s as part of the original planting scheme under the guidance of Sir Richard Cotterell then the Chairman of Queenswood Coronation Fund. Sir Richard was the driving force behind establishing the arboretum and it's to his love and knowledge of trees that we owe the presence and appearance of the mature trees in the Arboretum today. The maples are of a number of different varieties for which records have not survived.

### Oak Avenue

Oak Avenue contains a wide variety of Oaks from around the world, you will find these at various stages of colouration depending on their variety and when you visit.

G366

### Scarlet Oak

*Quercus coccinea*

One either side at the beginning of the avenue, perhaps the brightest of the Oaks, from Central and Eastern North America the leaves turning bright scarlet in autumn.

F261

### Chinese Spindle

*Euonymus lanceifolius*

This spindle, native to central and western China, produces masses of striking pink (poisonous) berries.

F490

### Sugar Maple

*Acer saccharum*

We return to maples, this one from North America and Canada. This is the leaf on the Canadian flag and the tree most often tapped for its sap to make Maple Syrup.

F69

### Japanese Maples

*Acer palmatum*

You will pass another small collection of mature Japanese Maples.

K317

### Red Maple

*Acer rubrum 'Schlesingeri'*

To your right a little way off Queens Ride are two Red Maples of a variety known for its early deep rich scarlet autumn colour.

E286/287

### Cappadocian Maples

*Acer cappadocicum*

A group of maples native to the Caucasus and Western Asia. There are a number of varieties here; the *Aureum's* leaves turn golden yellow in the autumn whereas the *Rubrum* has pinkish margins to its leaves.

B107

### Japanese Rowan

*Sorbus commixta*

This tree's leaves have good later autumn colour but early in the season it will produce huge quantities of bright red berries.