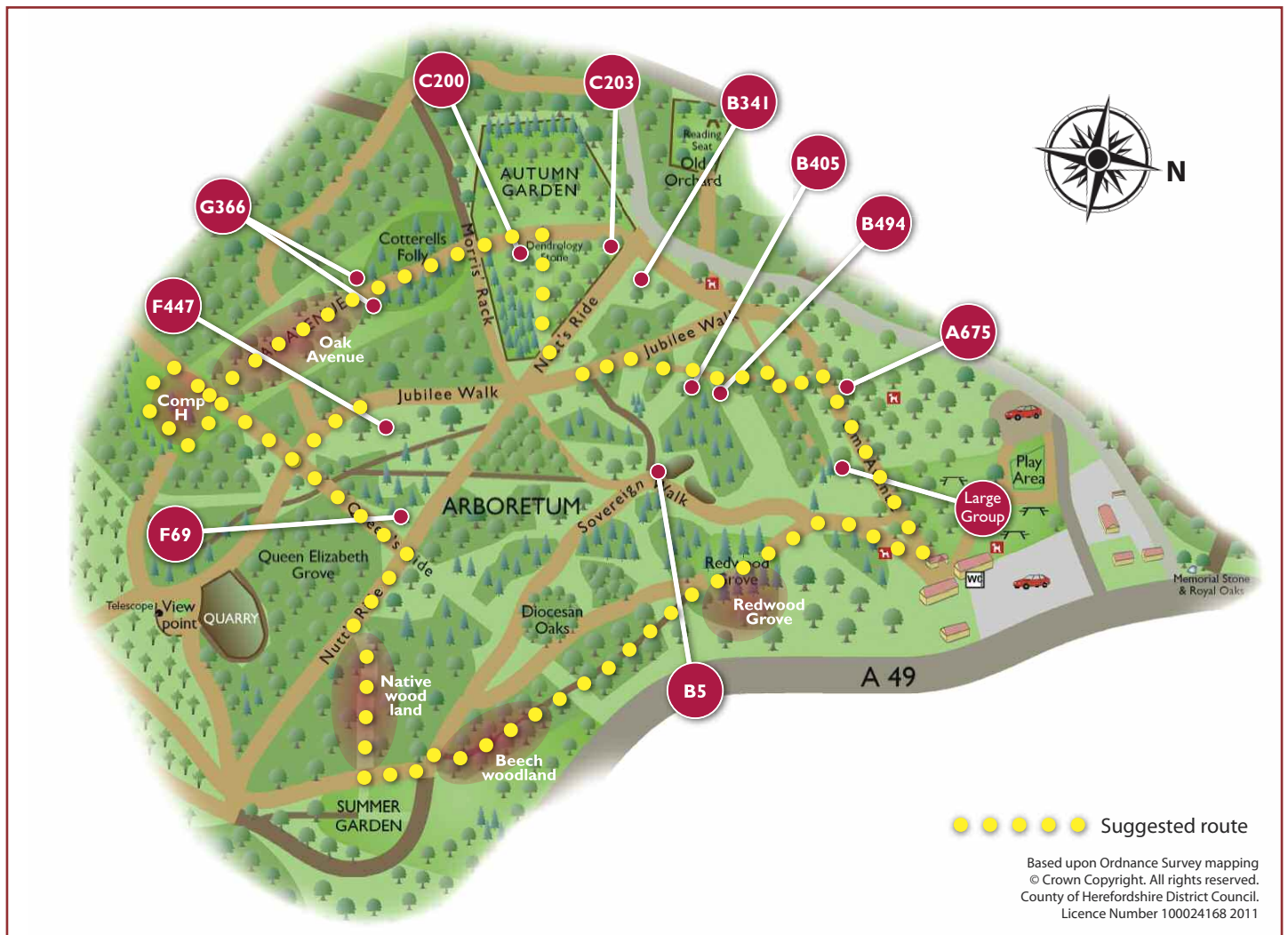


Late Autumn Tree Trail

The theme of this trail is to lead you through the arboretum and draw you to a number of trees with particularly fine autumn colour.

The trail begins with varieties of young Japanese Maples, then onto more mature examples. Exotic Oaks lead on to more natural woodlands which give a contrast with the exotic specimen trees.

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



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.

Late 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.

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.

B405

Shagbark Hickory

Carya ovata

When in full colour you can't miss this Hickory from North America, where it is the most important nut producing species (although rarely produces fruit in the UK). Its timber is also valuable being close grained, very hard, strong and flexible, used for tool handles, athletic goods and interior finishing.

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.

C203

Vine Maple

Acer circinatum

Another American maple, but this time from the American Pacific Northwest.

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 are visiting.

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.

Compartment H

Birch varieties

Belula

This area of the arboretum has many varieties of Birch tree from the around the world, including China, Japan, the Himalaya and America. Birches are known for their white bark, often flaking, and delicate triangular leaves which turn golden yellow in autumn.

F447

Japanese Rowan

Sorbus commixta

Also known as Japanese Mountain Ash, giving deep red autumn colours in both the leaves and berries.

F69

Japanese Maples

Acer palmatum

You will pass another small collection of mature Japanese Maples.

Native woodland

Quercus petraea, Fraxinus excelsior, Corylus avellana

This area of more natural wood gives contrast between the more managed areas (where we mow the areas around the individual specimen trees each year). Here Ash and hazel are growing up as an understory to the canopy Oak trees. This area is probably how Queenswood would appear if we were to let it develop without any intervention.

Beech wood

Fagus sylvatica

This area of Beech was planted in the 1950s. Beech woods do occur naturally in the UK but not in this part of the country. In contrast to the Oak woodland there is no understory, this is typical of Beechwoods which tend to shade out other trees and shrubs. This area is covered in Bluebells in spring.

Redwood Grove

Sequoia sempervirens, Sequoiadendron giganteum

Not known for their autumn colour! (they are conifers and will retain their green leaves (needles) throughout the winter). They do however have reddish trunks and when the low Autumnal sun catches them, they glow spectacularly red. These are found on the West coast of North America and grow to be the tallest and biggest trees in the world

B5

Sargeants Rowan

Sorbus sargentiana

From Western China. The leaves are the largest of any rowan turning deep red late in autumn. Produces small bright red berries in large numbers, which are a popular food source for birds such as Thrushes and Blackbirds.